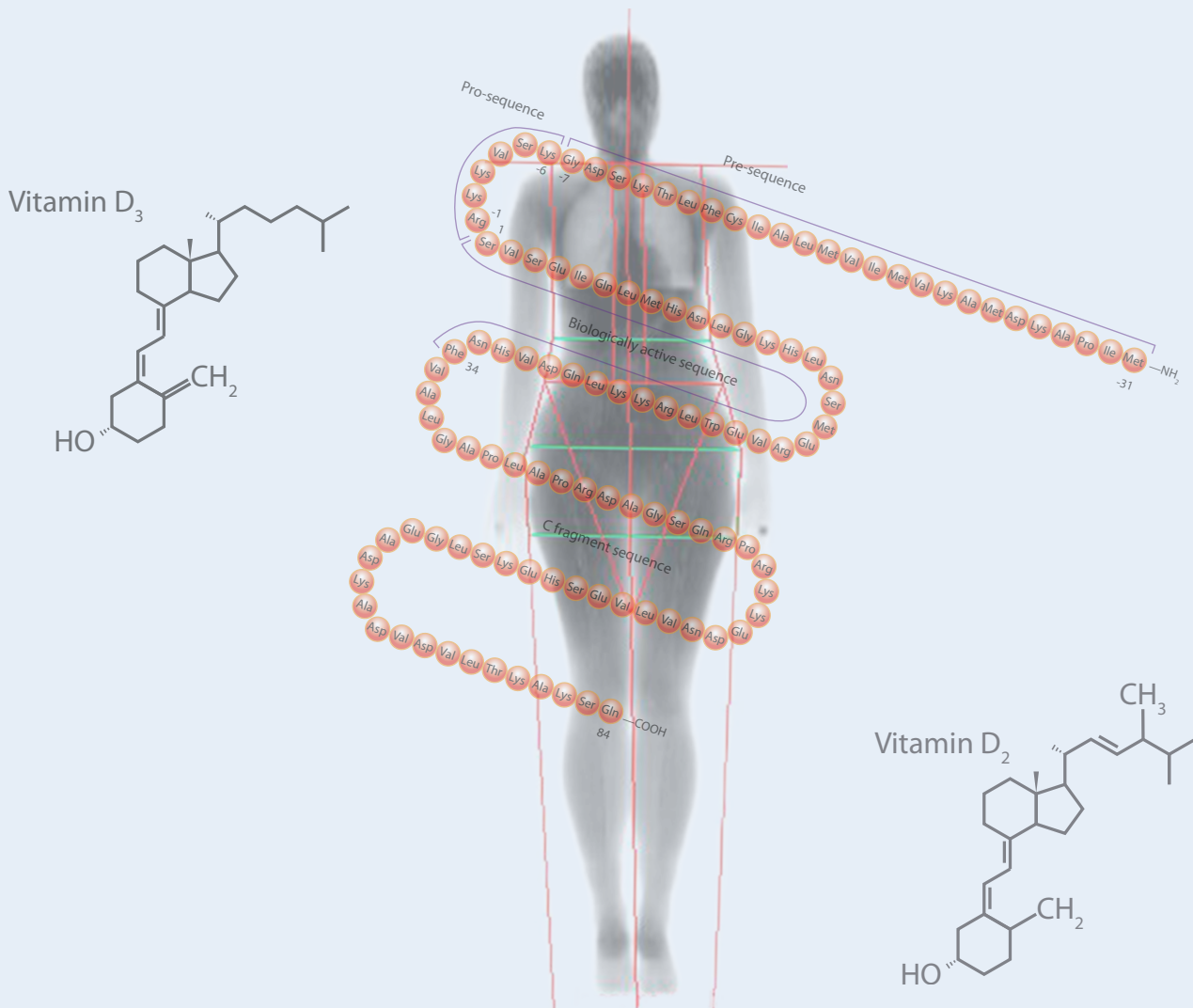


Body composition, parathyroid hormone and vitamin D

Results from the Tromsø Study and from an intervention study with high doses of cholecalciferol



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A dissertation for the degree of Philosophiae Doctor



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UNN

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In memoriam

Our dear Oddvar passed away suddenly and unexpectedly the 15th of January 2009. Your time came way too early. Thank you for your continuing support through all the years we had the pleasure to enjoy each others friendship. It was appreciated more than you know. You will always be missed!!!

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“Corpulence is not only a disease itself, but the harbinger of others” Hippocrates (1)

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Monica Sneve, March and December 2008

List of papers

This thesis is based on the following papers, referred to by their Roman numerals in the text.

- I. Monica Sneve, Rolf Jorde. Cross-sectional study on the relationship between body mass index and smoking, and longitudinal changes in body mass index in relation to change in smoking status. The Tromsø Study. *Scand J Public Health* 2008; 36:397-407.
- II. Monica Sneve, Nina Emaus, Ragnar Martin Joakimsen, Rolf Jorde. The association between serum parathyroid hormone and bone mineral density, and the impact of smoking: the Tromsø Study. *Eur J Endocrinol* 2008; 158:401-409.
- III. Monica Sneve, Nina Emaus, Lone Jørgensen, Yngve Figenschau, Rolf Jorde. The association between serum parathyroid hormone and body fat, and the impact of smoking. The Tromsø Study. Submitted.
- IV. Monica Sneve, Yngve Figenschau, Rolf Jorde. Supplementation with cholecalciferol does not result in weight reduction in overweight and obese subjects. *Eur J Endocrinol* 2008; 159:675-684.

Abbreviations

ANCOVA: analysis of covariance

BDI: Beck's Depression Inventory

BMC: bone mineral content

BMD: bone mineral density

BMI: body mass index

BMU: basic multicellular unit

CaR: extracellular calcium ion-sensing receptor

CPTH/CPTHr: C-fragment of PTH/C-fragment of PTH receptor

CT: computerized (axial) tomography

CV: coefficient of variation

DEXA: dual-energy X-ray absorptiometry

FM: fat mass

GLM: general linear model

HbA1c: glycosylated adult haemoglobin 1

HC: hip circumference

HRT: hormone replacement therapy

LM: lean soft tissue mass

LPL: lipoprotein lipase

MET: metabolic equivalent

MM: muscle mass

MRI: magnetic resonance imaging

OGTT: oral glucose tolerance test

PHPT: primary hyperparathyroidism

PTH: parathyroid hormone

PTHrP: parathyroid hormone related peptide

PTHr1: PTH-receptor 1, also referred to as PPR (PTH/PTHrP-related receptor)

RANK/ RANKL: receptor activator of nuclear factor-kappa B/ RANK ligand

SD: standard deviation

SHBG: sex hormone binding globulin

SHPT: secondary hyperparathyroidism

SPSS: Statistical Package for Social Sciences

SXA: single X-ray absorptiometry

UVB: ultraviolet B radiation

VDR: vitamin D receptor

WC: waist circumference

WHO: World Health Organization

WHR: waist-to-hip ratio

25(OH)D: 25-hydroxyvitamin D, also referred to as calcidiol

1, 25(OH)₂D: 1,25-dihydroxyvitamin D, also referred to as calcitriol

24,25(OH)₂D: 24,25-dihydroxyvitamin D

1. Introduction

1.1 Background

The present thesis is a result of ideas created on the basis of findings in other studies showing that;

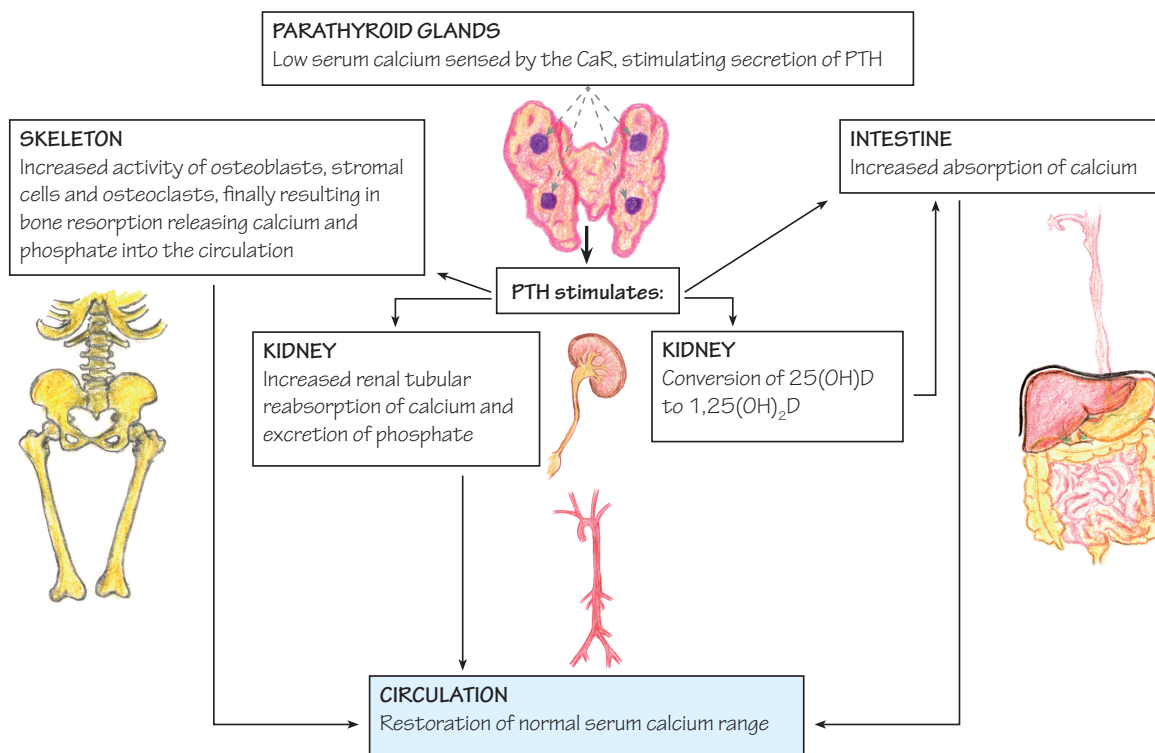
- people with disturbances in their calcium homeostasis often have low levels of vitamin D and are overweight (2-4)
- people with both primary and secondary hyperparathyroidism in general weigh more compared to controls (5, 6)
- there is an association between calcium, parathyroid hormone (PTH), vitamin D and body weight (7-11)
- cigarette smoking suppresses the levels of PTH (12-14), and may also suppress the levels of 25-hydroxyvitamin D (25(OH)D, also called calcidiol) (13) and 1,25-dihydroxyvitamin D (1,25(OH)₂D, also called calcitriol) (13, 14)
- smokers have lower bone mineral density (BMD) compared to non-smokers (15, 16)

Based on the findings mentioned above, we found reason to believe that there might be a causal relationship between disturbances in calcium homeostasis and overweight, and that higher doses than the recommended daily dosage of vitamin D probably would lead to weight loss. Thanks to the Tromsø Study, large databases were available for studying the relations between PTH, anthropometric measures, BMD and body fat, and to assess the impact of smoking on these relations, in both cross-sectional and longitudinal designs. In order to test our hypothesis that high doses of vitamin D will lead to weight loss, we did a randomized, placebo-controlled intervention study with high doses of cholecalciferol in persons with body mass index (BMI) 28.0-47.0 kg/m².

parathyroid glands. The biologically active hormone is the full sequence of 84 aminoacids, PTH(1-84). However, in the circulation there are relatively high concentrations of heterogeneous C-terminal fragments which do not interact with the PTH-receptor 1 (PTHr1), but there is evidence that also these fragments have biological activity. Intact PTH is cleared by the liver and by the kidneys, and the liver also generates C-terminal PTH fragments which can reenter the circulation (19).

PTH regulates calcium homeostasis in several ways (Figure 2, next page). It stimulates the activity of osteoblasts and stromal cells, thereby enhancing the production of receptor activator of nuclear factor-kappa B ligand (RANKL), macrophage colony-stimulating factor and possibly other cytokines as well, and it reduces the production of osteoprotegerin (an antiresorptive protein). This leads to differentiation of osteoclast precursors and stimulation of the resorbing activity of mature osteoclasts, culminating in bone resorption which releases calcium and phosphate into the circulation (19). PTH also stimulates calcium absorption from the intestine, mainly by an indirect mechanism via the kidneys, but probably also via a direct effect on the intestine, at least in some pathological and pharmacological conditions. In addition, PTH increases renal tubular reabsorption of calcium (19). By stimulating 1- α -hydroxylase in the kidney, PTH stimulates the conversion of 25(OH)D to 1,25(OH)₂D, the latter of which further increases gastrointestinal calcium absorption (20). In addition to this indirect effect of PTH, via the kidneys, on intestinal calcium absorption, there is experimental evidence for a direct effect of PTH on the intestine. However, at present, the role of the direct effect of PTH on intestinal calcium absorption under physiological conditions is unknown (19). In the kidneys, PTH stimulates the excretion of phosphate via a direct mechanism. PTH also inhibits 24-hydroxylase which inactivates 1,25(OH)₂D, a capacity important for maintaining calcium homeostasis in vitamin D deficiency states.

Figure 2. Regulation of calcium homeostasis by PTH and vitamin D

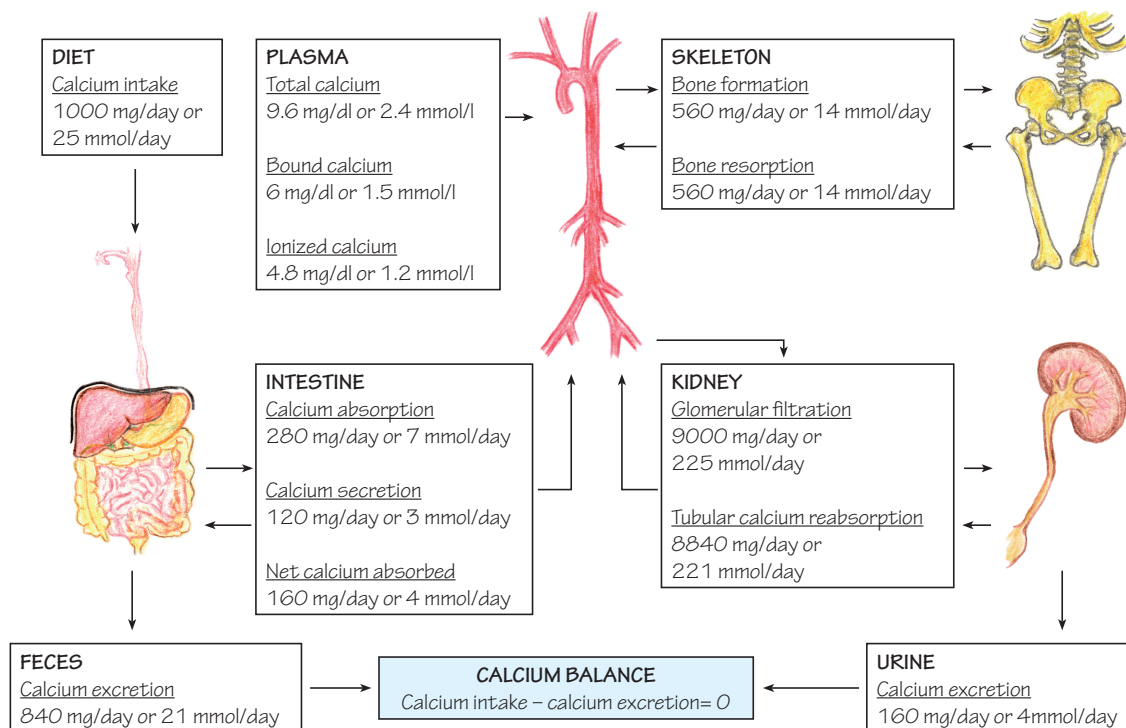


Parathyroid hormone related peptide (PTHrP) shares N-terminal aminoacid sequence homology with PTH. In addition to being responsible for the hypercalcemia of malignancy syndrome, PTHrP has several important physiological roles in the human body (e.g. regulation of chondrocyte growth and differentiation in the growth plates of developing long bones, branching morphogenesis of the mammary gland, mobilizing calcium from bones and into breast milk under lactation, regulation of maternal calcium transport across the placenta to the fetus) (17, 21, 22). PTHrP is produced locally in many tissues, it seems to function more like an autocrine-paracrine system in which high concentrations of PTHrP are elaborated rapidly and cleared quickly (17, 22). Usually PTHrP is not found in the circulation, except in certain conditions as hypercalcemia of malignancy or in lactating women. Its regulation is at the level of PTHrP mRNA expression.

In spite of the divergent tasks of PTH and PTHrP, the two peptides share the same G-protein coupled receptor, the PTHR1 (also referred to as PTH/PTHrP-related receptor (PPR)). The PTHR1 is highly expressed in bone and kidney, but is also found in other tissues such as breast, skin, heart, blood vessels and pancreas, among others, which implies that the receptor exhibit the capacity of multiple signalling pathways (19).

On average, an adult consumes about 1000 mg calcium per day, of which 40-50% is absorbed from the intestine. About 200-300 mg of the absorbed calcium is lost via intestinal and pancreatic secretions and via bile into the intestinal tract. Thus, there is a net absorption of approximately 100-200 mg calcium per day (23). Figure 3 displays an overview of the extracellular calcium homeostasis.

Figure 3. Extracellular calcium homeostasis



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There are two mechanisms for calcium absorption; the vitamin D dependent, which has a maximum, and the vitamin D independent passive diffusion, which does not have a maximum but is dependent on the calcium gradient (i.e. the calcium intake) (24). Roughly 99% of all calcium and most of the phosphate in the human body are incorporated in the skeleton as hydroxyapatite, however, it is the small fractions of ionized calcium and inorganic phosphate in plasma which are under hormonal control (principally by PTH and vitamin D). Of the calcium in plasma, 40% is bound to albumin, 15% is in complex with citrate, sulphate or phosphate, and 45% is as the physiologically important ionized calcium. Phosphate in plasma exists as phospholipids, ester phosphates and inorganic phosphates (the latter as the ions HPO_4^{2-} or H_2PO_4^-).

Vitamin D, the other main regulator of calcium homeostasis, is also called calciferol, and is a group of lipid soluble compounds with a four-ringed cholesterol backbone. The two main forms of vitamin D are vitamin D₃ (cholecalciferol) and vitamin D₂ (ergocalciferol) (Figure 4). Vitamin D₃ is formed in the skin when 7-dehydrocholesterol in the epidermis is exposed to sunlight or ultraviolet B radiation (UVB) (wave length 290-315 nm) (25). In the liver, vitamin D is hydroxylated into 25(OH)D and then in the kidney, by 1- α -hydroxylase, into 1,25(OH)₂D (24). The latter compound is metabolically active. When there is sufficient availability of 1,25(OH)₂D, then 24,25-dihydroxyvitamin D (24,25(OH)₂D) is formed in the kidney and catabolized further. In the circulation the vitamin D metabolites are bound to the vitamin D binding protein, which expresses high affinity for 25(OH)D, 1,25(OH)₂D and 24,25(OH)₂D and has a high homology with albumin. On entering the cell, 1,25(OH)₂D binds to the vitamin D receptor (VDR). The 1,25(OH)₂D-VDR-complex forms a heterodimer with the retinoid receptor, which then binds to a vitamin D responsive element on a responsive gene, leading to transcription, translation and either upregulation or downregulation of gene

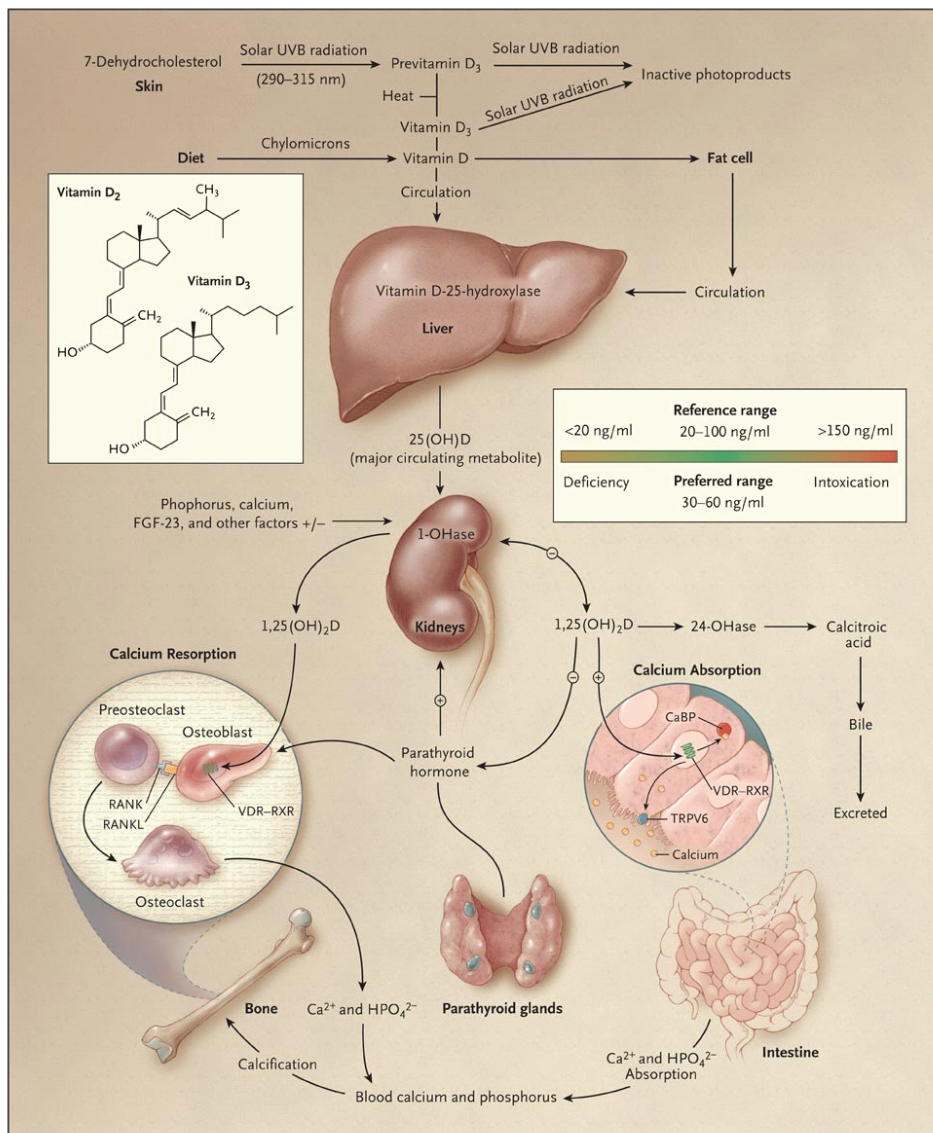
products, as for example calcium binding protein. Calcitriol can also act in a much quicker way via a plasma membrane receptor and second messengers (24). The formation of $1,25(\text{OH})_2\text{D}$ is stimulated by PTH, and inhibited by calcium via negative feedback which decreases PTH secretion. In addition, $1,25(\text{OH})_2\text{D}$ itself directly inhibits the secretion of PTH (24). Both $1,25(\text{OH})_2\text{D}$ and $25(\text{OH})\text{D}$ can be degraded by 24-hydroxylase (26).

Vitamin D increases the serum calcium concentration in three ways: 1) it induces proteins involved in active intestinal calcium absorption and stimulates active intestinal absorption of phosphate, 2) it stimulates osteoblasts to produce RANKL, which in turn stimulates osteoclastogenesis and bone resorption (both vitamin D and PTH is required for this) and 3) it interacts with PTH in the distal renal tubule to reabsorb filtered calcium (26) (Figure 4, next page).

The serum levels of vitamin D are influenced by age, gender, race, obesity, diet, malabsorption, season, geographical latitude and altitude (24, 27, 28). Apart from the main source of vitamin D which is sunshine, the other sources of vitamin D comes from nutrients in the form of ergocalciferol from plants and cholecalciferol from animal products (fatty fish, eggs, fortified diary products). In general $25(\text{OH})\text{D}$ is the preferred compound for assessment of vitamin D status. The concentration of $25(\text{OH})\text{D}$ is about 1000-fold that of $1,25(\text{OH})_2\text{D}$, its half-life is much longer and the concentration of $25(\text{OH})\text{D}$ is more stable than that of $1,25(\text{OH})_2\text{D}$ (29). Vitamin D insufficiency and deficiency is common in the general population in Europe and USA, particularly among adolescents and the elderly (24, 30). Serum concentration of $25(\text{OH})\text{D} < 25 \text{ nmol/L}$ are regarded as deficiency, and $25(\text{OH})\text{D}$ levels between 25 and 50 nmol/L as insufficiency. However, there is no consensus of which serum level of $25(\text{OH})\text{D}$ is adequate, though recently levels above 80-100 nmol/L were advocated (29). Some experts state that ingestion of minimum 1000 IU of vitamin D_3 daily is

necessary to maintain the circulating concentration of 25(OH)D \geq 75 nmol/L (27, 31), a dose much higher than the current daily recommended intake in Norway of 300-400 IU. The average daily intake of vitamin D in adults in Northern Norway is close to 400 IU (9.9 μ g) (32).

Figure 4. Synthesis and metabolism of vitamin D in the regulation of calcium, phosphorus, and bone metabolism (Holick MF. Vitamin D deficiency. N Engl J Med 2007; 357:266-281. Copyright © [2007] Massachusetts Medical Society. All rights reserved. Reproduced with permission).



Hyperparathyroidism is characterized by disturbances in calcium homeostasis. In primary hyperparathyroidism (PHPT) there are increased serum concentrations of calcium and PTH, the most common cause of which is parathyroid adenoma (33, 34). In secondary hyperparathyroidism (SHPT) there is hypocalcemia (or normocalcemia), hyperphosphatemia and low serum concentration of 25(OH)D resulting in increased secretion of PTH, the most common cause of which is chronic kidney disease (35, 36). Tertiary hyperparathyroidism ensues in longstanding SHPT which leads to parathyroid gland hyperplasia with autonomous secretion of PTH and elevated levels of serum calcium and phosphate, the latter often grossly so. In addition to other features, hyperparathyroidism is often associated with reduced BMD.

1.3 Bone structure and remodelling

There are two main components determining bone strength; composition and structure (37). In addition to the support of the body, the skeleton plays a major role in calcium homeostasis, functioning as a reservoir of calcium and phosphate (as described above), and it protects internal organs and houses the bone marrow (38). Bone is composed of type I collagen stiffened by calcium hydroxyapatite crystals. The human skeleton is about 60% mineralized (37). The skeleton consists of two types of bone; cortical and trabecular. Cortical bone constitutes about 80% of the skeleton, and is located mainly in the shafts of long bones and at surfaces of flat bones. This compact bone is laid down concentrically around central canals or Haversian systems (38). Long bones are constructed for lightness and to favour rigidity over flexibility, making them suitable for their functions for loading and movement. This is achieved by placing the cortical mass distant from the long axis and by the presence of the marrow cavity (37). Trabecular or cancellous bone is mainly found at the ends of long bones, vertebral bodies and at the inner parts of flat bones. This type of bone consists of an

interconnecting meshwork of plates and bars wherein the bone marrow is located (38). The trabecular structure promotes lightness and favour flexibility over stiffness, properties advantageous for their function as “springs” or shock absorbers, being able to absorb more energy by deforming more before cracking than long bones are able to (37).

There are three types of bone cells; osteoclasts, osteoblasts and osteocytes. Osteoclasts resorb bone, whereas osteoblasts produce new bone. Osteocytes are osteoblasts which are buried within lacunae in the mineralized matrix. They probably act as mechanosensors and locate both the place and time in which bone remodelling is necessary. Another faith of osteoblasts after finishing bone formation is becoming flat lining cells, covering the quiescent bone surface. The cell types communicate with each other and the surroundings via a syncytium of cellular extensions. The basic multicellular unit (BMU) is responsible for bone remodelling. It consists of osteoclasts in the front, osteoblasts in the rear, a central capillary, nerve supply and connective tissue (39). In the BMU osteoclasts resorbs bone and then osteoblasts produce and lay down osteoid where the resorbed bone was. Finally the osteoid is mineralized. This is a coupled process; resorption always preceding formation. At any given time about 20% of the cancellous bone in adults is undergoing remodelling (38), and every ten years the adult skeleton is being completely remodelled (39).

There are differences in bone structure during growth and aging between females and males and between different ethnic groups (37, 40). The bones in females have a smaller diameter and are shorter with slightly thinner cortices compared to those of men, resulting in a smaller and lighter skeleton. These differences are explained by the more rapid growth of the appendicular skeleton than the axial skeleton before puberty and the later onset of puberty in males (37). When estrogen levels in women decrease quite rapidly on entering menopause,

bone remodelling rate and bone resorption increases, leading to net bone loss. Estrogen deficiency induces apoptosis of osteoblasts and prolonged viability of osteoclasts. During senescence in men, the age-related bone loss is more slowly than in women because of slower decrease in sex hormones. The ratio and the mode of bone apposition and resorption with aging also differ between sexes, resulting in trabecular loss in women and thinning in men. These facts might explain why women are more prone to fragility fractures and osteoporosis than men (38, 40, 41). Estrogen, in both genders, and in men also testosterone, is important for development of peak bone mass. However, estrogen deficiency is the major determinant of age-related bone loss in both sexes (42).

When there is an imbalance in bone remodelling with more resorption than formation, osteoporosis will eventually develop. In osteoporosis there is destruction of microarchitecture and low bone mass, predisposing for fragility fractures (39-41). Using dual-energy X-ray absorptiometry (DEXA), the criterion for the diagnosis of osteoporosis is T-score less than -2.5. T-score is the number of standard deviations a person's BMD is below or above the mean of younger adults (43, 44). The etiology of osteoporosis is multifactorial, involving genetic, behavioural, nutritional and medical conditions (37, 39-44). Worldwide the incidence of osteoporosis is increasing as the proportion of older people is rising (40, 44).

Intermittent administration of PTH has an anabolic action on bone, whereas continuous administration has a catabolic action due to osteoclast activation (20, 39). PTH given intermittently stimulates bone formation by increasing osteoblast number and activity, by delaying apoptosis of osteoblasts and osteocytes, and by increasing remodelling rate with a net positive balance. The effect of intermittent administered PTH on BMD is most pronounced in trabecular bone (39, 45, 46). In recent years injectable recombinant PTH has

emerged as an effective therapeutic agent for osteoporosis (20, 39), and at present an oral compound is also being tested out (47). However, in addition to other agents, supplementation with vitamin D and calcium is still important in the prevention and treatment of osteoporosis (48, 49).

1.4 Body composition and obesity

Body composition can be seen from five different perspectives; atomic, molecular, cellular, tissues and whole body (50). Briefly described, the atomic model is characterized by the 11 main elements that constitute over 99% of the body composition: oxygen, carbon, hydrogen, nitrogen, calcium, phosphate, potassium, sulphur, sodium, chlorine and magnesium. This model is useful in radiation physics, and is measured by neutron activation analysis combined with whole body counting. The molecular model is most used in body composition research, and aims to assess the relative contents of lipid, water, proteins, glycogen and minerals. There are three families of this model. The first is the neutron activation analysis-whole body counting 4-component model, which divides body composition into protein (nitrogen), bone mineral (calcium), fat (carbon) and water (oxygen). The second molecular model is the underwater weighing of the 4-component model. The DEXA 3-component model is the third, and includes the components fat mass (FM), lean soft tissue mass (LM) and bone mineral content (BMC), where LM comprises water, protein, glycogen and soft tissue minerals (51). Using a reference man of 70 kg, the body composition, in percents of his body weight, is 60% water, 20% fat, 15% protein and 5% mineral (50), whereas a reference woman would have the same amount of protein and mineral, but about 50% water and 30% fat. Thus in most persons, LM makes up 70-90% of the body composition, and in adults there is a relationship between LM and stature (52).

The cellular model comprises cells, extracellular fluids and extracellular solids, and is important in physiological studies. The tissue system model includes the body's various tissues (muscular, connective, epithelial and nervous), organs and systems. It comprises adipose tissue and its subcomponents, major organs, skeletal muscle and smaller tissues and organs. It is useful for assessment of biological processes. Computerized axial tomography (CT) and magnetic resonance imaging (MRI) are used for measurement of the tissue components. The whole body model serves to assess body size, shape, and exterior and physical characteristics. There are several dimensions that can be measured according to this model; stature, segment lengths, body breadths, circumferences, skinfold thickness, body surface area, body volume, body weight, BMI and body density (50). A new technique for measurement of external body shape, proposed for both obesity research and clinical practice, is the whole-body three-dimensional photonic scanning (53). In the present thesis the DEXA 3-component and the whole body models are used.

Even though studies of body composition have been a field of research for more than a century (52), all factors determining body composition are not known, and there is also at present extensive research on the subject. The factors determining body weight and body composition, when there are no major environmental constraints, are not well understood (54). The different ways of assessing and measuring body composition and the lack of good prospective studies make it quite difficult to determine which, and how, factors influence body composition. We know that body composition is partly determined by genetic factors such as race, inheritance (e.g. the height of parents can be used to predict offspring height), gender differences, but also other factors contribute. Regarding nutrition, both positive and negative changes in energy balance usually involve changes in both LM and FM, and generally the changes are in the same direction (52). However, the relative contribution of LM

and FM to the total weight change is dependent of the initial content of body fat. Fatter persons tend to loose a higher proportion of the total weight loss as FM and thinner persons loose relatively more LM than FM. In intentional overfeeding, the gain in weight and the gain in LM are directly proportional to the amount of excess food ingested (52). Regarding exercise and body composition, in the absence of significant weight change, one can loose 2-3 kg FM and gain 2-3 kg LM. Vigorous exercise resulting in more than 4-5 kg weight loss can also induce loss in LM. There is evidence suggesting that body composition is at least partially preprogrammed and influenced by early growth and nutrition. The facts that fetuses gain FM predominantly in the third trimester of gestation, and that offspring of diabetic mothers are at higher risk for macrosomia compared to offspring of non-diabetic mothers, suggest that adipose tissue mass and distribution may be determined by experience during fetal life. However, there is inconsistency regarding birth weight, nutrition and growth in infancy and the association with later body composition and subsequent disease risk (55).

Body composition changes to a variable degree with aging. Cross sectional studies give the impression of a progressive decline in LM with increasing age, but in longitudinal studies the time change in body composition is variable (52). From birth there are gender differences in body composition, and the changes in body composition during development and ageing are primarily attributed to the levels of sex steroids (56, 57). Males generally have a higher ratio of muscle mass (MM) to total LM than females, attributable to higher MM, however, this gender difference diminishes with increasing age. Women generally have a higher percent FM than men, at least until the fifth decade, in which the difference starts to vane, as women enter the menopause and estrogen levels decline. Men tend to accumulate more visceral fat with age than women, but also this gender difference is smaller when older men are compared to postmenopausal women (56). It is proposed that testosterone favours fat

deposition in the trunk and abdomen, whereas estrogen facilitates fat deposition in the buttocks and thighs, resulting in the sex-specific fat distribution (57). In addition, the enzyme lipoprotein lipase (LPL) facilitates fat uptake and storage in adipose tissue. LPL levels are high in adipose tissue at the hip, thigh and breast in women and in the abdomen in men (57). BMC is equal between the sexes until about the age of 15 years, after which males by the time of reaching adulthood have accrued higher BMC than females, especially apparent in the appendicular skeleton. The age-related loss of BMC is greater in women than men. These differences in BMC are also attributed to the gender differences in sex hormones (42, 56).

In men, MM declines by 20-40% between 25 to 75 years of age, the FM doubles and BMD decreases gradually (58). In women, the same changes are seen with ageing; decreasing MM and increasing FM with increasing age, however, the decrease in BMD is more abrupt in women, with a quicker decrease on entering the menopause (37, 40, 42, 56).

Overweight and obesity are defined as abnormal and excessive body fat which may impair health (59). One way of assessing these conditions is by means of BMI. The World Health Organization's (WHO) ranges for BMI are as follows; underweight: BMI < 18.50 kg/m², normal weight: BMI 18.50- 24.99 kg/m², overweight: BMI 25.00- 29.99 kg/m², obese: BMI ≥ 30.00 kg/m² (60). Globally the prevalence of overweight and obesity has now reached epidemic proportions (61), and it is estimated that 1.6 billion adults above the age of 15 years were overweight and 400 million adults were obese in 2005 (59). Across most countries in Europe the BMI in the general population has increased over the last decades (starting around 1980), and in many of the European Union Member States more than 50% of adults are overweight or obese (62). In Scandinavia and in the Netherlands the rise in obesity was delayed up to a decade compared to other European countries, primarily because of higher level of physical activity (63). In Norway the prevalence of obesity during the years 1995-

2002 was about 14% (64), and the proportion of the population being obese has steadily increased from well below 10% in 1984 to above 15% for both sexes in 2000-2003 (65). In the USA, where the prevalence of obesity is among the highest in the world, tipping 32% in 2003-2004 (66), it is estimated that if the steadily increase in BMI in the general population continues, obesity will soon override smoking as the main preventable cause of illness and premature death (61).

Obesity is associated with increased risk for cardiovascular diseases, diabetes mellitus, metabolic syndrome, primary and secondary hyperparathyroidism and some types of cancer (6, 11, 61, 66-69). It is intriguing that also vitamin D is associated with all these conditions, and adequate serum levels of 25(OH)D seem to be associated with a lower risk of the mentioned diseases (4, 25, 30, 70-72).

Several studies have shown an inverse association between body fat and serum levels of 25(OH)D (2, 3, 10). Previous reports from the Tromsø Study have found a positive relation between PTH and BMI (9), and that SHPT frequently is caused by low calcium intake and low serum 25(OH)D levels (73). FM is also found to be a significant independent determinant of serum PTH levels in postmenopausal women (74). A higher intake of dietary calcium is associated both with lower body weight compared to persons with lower intake, and also with weight reduction in obese persons who initially had low dietary calcium intake (7, 75). However, not all data support a causal relationship between high dairy food intake and/or high dietary calcium intake and lower fat mass deposition (76). Recently, even mild disturbances in calcium homeostasis in premenopausal women was found to be associated with obesity, lower BMD and decreased quality of life (77). There seems to be a positive association between elevated serum levels of PTH and body fat, but it is not known if the relation is causal, nor if PTH increases body fat or vice versa. Hence, calcium homeostasis is somehow involved in

the regulation of body composition and body weight, but no key for explaining the association(s) is yet found.

The pathogenesis of obesity is not well understood, but is probably multifactorial, involving a complex interaction of genetic, hormonal and environmental factors. An evolutionary origin of obesity is possible, making the body store excessive amounts of energy in adipose tissue, a capacity which in earlier times was essential for survival in periods of food deprivation and for female fertility and viability of offspring (78). However, in today's western society with food abundance, which in addition often is energy-dense, this energy storing leads to overweight and obesity because food scarcity is non-existent and we are much less physically active, thus creating a positive energy balance (79). An increase in calorie intake of 100-200 kcal daily in an adult with BMI 22 kg/m² can within 3-5 years result in an increase in BMI to over 25 kg/m² (62). That obesity is a complex trait is supported by studies searching for genetic explanations for obesity. More than 120 candidate genes and over 250 trait loci have been shown to be associated with obesity related phenotypes (80). Appetite regulation is another not fully understood determinant of body composition and body weight. It involves a complex interaction between the central nervous system, signalling peptides and hormones and the gastrointestinal tract (81). The immunesystem is also implicated in the pathogenesis of obesity (82). As a consequence of the lack of understanding of the mechanisms involved in determining body composition and of the pathophysiology of obesity, no simple and long term efficient pharmacological or surgical treatment of obesity exists at present (81, 83, 84). The economical burden of obesity and its complications on the public health care system is huge, and is expected to increase (62, 66).

1.5 Cigarette smoking and other lifestyle factors

Smoking clearly influences calcium homeostasis. Cigarette smoking reduces serum levels of PTH (12-14), and possibly also serum levels of 25(OH)D (13) and 1,25(OH)₂D (13, 14). Smokers generally have lower BMD compared to former and never smokers and smoking is a well known risk factor for hip fracture and osteoporosis (15, 16). Calcium absorption is generally lower in smokers than in non-smokers, and is most probably secondary to the suppressed levels of PTH, and possibly also to suppressed levels of 25(OH)D and 1,25(OH)₂D in smokers (85). The mechanism by which smoking suppresses the levels of PTH, and maybe also the levels of calcidiol and calcitriol is unknown. The lower BMD in smokers can be attributed to the possible suppressant effect of smoking on serum levels of calcidiol, calcitriol and sex steroids (85), resulting in higher bone turnover. In women smoking has an anti-estrogenic effect, leading to formation of estrogen metabolites with minimal estrogenic activity (85). In both genders, smokers have higher levels of sex-hormone binding globulin (SHBG) compared to non-smokers (85). Smoking is also reported to impair osteoblast function (14), and smoking could therefore result in decreased bone formation. A direct toxic effect of cigarette smoking on bone and impaired blood supply to bone as a consequence of smoking, are also plausible mechanisms for the reduced BMD seen in smokers.

In general, smokers have lower BMI than non-smokers (86-89). However, smokers tend to have a higher WHR and a shift in fat distribution to more abdominal fat over peripheral fat compared to non-smokers. Because of this change in body composition, smokers have an increased risk of diabetes mellitus, metabolic syndrome and cardiovascular diseases and events (86-89). Smoking is associated with higher consumption of alcohol and a more sedentary lifestyle compared to non-smokers (87, 89). Smoking cessation is shown to

give a reversal of the metabolically adverse body composition and, after several years, the fat distribution in former smokers approach the pattern in never smokers (86, 89). The same holds for BMD, with partially regain in BMD with increasing years since smoking cessation (15, 91, 92).

Smoking prevalence in Norway has decreased from over 50% of men and over 30% of women in 1973, to 24% and 23% of men and women, respectively, in 2007 (93). In 2007, 22% of the population aged 16-74 years were daily smokers, whereas 10% in the same age group were occasional smokers (93). Worldwide there are about 1.1 billion smokers (94). It has been estimated that if smoking prevalence is reduced to 20% by the year 2020 over 100 million deaths due to smoking could be prevented (95). Several countries have implemented smoking bans, which have proven to be successful (96-98).

Other lifestyle factors related to body composition are physical activity and alcohol consumption. Generally, people with higher levels of physical activity and moderate alcohol consumption exhibit a metabolic healthier body composition compared to their counterparts, with better preservation of MM and less FM and higher BMD (11, 99-101).

Thus, there is a complex, not fully understood, relationship between calcium homeostasis and body composition, and the associations between the two are further complicated by the confounding or modifying effects of lifestyle factors such as smoking, alcohol consumption and physical activity.

2. Aims of the thesis

The aims of the present thesis were to explore the relation of different aspects of body composition with calcium homeostasis and smoking by studying:

- the cross-sectional relation between BMI and smoking, and longitudinal changes in BMI in relation to change in smoking status
- the association between PTH and BMD, and the impact of smoking
- the association between PTH and body fat, and the impact of smoking
- the effect of 12 months of high doses of cholecalciferol, in conjunction with calcium supplementation, on body weight in persons with BMI between 28.0 and 47.0 kg/m²

3. Subjects and methods

3.1 Paper I, II and III

3.1.1 Subjects

Subjects were participants in the fifth (paper II), or both the fourth and the fifth (paper I and III), Tromsø Study; a population based multipurpose health survey. It has been conducted five times; in 1974, 1979, 1986, 1994/1995 (for simplicity 1994 in the following) and 2001/2002 (for simplicity 2001 in the following). The sixth Tromsø Study started in 2007 and was still running when this dissertation was written.

In the fourth Tromsø Study in 1994, all men and women born earlier than 1970 and living in the municipality of Tromsø were invited to participate. Out of 37 558 invited subjects, 27 158 accepted to attend the first phase of the study. The attendance rate was 77%, with an age distribution from 25 to 97 years. All subjects aged 55-74 years old and 5-10% random samples in the 25-54 and 75-85 age groups were invited to return for a second phase of the study with comprehensive examinations including bone densitometry. A total of 7965 subjects accepted the invitation to the second phase of the study. During recent years the Institute of Community Medicine has revised and updated their databases, and hence the number of invited subjects and the number of participants have changed since the writing of the studies presented in this thesis.

In the fifth Tromsø Study in 2001, all men and women older than 29 years in the municipality of Tromsø who had participated in the second phase of the fourth Tromsø Study in 1994, or became 30, 40, 45, 60 or 70 years old during 2001, were invited to participate. A total of 10 353 persons were invited, of whom 8130 attended the first phase of the study. The attendance rate was close to 79%, and the age distribution was 30 to 89 years. Of the attendants, 6966 subjects, who had also attended the second phase of the fourth Tromsø Study and were still living in Tromsø, were invited to attend the second the phase of the fifth

Tromsø Study with comprehensive examinations as in the preceding study. A total of 5939 persons accepted the invitation.

In paper I we included subjects in whom we had anthropometric measures and information of lifestyle factors, including smoking status and number of cigarettes smoked daily.

In paper II we included subjects from the fifth Tromsø Study who had eligible measurements of BMD, serum calcium < 2.55 mmol/L, measurement of serum PTH, and did not use hormone replacement therapy (HRT), contraceptive pills or medication for osteoporosis.

In paper III we included subjects from the fourth and the fifth Tromsø Study who had serum calcium < 2.55 mmol/L, and in whom we had anthropometric measures, serum PTH levels, information about lifestyle factors including smoking status and, available in the fifth Tromsø Study only, DEXA measurement of body composition.

3.1.2 Questionnaires

All subjects filled in a questionnaire regarding health, smoking status, physical activity in spare time, alcohol and coffee consumption, use of estrogen compounds, calcium supplements and cod liver oil. The questionnaires used in the fourth and the fifth Tromsø Study can be found in Appendix A and B, respectively.

A physical activity score was calculated as the sum of hours of light and heavy physical activity in spare time per week, with heavy physical activity given double weight. Coffee consumption was calculated as the sum of cups of all types of coffee (brewed, filtered

or other type) drunk per day. Alcohol consumption was calculated as the number of glasses of alcohol (adding glasses of spirits, beer and wine) consumed in two weeks, assuming equal amount of alcohol in each glass.

3.1.3 Measurements

Height and weight were measured wearing light clothing and no shoes. BMI was calculated as weight in kg divided by squared height in metres (kg/m^2). Body composition and BMD at the hip were measured by DEXA (GE LUNAR Prodigy, LUNAR Corporation, Madison, WI, USA), whereas BMD at the forearm was measured by two single X-ray absorptiometric devices (SXA) (DTX-100; Osteometer Medi-Tech Inc., Hawthorne, CA, USA), according to the manuals provided by the manufacturers. The coefficient of variation (CV) % was 1.17% and 0.9% for the DEXA and SXA measurements, respectively.

3.1.4 Blood samples

Blood samples were drawn in the non-fasting state, and analyzed at the Department of Clinical Chemistry, University Hospital of North Norway. A Hitachi Model 917 analyzer, with reagents from Boehringer Mannheim (Mannheim, FRG, Germany), was used for measurement of serum concentrations of calcium and creatinine. Serum concentrations of intact PTH were determined using an Immulite analyzer (Diagnostics Products, Los Angeles, CA, USA) for two-site chemiluminescent immunometric assay. Reference ranges in our laboratory were for serum calcium at the time of the study 2.20- 2.60 mmol/l; for serum creatinine 70-120 $\mu\text{mol}/\text{l}$ for men and 55-100 $\mu\text{mol}/\text{l}$ for women; and for serum PTH, 1.1-6.8 pmol/l for those 50 years old and younger, and 1.1-7.5 pmol/l for those older than 50 years.

3.1.5 Statistical analyses

Normal distribution was evaluated with visual inspection of histograms with normal curve, normality plots (Q-Q-plots), and determination of skewness and kurtosis. Whenever the dependent variable in question was normally distributed, parametric tests were used, and when it was not normally distributed non-parametric tests were used.

In general, a general linear model (GLM) was done first to check for interactions, and whenever an interaction was found we did stratified analyses for the variable in question where appropriate. Analysis of covariance (ANCOVA) was used for calculation of adjusted means.

When comparing groups, we used Student's t-test for normally distributed variables and Mann-Whitney or Kruskal-Wallis test for variables without normal distribution. Where applicable, we used a GLM for comparison of groups. Linear trend across subgroups was evaluated with linear regression analysis.

For evaluation of individual predictors of a normally distributed dependent variable, multiple, or in some instances univariate, linear regression was used. The appropriateness of the models was verified by plotting the residuals against each variable and inspecting the plots for even distribution throughout the variable range.

Correlations between the dependent variable and the predictor variables in question were evaluated either by Spearman's rho (ρ) or by Pearson's correlation coefficient (r), as appropriate. In the analyses of the longitudinal data, change in variables was calculated as the value in 2001 minus the value in 1994. In paper III, z-scores for PTH in 1994 and in 2001 were calculated to give the values from 1994 and 2001 equal weight when calculating the Δ PTH value (Δ PTH z-score).

Unless otherwise stated, all data are given as mean \pm standard deviation (SD). All tests were done two-sided, and $P < 0.05$ was considered statistically significant. A Bonferroni

correction was used when multiple comparisons were done. The Statistical Package for Social Sciences (SPSS) was used for all analyses (SPSS Inc., Chicago, Ill., USA); SPSS 13.0 in paper I, and SPSS 14.0 in paper II and III.

3.1.6 Ethics

The studies were approved by the Regional Ethics Committee, and all participants gave written informed consent prior to the studies.

3.2 Paper IV

3.2.1 Subjects

In paper IV the subjects were recruited either by letter after identification in hospital charts with the diagnosis overweight or obesity, or by advertisement in the local newspaper “Nordlys” and in the hospital’s official news periodical “Pingvinen”. Subjects between 21 and 70 years old of both sexes, with BMI between 28.0 and 47.0 kg/m², without diabetes mellitus, cardiovascular or psychiatric diseases or renal stone disease, and without conditions known to affect calcium homeostasis, as sarcoidosis, were recruited. Subjects who had lost more than 10% of their body weight during the last six months, used anti-depressant pharmacotherapy, drugs for weight-reduction or participated in weight-reduction programs, pregnant or lactating women and fertile females not using contraceptive pills or intrauterine contraception device, were not eligible. Subjects with serum calcium > 2.55 mmol/L, males with serum creatinine > 129 µmol/L and females with creatinine > 104 µmol/L were not included. In those with serum calcium in the range 2.50-2.55 mmol/L, serum PTH had to be < 5.0 pmol/L for inclusion. An oral glucose tolerance test (OGTT) was done at baseline, and persons having test results compatible with diabetes mellitus were excluded.

Trained nurses and I made telephone interview of 626 persons in order to recruit suitable subjects, using a questionnaire. There were 496 persons who met for screening, of whom 445 met our inclusion criteria and were included. Subjects were randomized, stratified by smoking status and gender, into three groups either receiving 20 000 IU cholecalciferol twice a week, 20 000 IU cholecalciferol and placebo weekly, or placebo twice a week. In addition, all subjects received 500 mg calciumcarbonat daily. There were six visits at the hospital during the study; screening, baseline and then after three, six, nine and 12 months.

3.2.2 Questionnaires

All subjects filled in questionnaires regarding physical activity, mood (Beck's Depression Inventory (BDI)) and food frequency on entering the study (baseline) and at the end of the study at 12 months. Specially trained nurses controlled each questionnaire together with the participant in order to make sure that there were no misunderstandings and that all parts of the questionnaires were answered. The food frequency and the BDI questionnaires were read optically, whereas the physical activity questionnaire was punched manually by one specially trained nurse. Smoking status was recorded, and subjects assigned as smoker or non-smoker.

A physical activity score was calculated from the reported amounts of vigorous, moderate and walking activities during the last seven days, and displayed as multiples of the resting metabolic rate (MET)-minutes per week. MET are metabolic equivalent. Intakes of calories, vitamin D and calcium were calculated from the food frequency questionnaire. The questionnaires used in the intervention study can be found in Appendix C.

3.2.3 Measurements

Height, weight, body composition and BMD were measured, and BMI was calculated, as described above for papers I, II and III. Waist circumference (WC) was measured 2.5 cm above the umbilicus, and hip circumference (HC) was measured at the widest circumference at the hip. The waist-to-hip ratio (WHR) was calculated by dividing the WC by the HC. Height, body composition and BMD were measured at baseline and at 12 months, whereas weight, WC and HC were measured, and WHR and BMI calculated, at each visit.

Glucose tolerance was assessed by OGTT; in the fasting state subjects were given 75 g dextrose dissolved in 300 ml water. Blood tests for determination of serum glucose and glycosylated adult haemoglobin 1 (HbA1c) were drawn immediately before the ingestion of the sugar solution, and two hours after ingestion for determination of serum glucose. Fasting serum glucose ≥ 7 mmol/L or two-hour value ≥ 11.1 mmol/L were evaluated as the subject having diabetes mellitus, and hence the person was excluded from the study.

Urine was collected for 24 hours both at baseline and at the end of the study for determination of urinary calcium excretion. Urinary calcium was measured on a Modular P800 (Roche Diagnostics®, Mannheim, Germany), with reagents from the same company. The reference range for urinary calcium was 2.0-8.0 mmol/24 hours.

3.2.4 Blood samples

At baseline and at 12 months, all blood samples were drawn in the fasting state, and at the other visits (3, 6 and 9 months) they were drawn in the non-fasting state. Serum calcium, serum creatinine and plasma PTH at screening were measured consecutively, whereas fasting serum PTH from baseline and after 12 months were analyzed in batch at the end of the study. All serum 25(OH)D samples were also analyzed in batch at the end of the study. Apparatuses

and reagents used for analyses of calcium, creatinine and PTH, as well as reference ranges were as described above for papers I, II and III.

Serum 25(OH)D₃ was determined by immunometry (electrochemiluminiscence: ECLIA) using an automated clinical chemistry analyser (Modular E170, Roche Diagnostics®, Mannheim, Germany). According to the producer, the assay has, for total analytical precision, a CV ≤ 7.8 % as judged in any of three different concentrations (48.6-73.8-177.0 nmol/L). The cross-reactivity with 25(OH)D₂ was <10 % and the analytical sensitivity was 10 nmol/L. At present, the laboratory has no reference values for 25(OH)D₃, but the manufacturer provides a population based reference range of 27.7-107.0 nmol/L for adults as a guideline.

3.2.5 Statistical analyses

In general, statistical analyses were performed as described for papers I-III. All dependent variables were considered normally distributed.

Correlations were evaluated with Pearson's correlation coefficient *r*. Linear regression was used for evaluation of individual predictors of BMI with age, gender, serum calcium, serum PTH, serum 25(OH)D, calorie intake, calcium intake, vitamin D intake, smoking status and physical activity score as covariates. Groups were compared by Student's *t*-test, applying Bonferroni correction for multiple analyses where appropriate. In addition, in order to incorporate all repeated measures, and to adjust for dependency between them, a linear mixed model with a Toeplitz covariance structure was used.

3.2.6 Ethics

The study was approved by the Regional Ethics Committee, and all participants gave written informed consent prior to the study.

4. Main results

4.1 Paper I. Cross-sectional study on the relationship between body mass index and smoking, and longitudinal changes in body mass index in relation to change in smoking status.

The objective in this combined cross-sectional and longitudinal study was to explore the relation between BMI and smoking, and to assess the effect of change in smoking status on BMI. A total of 10 920 men (3937 smokers) and 12 090 women (4343 smokers) from the fourth Tromsø Study, and 2364 men (732 smokers in 1994) and 2738 women (942 smokers in 1994) who had participated in both the fourth and the fifth Tromsø Study were included.

In the cross-sectional study we found that both male and female current smokers had a lower BMI, lower degree of physical activity and higher consumption of coffee and alcohol compared to never smokers. There was a U-shaped relation between the number of cigarettes smoked daily and BMI. Those smoking six to ten cigarettes daily had the lowest BMI, whereas never smokers and heavy smokers had similar BMI. In the longitudinal study we found continuing smokers to have a smaller increase in BMI compared to those who had given up smoking. Among those who had quitted smoking, there was a significant positive relation between the number of cigarettes smoked daily in 1994 and increase in BMI.

4.2 Paper II. The association between serum parathyroid hormone and bone mineral density, and the impact of smoking: the Tromsø Study.

In this cross-sectional study our aim was to address the relation between serum PTH and BMD, and to assess the impact of smoking. A total of 1442 men (341 smokers) and 1368 women (354 smokers) from the fifth Tromsø Study were included.

We found serum PTH to be a strong negative predictor of BMD at the hip in both genders, but not at the distal or ultradistal forearm. In addition, age and smoking were negative predictors and BMI and physical activity positive predictors of BMD at the hip. However, the relation between PTH and BMD at the hip was significant in current non-smokers only when smokers and non-smokers were analysed separately. Current non-smoking males had significant higher BMD at the hip, distal and ultradistal forearm compared to smoking men. Former smoking men had BMD values at all three measurement sites in-between current and never smoking men. There was a significant negative relation between the number of years smoked and BMD at the hip in both genders. Male former smokers showed increasing BMD values at the hip with increasing years since smoking cessation. There was no significant relation between BMD and neither the number of cigarettes smoked daily nor pack-years. The effect of smoking on BMD seemed more pronounced in men.

4.3 Paper III. The association between serum parathyroid hormone and body fat, and the impact of smoking. The Tromsø Study.

This work is a combined cross-sectional and longitudinal study, in which we wanted to explore the relation between serum PTH and measures of body fat, and the impact of smoking. In the cross-sectional part of the paper, 543 men (128 smokers) and 791 women (211 smokers) were included, whereas the longitudinal part included 639 men and 783 women, all non-smokers.

We found a positive relation between PTH and fat mass (measured by DEXA), in non-smokers only, in the cross-sectional part. There was a significant increase in age, BMI, total FM (kg), and percentages of total body fat, trunk fat and fat in the extremities with increasing PTH quartiles. In smokers there were no significant trends for measures of body composition across PTH quartiles. In the longitudinal study, the relation between PTH and body fat was assessed in continuing non-smokers only, by using BMI (DEXA-measurements were not available in the fourth Tromsø Study). We found a significant positive relation between quartiles of change in PTH from 1994 to 2001 (z-scores) and change in BMI during the same time period. However, there was no significant relation between quartiles of serum PTH in 1994 and subsequent change in BMI.

4.4 Paper IV. Supplementation with cholecalciferol does not result in weight reduction in overweight and obese subjects.

In this prospective, randomized double blind placebo controlled study we wanted to evaluate the effect of one year intervention with high doses of cholecalciferol, in conjunction with calcium supplementation, on body weight. At baseline 159 men (34 smokers) and 286 women (65 smokers) were included and 128 men (26 smokers) and 206 women (37 smokers) completed the study. During the study, two persons were diagnosed as having PHPT, another subject developed an increase in serum calcium to 2.62 mmol/L, and hence, all three were excluded. In addition, 108 participants withdraw their consent, or got excluded, because of various reasons (started other weight-reduction programs or pharmacological treatment for obesity, moved, got pregnant, time constraints, unknown reasons). There were no significant differences between the groups at baseline. We found a significant inverse association

between 25(OH)D and BMI, and a significant positive association between calorie intake and BMI. During the study there was no significant weight change within, or between, the groups. The same was found when dividing the study population according to baseline 25(OH)D levels. Nor were there any differences from baseline or between the groups in WHR or percentage body fat at 12 months. 25(OH)D increased significantly in both the cholecalciferol + cholecalciferol-group and in the cholecalciferol + placebo-group, and levels stabilized after three months and throughout the study. Serum PTH decreased significantly in the two groups given cholecalciferol, and serum calcium was unchanged in all three groups. Urinary calcium excretion increased in all three groups, but there was no significant difference between them.

5. General discussion

The findings in the four presented papers show that there is an interwoven relationship between body composition and calcium homeostasis, and that body composition also is influenced by cigarette smoking.

5.1 BMI, PTH, BMD and body fat, and the impact of smoking (Paper I, II and III)

In paper I we found a U-shaped relation between the number of cigarettes smoked and BMI, and that smoking cessation was associated with weight gain compared to continuing smokers, consistent with the findings of others (102, 103). In line with other studies (86, 104, 105), we also found current smokers to have lower BMI, lower physical activity level and higher coffee- and alcohol consumption compared to never smokers. Our results can be explained by the appetite suppressant effect and the increase in metabolic rate of smoking (106-108), and the unhealthier lifestyle associated with smoking compared to that of non-smokers (86, 104, 105). The net result could in heavy smokers be that their unhealthier lifestyle overrides the appetite suppressant effect and the increased metabolic rate induced by smoking.

We also found a positive relation between number of cigarettes smoked and amount of alcohol and coffee consumed, and a negative relation to levels of physical activity. Thus the increased amount of calories ingested in form of alcohol and the reduced energy expenditure in heavy smokers can result in a net positive energy balance and weight gain. Caffeine is also reported to augment the thermogenic effect (109-111) and the appetite reduction (106) caused by nicotine. In our study, smoking cessation was paralleled by a decrease in coffee consumption, and there was a positive association between the increase in BMI and the number of cigarettes previously smoked. Thus, the weight gain associated with smoking

cessation can be a result of increased appetite and reduced metabolic rate because nicotine supply is stopped, in addition to the effect of an already established sedentary lifestyle. Another mechanism for the weight gain after smoking cessation can be that nicotine lowers the body weight set point, and when smoking ceases the nicotine induced lowering effect disappears (112).

Based on the effects of PTH on calcium metabolism and bone, one would expect an inverse relation between PTH and BMD. However, in epidemiological studies the relation between PTH and BMD is not uniform. Most (113-117), but not all (118), studies support our finding of a negative relation between PTH and BMD at the hip (paper II). We found PTH, age and smoking to be significant negative predictors, and BMI and physical activity to be significant positive predictors, of BMD at the hip in both genders, as expected (41, 43). However, when stratifying by smoking status, the relation between PTH and BMD at the hip was significant in non-smokers only. PTH was not a significant predictor of BMD at the distal or ultradistal forearm, in accordance with Szulc et al. (116). In the studies by Garnero et al. (118) and Szulc et al. (116), adjustment for smoking status was not done.

When stratifying further by sex, we found that current non-smoking men had significantly higher BMD at the hip as well as at the distal and ultradistal forearm compared to smoking men, whereas no significant relations were found in women. The association between PTH and BMD in men was most pronounced at the hip. Former smoking men had BMD values at all three measurement sites in-between current and never smokers. The gender difference is in accordance with a large meta-analysis done by Ward and Klesges (15). We do not find it likely that the gender difference is caused by sex hormones, because smoking has an anti-estrogenic effect in women (85) and is associated with elevated testosterone levels in men (72).

It could be that toxins in cigarette smoke affect the microstructure of bone or blood supply to bone (15), thus leading to bone loss. The lower PTH seen among smokers compared to non-smokers could be an attempt from the body to spare bone from the harmful effect of smoking on the skeleton. However, a reduction in PTH will also lead to increased renal calcium loss and reduced 1,25-hydroxylation of 25(OH)D. In addition, smoking is associated with lower BMI (15, 86-89), earlier menopause (15) and an unhealthier lifestyle compared to non-smokers (15, 87, 89), all of which could lead to reduced BMD. Smoking impairs osteoblast function (14), and thus an inhibitory function on bone formation is also a possible mechanism for the reduced BMD associated with smoking (14, 15).

We did not find any relation between BMD and neither number of cigarettes smoked daily, nor pack-years, which can be attributable to information bias. However, we found a significant relation between BMD at the hip and number of years smoked in former smokers in both genders, and in men, also with the number of years since smoking cessation. The partially reversible harmful effect of smoking on bone seen after smoking cessation is supported by other studies (15).

The positive relation between PTH and FM observed in our study (paper III), is also shown previously by others (3, 74, 119), and was expected based on our own earlier findings in paper II and previous reports from the Tromsø Study (9). However, in contrast to Snijder et al. (119), we found a significant relation between FM and PTH in non-smokers only, but Snijder et al. found that the relation became 10% stronger when adjustment for smoking was done. In accordance with Snijder et al., we found a strong association between PTH and total body and trunk fat, but we found in addition a significant relation between PTH and fat in the extremities. This difference can be attributed to the higher number of subjects in our study.

Across increasing PTH quartiles we found a significant increase in age, BMI, total FM (kg), and percent total body fat, trunk fat and fat in the extremities in non-smokers, but not in smokers. We did not find any relation of PTH with LM. The masking effect of smoking on the association between PTH and body fat is difficult to explain.

One explanation for the increased FM associated with increased levels of PTH might be that PTH is reported to impede catecholamine induced lipolysis in adipocytes (11) and by increasing intracellular calcium ion concentrations in adipocytes, elevated PTH levels can enhance lipogenesis (75). Zemel states that dietary calcium has anti-obesity effects (75), and this is supported by others (120, 121). It is shown that dairy calcium affects body weight to a greater degree than calcium supplementation does (75), probably because dairy products are fortified with vitamin D in many countries. However, there is also contradictory evidence (76). We found a weak, significant association between change in serum PTH (Δ PTH z-scores) and BMI in the longitudinal study in paper III. This may indicate a causal relationship between PTH and body fat, but if it exists, it is probably of low clinical significance. It has to be addressed that BMI is only a surrogate marker for fat distribution, and it is possible that we had found different results if DEXA-measurements of body composition were available in the fourth Tromsø Study also.

Further support for the hypothesis that there is connection between calcium homeostasis and body composition comes from the finding that adipocytes and osteoblasts arise from the same progenitor cell (122). It has been suggested that osteoporosis is the obesity of bone, as there is evidence suggesting that fat infiltration in the bone marrow is associated with skeletal fragility (122). In addition, studies have shown that bone mass is positively related to body weight and BMI (123, 124), supporting our findings. However, the relative contribution of LM versus FM is controversial (123).

There are some limitations of our studies. In paper II and III all blood tests were drawn in the non-fasting state, and the levels of serum PTH and serum calcium could therefore have been influenced by calcium intake or smoking. In addition, the effect of sex steroids, intake of calcium and vitamin D were not assessed, all of which are known to be related to both BMD and body composition, as described in the introduction of this thesis. Adjustment for calcium- and vitamin D intake would probably have strengthened our studies. However, it is also known that calculation of dietary intake is prone to inaccuracy, as all variables based on questionnaires compiled on a recall basis are. Further discussion on methodology is given in section 5.3.

5.2 Body weight and vitamin D (Paper IV)

We found, at baseline, an expected significant inverse association between serum levels of 25(OH)D and BMI, and a positive relation between serum PTH and body weight in this cohort of overweight and obese subjects, in accordance with other studies (10, 119). In support of our findings, a recent cross-sectional study in over 2000 subjects in Norway showed an inverse association between both 25(OH)D and 1,25(OH)₂D levels and BMI (125).

There were no significant differences between the groups in our study at baseline, and during the intervention period there was no significant weight change neither within any of the groups nor between the groups. Nor were there any significant change in percent FM or fat distribution, the latter evaluated by WHR. The expected reduction in serum PTH levels was observed, and there was an increase in the serum levels of 25(OH)D to the upper physiological range, which reached a plateau after three months and stabilized thereafter.

Regarding the lack of effect of cholecalciferol on weight change, it should be kept in mind that there are several other factors which could influence our results, as for example compliance rate. However, the compliance rate was high in our study, 95% for the vitamin D

and placebo capsules, and for the calcium tablets ranging from 81% to 85%. Another possibility is that the choice of cholecalciferol was wrong, as other studies have shown significant weight reduction in obese subjects given alfa-calcidiol (126, 127). However, in a study by Nilas et al., where they treated three different groups with either alfacalcidiol, cholecalciferol or calcitriol for one year, there was no significant effect on weight with either regimen (128). Nor did Trivedi et al. find any effect of cholecalciferol on body weight (129). Under normal physiological conditions, the level of $1,25(\text{OH})_2\text{D}$ is substrate dependent, i.e. the level of $1,25(\text{OH})_2\text{D}$ is dependent on the level of $25(\text{OH})\text{D}$ (4, 23, 29). There are also conflicting results about the potency of ergocalciferol and cholecalciferol in humans (130, 131). Our rationale for selecting cholecalciferol was based on earlier findings concluding that cholecalciferol was more potent than ergocalciferol (4, 130). However, a recent paper by Holick et al. showed that ergocalciferol and cholecalciferol probably were equally effective in maintaining the serum level of $25(\text{OH})\text{D}$ (131).

It is also possible that the concomitant supplementation with calcium was a confounder in our study, as there are several studies regarding weight loss attributed to calcium supplementation (7, 8, 75, 120, 121). We cannot exclude that the calcium supplementation can have masked an effect of cholecalciferol on body weight. However, our subjects did not show any significant weight loss, and in studies with calcium supplementation in the order of our dosage (500 mg tablets) there are small effects on weight change compared to doses of double magnitude (121). Thus, we find it unlikely that the calcium supplementation has influenced our results to a significant degree. Adjustment for phosphate levels was not done, and hence could have changed our results. However, elevated serum concentrations of phosphate are relatively rare, and hence we do not believe that the lack of adjustment for phosphate have influenced our results.

It could also be that there actually is a “fat mass homeostasis”, and that sufficient levels of both calcium and vitamin D have to be present over time (i.e. years) in order to stabilize weight, and thus only one year of supplementation is too short a time period for weight change in overweight and obese subjects. This is supported by a recent placebo-controlled study in postmenopausal women by Caan et al (132). They gave 400 IU cholecalciferol and 1000 mg elemental calcium daily for an average of seven years, and found a small effect on the prevention of weight gain.

There is an ongoing debate regarding the optimal daily dosage of vitamin D, safety of vitamin D supplementation and the optimal serum concentration of vitamin D (30, 31, 133-143). Most scientists with vitamin D as research field claim that today’s recommendations for daily vitamin D intake are too low. Our study gives an important contribution to this debate. The doses we used in our intervention study indicate that there is no danger of hypercalcemia or other serious adverse effects with doses of cholecalciferol several fold higher than the daily recommended dosage. However, obviously, results of a one-year intervention study in 334 overweight and obese persons at our latitude cannot be extrapolated to prove safety for the general population worldwide.

There are considerable strengths in this study as there were a high number of participants of both genders, and baseline and 12 months blood samples were collected in the fasting state and at the same time of day, as were also the DEXA-measurements. Our analyses are adjusted for age, gender, smoking status, calorie-, calcium and vitamin D intake, serum calcium and physical activity; factors known to affect body composition.

5.3 General aspects regarding methodology

Selection bias could be a potential limitation of our studies. It is known that volunteers in population based surveys are often more interested in health issues, and hence they could represent a healthier population compared to non-participants. This implies that the results found probably are of weaker associations than they would have been if also non-participants had been studied. However, the attendance rates were high, and in the Tromsø Study the subjects were not selected because of any particular condition, and the incidence of cardiovascular diseases, mortality, education and lifestyle in Tromsø is not very different compared to other parts of Norway (144). The latitude of Tromsø at 70° N results in complete loss of sunshine during wintertime from late November until middle of January and no sunset from the middle of May until late July, thus giving considerable variation for the contribution of sunshine to vitamin D status. However, the population in the northern part of Norway has a relatively high intake of dietary vitamin D (32), which probably partly compensates for the lack of sunshine during winter. Thus, we find it unlikely that our study populations in paper I-III are not representative for the general Norwegian population. In contrast, in paper IV, the participants had to be healthy overweight or obese persons, and thus the results from this study cannot be extrapolated to persons with lower BMI than 28.0 kg/m² or to subjects suffering from major or serious illnesses. Even though the attendance rates in the Tromsø Studies were high, the attendance rates among the younger cohorts were lower, and hence the age distribution makes the results among younger men and premenopausal women more uncertain. In addition, practically all our participants in paper I-III were Caucasians, so our results cannot imply anything in subjects of other ethnic groups because of the known differences in body composition seen between people of different ethnicity.

Information bias is another possible limitation of our studies. It can be difficult to recall exactly the amount of ingested foods and the exact number of cigarettes smoked. Smokers tend to underestimate the number of cigarettes they smoke daily, and heavy drinkers tend to underestimate their amount of alcohol consumption. Regarding self reported physical activity, there are conflicting results of the validity of self reported physical activity level (145, 146). It seems as men, younger subjects and those with lower BMI tend to have more accurate estimations of physical activity compared to others (146). The accuracy of estimation of energy intake is also variable (147). Thus, the variables for cigarette smoking, physical activity, and nutrition and alcohol consumption are prone to some inaccuracy. Neither did we adjust for socioeconomic status, which affects body composition to a variable degree in both men and women (148, 149).

BMD measured by DEXA gives only a two dimensional picture of bone, it gives no information of the histomorphometric structure (40, 41, 150). Thus, the impact of the various covariates on bone assessed in our studies is only attributable to the density, not the content or microstructure, of bone. The same holds for the forearm measurements by SXA. Regarding DEXA-measurements of body composition the accuracy seems to vary with age, gender and degree of overweight (151). Even though the precision of bone measurements and soft tissue is good, 1% and 2-3% respectively, the accuracy of the measurements is not well established, particularly regarding FM. In addition, DEXA cannot clearly distinguish bone from soft tissue in all body regions, and the scanner might not be big enough for larger persons (152). However, it is concluded in one recent study that DEXA measurements are valuable in longitudinal studies of changes in body composition (153). In the Tromsø Study the CV was only 0.9% for the SXA (paper II) and 1.7% for the DEXA measurements (paper II and III). Hence, the validity of the data for BMD was probably good.

The different ways of measuring body composition, differences in methodology and age distribution or ethnicity, implies that results and conclusions based on comparison with other studies using a different methodology must be interpreted with caution. BMI does not distinguish between FM and LM, and even though it is used for assessment of fatness it is almost as much a measure of leanness (152). Both the degree of obesity and of underweight is often assessed by BMI (152). The BMI expression calculates the number of kilos of body weight divided by height squared. Thus, a person with proportionally higher MM than FM (e.g. a bodybuilder) can have the same BMI as an obese person with low MM but high FM. BMI is a better measure of fat content (kg) than fatness (%) (152). We find the use of our assessment methods for body composition satisfying and well rationalized, even though it would have been preferable to have DEXA measurements from the fourth Tromsø Study as well.

It should also be emphasized that cross-sectional studies give only a moment in time-picture, which implies that causal relations from associations found cannot be drawn (paper II, partially paper I and III).

However, all our studies also have considerable strength because of the large number of participants, the stratified analyses and the adjustment for several important possible confounders and effect modifiers. The longitudinal design in paper I and III and the intervention in IV further improve the strength of those studies. In addition, all measurements in all studies were done by specially trained personnel strictly following the study protocols.

6. Conclusions

1. BMI is strongly related to smoking status and other lifestyle factors, as physical activity level, coffee- and alcohol consumption.
2. The relation between number of cigarettes smoked daily and BMI is U-shaped.
3. During a seven year period there was an increase in mean BMI in both men and women in all subgroups of smoking status, but smoking cessation was associated with an increase in body weight compared to those who continued smoking.
4. There is a negative association between serum PTH and BMD at the hip in both men and women, and this relation seems to be diminished by smoking.
5. Smoking reduces BMD at the hip, distal and ultradistal forearm in men, and the effect seems to be mainly time dependent and independent of dose.
6. The negative effect of smoking on BMD diminishes after smoking cessation.
7. Serum levels of PTH are positively associated with body FM in non-smokers.
8. There might be a causal relation between PTH and body FM.
9. Supplementation with high doses of cholecalciferol in conjunction with daily calcium supplementation over 12 months does not result in weight reduction in overweight and obese persons.
10. Our results, in conjunction with the findings of others, demonstrates that body weight is determined by multiple factors, and hence it is not expected that one single variable, as for example calcium and vitamin D status, would explain a large part of the variation in body weight.

7. Implications and further research

The finding of a U-shaped relation between the number of cigarettes smoked daily and BMI implies that smokers are a heterogeneous group, and this has to be taken into consideration when the relation between BMI and smoking is being assessed. We have shown that smoking affects both serum PTH levels, BMD, BMI and the distribution of body fat, and these findings imply that adjustment for smoking status is mandatory whenever evaluating the relation between body composition and PTH. We have found a relation between change in PTH and change in BMI in non-smokers, and no effect of supplementation with cholecalciferol on weight in overweight and obese persons. Based on the results of the intervention study, we cannot recommend vitamin D supplementation as an aid for weight reduction.

What is not known are the optimal levels of 25(OH)D regarding general health outcomes and the long-term safety of higher dosages than the current recommended intake of vitamin D. It is known that insufficient serum concentrations of vitamin D are associated with increased fall tendency (154) and fracture risk (155), reduced muscle function and strength (sarcopenia) (156), increased incidence and poorer outcomes of cardiovascular, pulmonary and immunological diseases and cancer (4, 30, 70), impaired mood and neuropsychiatric functions (157, 158). Vitamin D is also essential for brain development and function (159). Several reviews have also concluded that vitamin D supplementation may protect against development of diabetes mellitus and decrease total mortality rates (160, 161). Low 25(OH)D levels are associated with obesity, increased cardiovascular risk, hypertension, congestive heart failure and stroke (163). However, these are mainly associations and what are warranted are carefully conducted intervention studies to establish whether there is a cause-effect relationship or not. Before this is done, one should be careful recommending higher intakes of vitamin D than the current existing guidelines.

Thus, it is possible that sufficient serum levels of vitamin D and a normal calcium homeostasis are important in order to maintain normal body weight. As a final remark, regardless of whatever effect vitamin D may have on body composition, one pill is not enough: collaboration between the physician and the patient is essential for success, which is particularly true regarding weight reduction and smoking cessation. Some things in medicine have not changed since ancient times;

“The art has three factors, the disease, the patient, the physician... The patient must cooperate with the physician in combating the disease.” Hippocrates (164)

8. References

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Paper I

Paper II

Paper III

Paper IV

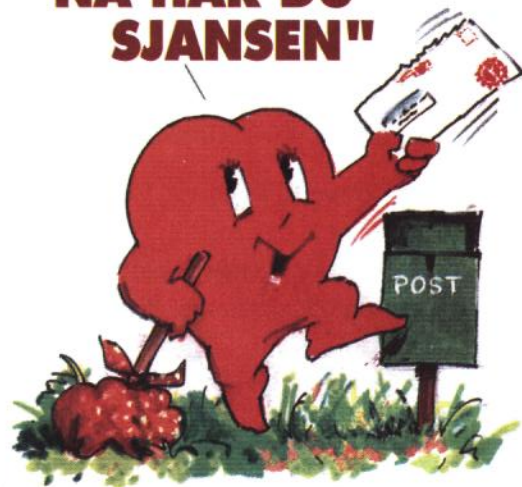
Appendices

Appendix A. Questionnaires in the fourth Tromsø Study in 1994-1995

1. First questionnaire, the Tromsø Study 1994-1995, Norwegian and English
2. Second questionnaire, the Tromsø Study 1994-1995, for subjects below the age of 70,
Norwegian and English
3. Second questionnaire, the Tromsø Study 1994-1995, for subjects over the age of 70,
Norwegian and English

Innbydelse til HELSEUNDERSØKELSEN

"NÅ HAR DU
SJANSEN"



Fødselsdato Personnr.

Kommune

Kretsnr.

Velkommen til helseundersøkelsen i Tromsø!

Helseundersøkelsen kommer nå til Tromsø. Tid og sted for fram møte finner du nedenfor. Du finner også en orientering om undersøkelsen i den vedlagte brosjyren.

Vi ber deg fylle ut spørreskjemaet på baksiden og ta det med til undersøkelsen.

Undersøkelsen blir mest verdifull om fram møtet blir så fullstendig som mulig. Vi håper derfor at du har

mulighet til å komme. Møt selv om du kjenner deg frisk, om du er under legebehandling, eller om du har fått målt kolesterol og blodtrykk i den senere tid.

Vennlig hilsen
Kommunehelsetjenesten
Fagområdet medisin, Universitetet i Tromsø
Statens helseundersøkelser

"GRIP SJANSEN—
MØT FRAM!"



EGEN HELSE

Hvordan er helsen din nå? *Sett bare ett kryss.*

- Dårlig 12 1
 Ikke helt god 2
 God 3
 Svært god 4

Har du, eller har du hatt:

	JA	NEI	Alder første gang
Hjerteinfarkt 13	<input type="checkbox"/>	<input type="checkbox"/>	år
Angina pectoris (hjertekrampe) 16	<input type="checkbox"/>	<input type="checkbox"/>	år
Hjerneslag/hjerneblødning 19	<input type="checkbox"/>	<input type="checkbox"/>	år
Astma 22	<input type="checkbox"/>	<input type="checkbox"/>	år
Diabetes (sukkersyke) 25	<input type="checkbox"/>	<input type="checkbox"/>	år

Bruker du medisin mot høyt blodtrykk?

- Nå 28 1
 Før, men ikke nå 2
 Aldri brukt 3

Har du i løpet av det siste året vært plaget med smerter og/eller stivhet i muskler og ledd som har vart i minst 3 måneder sammenhengende? 29

JA	NEI
<input type="checkbox"/>	<input type="checkbox"/>

Har du de siste to ukene følt deg:

	Nei	Litt	En god del	Svært mye
Nervøs og urolig? 30	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plaget av angst? 31	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trygg og rolig? 32	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Irritabel? 33	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glad og optimistisk? 34	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nedfor/deprimert? 35	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ensom? 36	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4

RØYKING

Røykte noen av de voksne hjemme da du vokste opp? 37

JA	NEI
<input type="checkbox"/>	<input type="checkbox"/>

Bor du, eller har du bodd, sammen med noen dagligrykere etter at du fylte 20 år? 38

JA	NEI
<input type="checkbox"/>	<input type="checkbox"/>

Hvis "JA", hvor mange år tilsammen? ... 39

 Antall år

Hvor lenge er du vanligvis daglig tilstede i røykfyllt rom? 41

 Antall timer

Sett 0 hvis du ikke oppholder deg i røykfyllt rom.

Røyker du selv:

- Sigaretter daglig? 43 JA NEI
 Sigarer/sigarillos daglig? 44 JA NEI
 Pipe daglig? 45 JA NEI

Hvis du har røykt daglig tidligere, hvor lenge er det siden du sluttet? 46

 Antall år

Hvis du røyker daglig nå eller har røykt tidligere:

Hvor mange sigaretter røyker eller røykte du vanligvis daglig? 48

 Antall sigaretter

Hvor gammel var du da du begynte å røyke daglig? 52

 Alder år

Hvor mange år tilsammen har du røykt daglig? 54

 Antall år

MOSJON

Hvordan har din fysiske aktivitet i fritiden vært det siste året? *Tenk deg et ukentlig gjennomsnitt for året.*

Arbeidsvei regnes som fritid.

	Timer pr. uke				
	Ingen	Under 1	1-2	3 og mer	
Lett aktivitet (ikke svett/andpusten) 56	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hard fysisk aktivitet (svett/andpusten) 57	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	

KAFFE

Hvor mange kopper kaffe drikker du daglig?

Sett 0 hvis du ikke drikker kaffe daglig.

- Kokekaffe 58 Antall kopper
 Annen kaffe 60 Antall kopper

ALKOHOL

Er du total avholdsmann/-kvinne? 62

JA	NEI
<input type="checkbox"/>	<input type="checkbox"/>

Hvor mange ganger i måneden drikker du vanligvis alkohol? *Regn ikke med lettøl.*

Sett 0 hvis mindre enn 1 gang i mnd. 63

 Antall ganger

Hvor mange glass øl, vin eller brennevin drikker du vanligvis i løpet av to uker? 65

- Regn ikke med lettøl.*
- Sett 0 hvis du ikke drikker alkohol.*
- Øl glass Vin glass Brennevin glass

FETT

Hva slags margarin eller smør bruker du vanligvis på brødet? *Sett ett kryss.*

- Bruker ikke smør/margarin 71 1
 Meierismør 2
 Hard margarin 3
 Bløt (soft) margarin 4
 Smør/margarin blanding 5
 Lettmargarin 6

UTDANNING/ARBEID

Hvilken utdanning er den høyeste du har fullført?

- Grunnskole, 7-10 år, framholdsskole, folkehøgskole 72 1
 Realskole, middelskole, yrkesskole, 1-2-årig videregående skole 2
 Artium, øk.gymnas, allmennfaglig retning i videregående skole 3
 Høgskole/universitet, mindre enn 4 år 4
 Høgskole/universitet, 4 år eller mer 5

Hva slags arbeidssituasjon har du nå?

- Lønnet arbeid 73
 Heltids husarbeid 74
 Utdanning, militærtjeneste 75
 Arbeidsledig, permittert 76

Hvor mange timer lønnet arbeid har du i uka? ... 77

 Antall timer

Mottar du nå noen av følgende ytelser?

- Syketrygd (sykmeldt) 79
 Attføring 80
 Uførepensjon 81
 Alderspensjon 82
 Sosialstøtte 83
 Arbeidsløshetsstrygd 84

SYKDOM I FAMILIEN

Har en eller flere av foreldre eller søsken hatt hjerteinfarkt (sår på hjertet) eller angina pectoris (hjertekrampe)? 85

JA	NEI	VET IKKE
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

English translation of invitation with the first questionnaire used in the health survey in Tromsø 1994/95

Translation based on translations by Kevin McCafferty and Anne Clancy

HEALTH SURVEY
INVITATION

"This is your chance"

Date of birth Social security No.

Municipality Electoral ward No.

Welcome to the Tromsø
Health Survey!

The Health Survey is coming to Tromsø. This leaflet will tell you when and where. You will also find information about the survey in the enclosed brochure.

We would like you to fill in the form overleaf and take it with you to the examination.

The more people take part in the survey, the more valuable its results will be. We hope, therefore, that you will be able to come. Come along even if you feel healthy, if you are currently receiving medical treatment, or if you have had your cholesterol and blood pressure levels taken recently.

Yours sincerely,

Municipal Health Authorities
Faculty of Medicine - University of Tromsø
National Health Screening Service

"This is a real opportunity – Take it!"

Your own health

What is your current state of health?

Tick one box only.

Poor
Not so good
Good
Very good

Do you have, or have you ever had:

	YES	NO	Age first time
Myocardial infarction	<input type="checkbox"/>	<input type="checkbox"/>	_____ years
Angina pectoris	<input type="checkbox"/>	<input type="checkbox"/>	_____ years
Stroke/ brain haemorrhage	<input type="checkbox"/>	<input type="checkbox"/>	_____ years
Asthma	<input type="checkbox"/>	<input type="checkbox"/>	_____ years
Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	_____ years

Do you take medicine for high blood pressure?

At the moment
Used to, but not any longer
Never have

Have you during the last year suffered from pains and/or stiffness in muscles and joints that have lasted continuously for at least 3 months?

YES NO

Have you in the last two weeks felt:

	No	A little	A lot	Very much
Nervous or worried?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anxious?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secure and calm?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Irritable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Happy and optimistic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Down/depressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lonely?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Smoking

Did any of the adults at home smoke while you were growing up? YES NO

Do you now, or have you previously, lived with daily smokers after your 20th birthday?

YES NO

If "YES", for how many years in all? _____Years

How many hours a day do you normally spend in smoke-filled rooms? _____Hours

Put 0 if you do not spend time in smoke-filled rooms.

Do you yourself smoke: YES NO
 Cigarettes daily?
 Cigars/cigarillos daily?
 Pipe daily ?

If you previously smoked daily, how long is it since you stopped? _____ Years

If you smoke daily at the moment, or have smoked before:

How many cigarettes do you smoke/did you smoke per day? _____ Cigarettes

How old were you when you began smoking daily? Age _____ Years

How many years in all have you smoked daily? _____ Years

Exercise

How has your physical activity in leisure time been during this last year? *Think of your weekly average for the year. Time spent going to work counts as leisure time.*

	Hours pr. week			
	None	Less than 1	1-2	3 or more
Light activity (not sweating or out of breath)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hard activity (sweating/ out of breath)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Coffee

How many cups of coffee do you drink daily? *Put 0 if you do not drink coffee daily.* Cups

Boiled coffee

(i.e., grind boiled and allowed to draw)

Other coffee

Alcohol

Are you a teetotaler? YES NO

How many times a month do you normally drink alcohol? *Do not count low-alcohol beer. Put 0 if less than once a month.* _____ Times

How many glasses of beer, wine or spirits do you normally drink in a fortnight? *Do not count low-alcohol beer. Put 0 if less than once a month.*

Beer	Wine	Spirits
Glasses	Glasses	Glasses
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

Fat

What kind of margarine or butter do you normally use on bread? *Tick one box only.*

Don't use butter/margarine
 Creamery butter
 Hard margarine
 Soft margarine
 Butter/margarine blend
 Light margarine

Education/work

What is the highest level of education you have completed?

7-10 years primary/secondary school, modern secondary school, folk high school
 Technical school, middle school, vocational.. school, 1-2 years' senior high school
 A-levels/High school diploma, (3-4 years)
 College/university, less than 4 years
 College/university, 4 or more years

What is your current work situation?

Paid work
 Full-time housework
 Education, military service
 Unemployed, redundant

How many hours of paid work do you have pr. week? _____ Hours

Do you receive any of the following benefits?

Sickness benefit (sick leave)
 Rehabilitation benefit
 Disability pension
 Old-age pension
 Social welfare benefits
 Unemployment benefit

Illness in the family

Have one or more of your parents or siblings had a heart attack or had angina (heart cramp)?

YES NO DON'T KNOW

Helseundersøkelsen i Tromsø

Hovedformålet med Tromsøundersøkelsene er å skaffe ny kunnskap om hjerte-karsykdommer for å kunne forebygge dem. I tillegg skal undersøkelsen øke kunnskapen om kreftsykdommer og andre alminnelige plager som f.eks. allergier, smerter i muskulatur og nervøse lidelser. Vi ber deg derfor svare på noen spørsmål om forhold som kan ha betydning for risikoen for disse og andre sykdommer.

Skjemaet er en del av Helseundersøkelsen som er godkjent av Datatilsynet og av Regional komite for medisinsk forskningsetikk. Svarene brukes bare til forskning og behandles strengt fortrolig. Opplysningene kan senere bli sammenholdt med informasjon fra andre offentlige helseregistre etter de regler som Datatilsynet og Regional komite for medisinsk forskningsetikk gir.

Hvis du er i tvil om hva du skal svare, sett kryss i den ruten som du synes passer best.

Det utfylte skjema sendes i vedlagte svarkonvolutt. Porto er betalt.

På forhånd takk for hjelpen!

Med vennlig hilsen

Fagområdet medisin
Universitetet i Tromsø

Statens helseundersøkelser

Hvis du ikke ønsker å besvare spørreskjemaet, sett kryss i ruten under og returner skjemaet. Da slipper du purring.

Jeg ønsker ikke å besvare spørreskjemaet17

Dag Mnd År

Dato for utfylling av skjema:18/...../.....

OPPVEKST

I hvilken kommune bodde du da du fylte 1 år?

.....24-28
Hvis du ikke bodde i Norge, oppgi land i stedet for kommune.

Hvordan var de økonomiske forhold i familien under din oppvekst?

Meget gode29
Gode
Vanskelige
Meget vanskelige

Hvor mange av de første 3 årene av ditt liv

– bodde du i by?30 _____ år
– hadde dere katt eller hund i hjemmet?31 _____ år

Hvor mange av de første 15 årene av ditt liv

– bodde du i by?32 _____ år
– hadde dere katt eller hund i hjemmet?34 _____ år

BOLIG

Hvem bor du sammen med?

Sett ett kryss for hvert spørsmål og angi antall. Ja Nei Antall

Ektefelle/samboer36 _____
Andre personer over 18 år37 _____
Personer under 18 år40 _____

Hvor mange av barna har plass i barnehage?43 _____

Hvilken type bolig bor du i?

Enebolig/villa45 1
Gårdsbruk 2
Blokk/terrasseleilighet 3
Rekkehus/2-4 mannsbolig 4
Annen bolig 5

Hvor stor er din boenhet?46 _____ m²

I omtrent hvilket år ble boligen bygget?49 _____

Er boligen isolert etter 1970?53 Ja Nei

Bor du i underetasje/kjeller?54
Hvis "Ja", er gulvbelegget lagt på betong?55

Hvordan er boligen hovedsakelig oppvarmet?

Elektrisk oppvarming56
Vedfyring
Sentralvarmeanlegg oppvarmet med:
Parafin
Elektrisitet

Er det heldekkende tepper i stua?60 Ja Nei
Er det katt i boligen?61
Er det hund i boligen?62

ARBEID

Hvis du er i lønnet eller ulønnet arbeid, hvordan vil du beskrive ditt arbeid?

For det meste stillesittende arbeid?63 1
(f.eks. skrivebordsarbeid, montering)
Arbeid som krever at du går mye? 2
(f.eks. ekspeditørb., lett industriarb., undervisning)
Arbeid hvor du går og løfter mye? 3
(f.eks. postbud, pleier, bygningsarbeid)
Tungt kroppsarbeid? 4
(f.eks. skogsarb., tungt jordbruksarb., tungt bygn.arb.)

Kan du selv bestemme hvordan arbeidet ditt skal legges opp?

Nei, ikke i det hele tatt64 1
I liten grad 2
Ja, i stor grad 3
Ja, det bestemmer jeg selv 4

Har du skiftarbeid, nattarbeid eller går vakter?65 Ja Nei

Har du noen av følgende yrker (heltid eller deltid)?

Sett ett kryss for hvert spørsmål. Ja Nei
Sjåfør66
Bonde/gårdbruker
Fisker

EGNE SYKDOMMER

Har du noen gang hatt:

Sett ett kryss for hvert spørsmål. Oppgi alderen ved hendelsen.
Hvis det har skjedd flere ganger, hvor gammel var du **siste** gang?

	Ja	Nei	Alder
Lårhalsbrudd.....	69 <input type="checkbox"/>	<input type="checkbox"/>	_____
Brudd ved håndledd/underarm.....	72 <input type="checkbox"/>	<input type="checkbox"/>	_____
Nakkesleng (whiplash).....	75 <input type="checkbox"/>	<input type="checkbox"/>	_____
Skade som førte til sykehusinnleggelse.....	78 <input type="checkbox"/>	<input type="checkbox"/>	_____
Sår på magesekken.....	81 <input type="checkbox"/>	<input type="checkbox"/>	_____
Sår på tolvfingertarmen.....	84 <input type="checkbox"/>	<input type="checkbox"/>	_____
Magesår-operasjon.....	87 <input type="checkbox"/>	<input type="checkbox"/>	_____
Operasjon på halsen.....	90 <input type="checkbox"/>	<input type="checkbox"/>	_____

Har du eller har du hatt:

Sett ett kryss for hvert spørsmål.

	Ja	Nei
Kreftsykdom.....	93 <input type="checkbox"/>	<input type="checkbox"/>
Epilepsi (fallesyke).....	<input type="checkbox"/>	<input type="checkbox"/>
Migrene.....	<input type="checkbox"/>	<input type="checkbox"/>
Kronisk bronkitt.....	<input type="checkbox"/>	<input type="checkbox"/>
Psoriasis.....	<input type="checkbox"/>	<input type="checkbox"/>
Benskjørhet (osteoporose).....	98 <input type="checkbox"/>	<input type="checkbox"/>
Fibromyalgi/fibrositt/kronisk smertesyndrom.....	<input type="checkbox"/>	<input type="checkbox"/>
Psykiske plager som du har søkt hjelp for.....	<input type="checkbox"/>	<input type="checkbox"/>
Stoffskiftesykdom (skjoldbruskkjertel).....	<input type="checkbox"/>	<input type="checkbox"/>
Sykdom i leveren.....	<input type="checkbox"/>	<input type="checkbox"/>
Nyrestein.....	103 <input type="checkbox"/>	<input type="checkbox"/>
Blindtarmsoperasjon.....	<input type="checkbox"/>	<input type="checkbox"/>
Allergi og overfølsomhet		
Atopisk eksem (f.eks. barneeksem).....	<input type="checkbox"/>	<input type="checkbox"/>
Håndeksem.....	<input type="checkbox"/>	<input type="checkbox"/>
Høysnue.....	<input type="checkbox"/>	<input type="checkbox"/>
Matvareallergi.....	108 <input type="checkbox"/>	<input type="checkbox"/>
Annen overfølsomhet (ikke allergi).....	<input type="checkbox"/>	<input type="checkbox"/>

Hvor mange ganger har du hatt forkjølelse, influensa, "ræksjuka" og lignende siste halvår?..110 _____ ganger

Har du hatt dette siste 14 dager?.....112 Ja Nei

SYKDOM I FAMILIEN

Kryss av for de slektningene som har eller har hatt noen av sykdommene:

Kryss av for "Ingen" hvis ingen av slektningene har hatt sykdommen.

	Mor	Far	Bror	Søster	Barn	Ingen
Hjerneslag eller hjerneblødning.....	113 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hjerteinfarkt før 60 års alder.....	119 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kreftsykdom.....	125 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Astma.....	131 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mage/tolvfingertarm-sår.....	137 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Benskjørhet (osteoporose).....	143 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psykiske plager.....	149 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Allergi.....	155 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes (sukkersyke).....	161 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
– alder da de fikk diabetes.....	167 _____	_____	_____	_____	_____	_____

SYMPTOMER

Hoster du omtrent daglig i perioder av året?.....177 Ja Nei

Hvis "Ja":

Er hosten vanligvis ledsaget av oppspytt?.....178

Har du hatt slik hoste så lenge som i en 3 måneders periode i begge de to siste år?.....179

Har du hatt episoder med piping i brystet?.....180

Hvis "Ja", har dette oppstått:

Sett ett kryss for hvert spørsmål.

Om natten.....181

Ved luftveisinfeksjoner.....

Ved fysiske anstrengelser.....

Ved sterk kulde.....

Har du merket anfall med plutselig endring i pulsen eller hjerterytmen siste år?.....185

Hvor ofte er du plaget av søvnløshet?

Aldri, eller noen få ganger i året.....186 1

1-2 ganger i måneden..... 2

Omtrent en gang i uken..... 3

Mer enn en gang i uken..... 4

Hvis du er plaget av søvnløshet i perioder, når på året er du mest plaget?

Ingen spesiell tid.....187 1

Særlig i mørketiden..... 2

Særlig i midnattstiden..... 3

Særlig vår og høst..... 4

Har du det siste året vært plaget av søvnløshet slik at det har gått ut over arbeidsevnen?.....188 Ja Nei

Hvor ofte er du plaget av hodepine?

Sjelden eller aldri.....189 1

En eller flere ganger i måneden..... 2

En eller flere ganger i uken..... 3

Daglig..... 4

Hender det at tanken på å få alvorlig sykdom bekymrer deg?

Ikke i det hele tatt.....190 1

Bare i liten grad..... 2

En del..... 3

Ganske mye..... 4

BRUK AV HELSEVESENET

Hvor mange ganger har du siste året, på grunn av egen helse eller sykdom, vært:

Sett 0 hvis du **ikke** har hatt slik kontakt.

Antall ganger siste år

Hos vanlig lege/legevakt.....191 _____

Hos psykolog eller psykiater....._____

Hos annen legespesialist utenfor sykehus....._____

På poliklinikk.....197 _____

Innlagt i sykehus....._____

Hos bedriftslege....._____

Hos fysioterapeut.....203 _____

Hos kiropraktor....._____

Hos akupunktør....._____

Hos tannlege.....209 _____

Hos naturmedisiner (homøopat, soneterapeut o.l.)....._____

Hos håndspålegger, synsk eller "leser"....._____

LEGEMIDLER OG KOSTTILSKUDD

Har du det siste året periodevis brukt noen av de følgende midler daglig eller nesten daglig? Angi hvor mange måneder du brukte dem.

Sett **0** hvis du **ikke** har brukt midlene.

Legemidler

Smertestillende	215	_____	mnd.
Sovemedisin		_____	mnd.
Beroligende midler		_____	mnd.
Medisin mot depresjon	221	_____	mnd.
Allergimedisin		_____	mnd.
Astmamedisin		_____	mnd.

Kosttilskudd

Jerntabletter	227	_____	mnd.
Kalktabletter eller benmel		_____	mnd.
Vitamin D-tilskudd		_____	mnd.
Andre vitamintilskudd	233	_____	mnd.
Tran eller fiskeoljekapsler		_____	mnd.

Har du de siste 14 dager brukt følgende legemidler eller kosttilskudd?

Sett **ett kryss** for **hvert** spørsmål.

Legemidler

	Ja	Nei
Smertestillende medisin	<input type="checkbox"/>	<input type="checkbox"/>
Febersenkende medisin	<input type="checkbox"/>	<input type="checkbox"/>
Migrenemedisin	<input type="checkbox"/>	<input type="checkbox"/>
Eksemsalve	<input type="checkbox"/>	<input type="checkbox"/>
Hjertemedisin (ikke blodtryksmedisin)	<input type="checkbox"/>	<input type="checkbox"/>
Kolesterolsenkende medisin	242	<input type="checkbox"/>
Sovemedisin	<input type="checkbox"/>	<input type="checkbox"/>
Beroligende medisin	<input type="checkbox"/>	<input type="checkbox"/>
Medisin mot depresjon	<input type="checkbox"/>	<input type="checkbox"/>
Annen nervemedisin	<input type="checkbox"/>	<input type="checkbox"/>
Syrenøytraliserende midler	247	<input type="checkbox"/>
Magesårsmedisin	<input type="checkbox"/>	<input type="checkbox"/>
Insulin	<input type="checkbox"/>	<input type="checkbox"/>
Tabletter mot diabetes (sukkersyke)	<input type="checkbox"/>	<input type="checkbox"/>
Tabletter mot lavt stoffskifte (thyroxin)	<input type="checkbox"/>	<input type="checkbox"/>
Kortisonabletter	252	<input type="checkbox"/>
Annen medisin	<input type="checkbox"/>	<input type="checkbox"/>

Kosttilskudd

Jerntabletter	<input type="checkbox"/>	<input type="checkbox"/>
Kalktabletter eller benmel	<input type="checkbox"/>	<input type="checkbox"/>
Vitamin D-tilskudd	<input type="checkbox"/>	<input type="checkbox"/>
Andre vitamintilskudd	257	<input type="checkbox"/>
Tran eller fiskeoljekapsler	<input type="checkbox"/>	<input type="checkbox"/>

VENNER

Hvor mange gode venner har du som du kan snakke fortrolig med og gi deg hjelp når du trenger det?.....259 _____ gode venner

Tell ikke med de du bor sammen med, men ta med andre slektninger!

Hvor mange av disse gode vennene har du kontakt med minst en gang i måneden?

.....261	_____	
	Ja	Nei
Føler du at du har nok gode venner?.....263	<input type="checkbox"/>	<input type="checkbox"/>

Hvor ofte tar du vanligvis del i foreningsvirksomhet som f.eks. syklubb, idrettslag, politiske lag, religiøse eller andre foreninger?

Aldri, eller noen få ganger i året	264	<input type="checkbox"/>	1
1-2 ganger i måneden		<input type="checkbox"/>	2
Omtrent en gang i uken		<input type="checkbox"/>	3
Mer enn en gang i uken		<input type="checkbox"/>	4

KOSTVANER

Hvis du bruker smør eller margarin på brødet, hvor mange skiver rekker en liten porsjonspakning vanligvis til? Vi tenker på slik porsjonspakning som du får på fly, på kafé o.l. (10-12 gram).

Den rekker til omtrent265 _____ skiver

Hva slags fett blir vanligvis brukt til **matlaging** (ikke på brødet) i din husholdning?

Meierismør	266	<input type="checkbox"/>
Hard margarin		<input type="checkbox"/>
Bløt (Soft) margarin		<input type="checkbox"/>
Smør/margarin blanding		<input type="checkbox"/>
Oljer	270	<input type="checkbox"/>

Hva slags type brød (kjøpt eller hjemmebakt) spiser du vanligvis? Sett **ett eller to kryss**!

Loff	Fint brød	Kneipbrød	Grovbrød	Knekkebrød
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
271				275

Hvor mye (i **antall** glass, kopper, poteter eller brødskiver) spiser eller drikker du vanligvis **daglig** av følgende matvarer?

Kryss av for **alle** matvarene.

	0	Færre enn 1	1-2	3-4	5-6	Mer enn 6
Helmelk (søt eller sur) (glass)	276	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lettmelk (søt eller sur) (glass)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skummet melk (søt eller sur) (glass)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Te (kopper)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appelsinjuice (glass)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poteter	281	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brødskiver totalt (inkl. knekkebrød)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brødskiver med						
– fiskepålegg (f.eks. makrell i tomat)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
– magert kjøttpålegg (f.eks. skinke)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
– fetere kjøttpålegg (f.eks. salami)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
– gulost	286	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
– brunost		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
– kaviar		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
– syltetøy og annet søtt pålegg		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6

Hvor mange **ganger i uka** spiser du vanligvis følgende matvarer?

Kryss av for **alle** matvarene.

	Aldri	Færre enn 1	1	2-3	4-5	Omtrent daglig
Yoghurt	290	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kokt eller stekt egg		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frokostblanding/havregryn o.l.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Middag med						
– rent kjøtt		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
– pølser/kjøttpudding/-kaker		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
– feit fisk (f.eks. laks/uer)	295	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
– mager fisk (f.eks. torsk)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
– fiskeboller/-pudding/-kaker		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
– grønnsaker		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Majones, remulade o.l.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gulrøtter	300	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blomkål/kål/brokkoli		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Epler/pærer		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appelsiner, mandariner o.l.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sukkerholdige leskedrikker		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sukkerfrie («Light») leskedrikker ..		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sjokolade		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vafler, kaker o.l.	307	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6

ALKOHOL

Hvor ofte pleier du å drikke øl? vin? brennevin?

Aldri, eller noen få ganger i året..... 1
1-2 ganger i måneden..... 2
Omtrent 1 gang i uken..... 3
2-3 ganger i uken..... 4
Omtrent hver dag..... 5

308 310

Omtrent hvor ofte har du i løpet av siste år drukket alkohol tilsvarende minst 5 halvflasker øl, en helflaske vin eller 1/4 flaske brennevin?

Ikke siste år.....311 1
Noen få ganger..... 2
1 - 2 ganger per måned..... 3
1 - 2 ganger i uken..... 4
3 eller flere ganger i uken..... 5

I omtrent hvor mange år har ditt alkoholforbruk vært slik du har svart i spørsmålene over?.....312 _____ år

SLANKING

Omtrent hvor mange ganger har du bevisst prøvd å slanke deg? Sett 0 hvis ingen forsøk.

- før 20 år.....314 _____ ganger
- senere.....316 _____ ganger

Hvis du har slanket deg, omtrent hvor mange kilo har du på det meste gått ned i vekt?

- før 20 år.....318 _____ kg
- senere.....320 _____ kg

Hvilken vekt ville du være tilfreds med (din "trivselsvekt")?.....322 _____ kg

UFRIVILLIG URINLEKKASJE

Hvor ofte har du ufrivillig urinlekkasje?

Aldri.....325 1
Ikke mer enn en gang i måneden..... 2
To eller flere ganger i måneden..... 3
Ukentlig eller oftere..... 4

Dine kommentarer:

BESVARES BARE AV KVINNER

MENSTRUASJON

Hvor gammel var du da du fikk menstruasjon første gang?.....326 _____ år

Hvis du ikke lenger har menstruasjon, hvor gammel var du da den sluttet?.....328 _____ år

Når du ser bort fra svangerskap og barselsperiode, har du noen gang vært blødningsfri i minst 6 måneder?.....330 Ja Nei

Hvis "Ja", hvor mange ganger?.....331 _____ ganger

Hvis du fremdeles har menstruasjon eller er gravid: dag/ mnd/ år

Hvilken dato startet din siste menstruasjon?.....333 ____/____/____

Bruker du vanligvis smertestillende legemidler for å dempe menstruasjonsplager?.....339 Ja Nei

SVANGERSKAP

Hvor mange barn har du født?.....340 _____ barn

Er du gravid nå?.....342 Ja Nei Usikker

Har du i forbindelse med svangerskap hatt for høyt blodtrykk og/eller eggehvite (protein) i urinen?.....343 Ja Nei

Hvis "Ja", i hvilket svangerskap? Første Senere

For høyt blodtrykk.....344
Eggehvite i urinen.....346

Hvis du har født, fyll ut for hvert barn barnets fødselsår og omtrent antall måneder du ammet barnet.

Barn:	Fødselsår:	Antall måneder med amming:
1	348 _____	_____
2	_____	_____
3	356 _____	_____
4	_____	_____
5	364 _____	_____
6	_____	_____

PREVENSJON OG ØSTROGEN

Bruker du, eller har du brukt: Nå Før Aldri

P-pille (også minipille).....372
Hormonspiral.....
Østrogen (tabletter eller plaster).....374
Østrogen (krem eller stikkpiller).....

1 2 3

Hvis du bruker p-pille, hormonspiral eller østrogen; hvilket merke bruker du nå?.....376 _____

Hvis du bruker eller har brukt p-pille: Alder da du begynte med P-piller?.....380 _____ år

Hvor mange år har du tilsammen brukt P-piller?.....382 _____ år

Dersom du har født, hvor mange år brukte du P-piller før første fødsel?.....384 _____ år

Hvis du har sluttet å bruke P-piller: Alder da du sluttet?.....386 _____ år

English translation of the second questionnaire used in the health survey in Tromsø 1994/95 for subjects younger than 70 years.

Based on translations by K. McCafferty and A. Clancy

TROMSØ HEALTH SURVEY

The main aim of the Tromsø survey is to improve our knowledge of heart and circulatory conditions in order to aid prevention. The survey is also intended to improve our knowledge of cancer and other general conditions, such as allergies, muscle pains and nervous conditions. We would therefore like you to answer some questions about factors that may be relevant for your risk of getting these and other illnesses.

This form is part of the Health Survey, which has been approved by the Norwegian Data Inspectorate and the Regional Board of Research Ethics. The answers will only be used for research purposes and will be treated in strict confidence. The information you give us may later be stored along with information from other public health registers in accordance with the rules laid down by the Data Inspectorate and the Regional Board of Research Ethics.

If you are unsure about what to answer, tick the box that you feel fits best.

The completed form should be sent to us in the enclosed pre-paid envelope.

Thank you in advance for helping us.

Yours sincerely,

Faculty of Medicine
University of Tromsø

National Health
Screening Service

If you do not wish to answer the questionnaire, tick the box below and return the form. Then you will not receive reminders.

I do not wish to answer the questionnaire.

Date for filling in this form: Day/Month/Year

CHILDHOOD/YOUTH

What Norwegian municipality did you live in at the age of 1 year? _____

If you did not live in Norway, give country of residence instead of municipality.

How was your family's economic situation while you were growing up?

- Very good
- Good
- Difficult
- Very difficult

For how much of the first three years of your life

- did you live in a town/city? _____ Years
- did your family have a cat or dog in the home? _____ Years

For how much of the first 15 years of your life

- did you live in a town/city? _____ Years
- did your family have a cat or dog in the home? _____ Years

HOME

Who do you live with?

Tick once for each item and give the number of persons.

	YES	NO	Number
Spouse/partner	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other persons over 18 years	<input type="checkbox"/>	<input type="checkbox"/>	_____
Persons under 18 years	<input type="checkbox"/>	<input type="checkbox"/>	_____

How many of the children go to day care/kindergarten/nursery school? _____

What type of home do you live in?

- Villa/ detached house
- Farm
- Flat / Apartment
- Terraced /semi-detached house
- Other

How big is your home? _____ m2

Approximately what year was your home built? _____

	YES	NO
Has your home been insulated after 1970?	<input type="checkbox"/>	<input type="checkbox"/>
Do you live on the bottom floor/cellar level?	<input type="checkbox"/>	<input type="checkbox"/>
If "YES", is the floor laid on concrete?	<input type="checkbox"/>	<input type="checkbox"/>

What is the main source of heat in your home?

Electric heating

Wood-burning stove

Central heating system using:

Paraffin

Electricity

Do you have fitted carpets in the living-room? **YES** **NO**

Is there a cat in your home?

Is there a dog in your home?

WORK

If you are in paid or unpaid work, which statement describes your work best?

I am mainly seated while working (e.g., at a desk/assembly work)

My work requires a lot of walking (e.g., shop assistant, light industrial work, teaching)

My work entails a lot of walking and lifting (e.g., postman/woman, nurse, building work)

I do heavy physical work (e.g., forestry, heavy agricultural/construction work)

Do you have any influence on how your work is organised?

No, not at all

To a small extent

Yes, to a large extent

Yes, I decide myself

Are you on call; do you work shifts or nights? **YES** **NO**

Do you do any of the following jobs (full- or part-time)?

Tick one box only for each item. **YES** **NO**

Driver

Farmer

Fisherman

YOUR OWN ILLNESSES

Have you ever had:

Tick one box only for each item. Give your age at the time.

If you have had the condition several times, how old were you last time?

	YES	NO	AGE
Hip fracture	<input type="checkbox"/>	<input type="checkbox"/>	_____
Wrist/forearm fracture	<input type="checkbox"/>	<input type="checkbox"/>	_____
Whiplash	<input type="checkbox"/>	<input type="checkbox"/>	_____
Injury requiring hospital admission	<input type="checkbox"/>	<input type="checkbox"/>	_____
Stomach ulcer	<input type="checkbox"/>	<input type="checkbox"/>	_____
Duodenal ulcer	<input type="checkbox"/>	<input type="checkbox"/>	_____
An operation for stomach/duodenal ulcer	<input type="checkbox"/>	<input type="checkbox"/>	_____
Throat/ neck operation	<input type="checkbox"/>	<input type="checkbox"/>	_____

Have you you ever had, or do you still have:

Tick one box only for each item.

	YES	NO
Cancer	<input type="checkbox"/>	<input type="checkbox"/>
Epilepsy	<input type="checkbox"/>	<input type="checkbox"/>
Migraine	<input type="checkbox"/>	<input type="checkbox"/>
Chronic bronchitis	<input type="checkbox"/>	<input type="checkbox"/>
Psoriasis	<input type="checkbox"/>	<input type="checkbox"/>
Osteoporosis	<input type="checkbox"/>	<input type="checkbox"/>
Fibromyalgia/fibrositis/chronic pain syndrome	<input type="checkbox"/>	<input type="checkbox"/>
Psychological problems for which you have sought help	<input type="checkbox"/>	<input type="checkbox"/>
Thyroid disease	<input type="checkbox"/>	<input type="checkbox"/>
Liver disease	<input type="checkbox"/>	<input type="checkbox"/>
Kidney stone	<input type="checkbox"/>	<input type="checkbox"/>
Appendectomy	<input type="checkbox"/>	<input type="checkbox"/>
Allergy and hypersensitivity:		
Atopic eczema (e.g., childhood eczema)	<input type="checkbox"/>	<input type="checkbox"/>
Hand eczema	<input type="checkbox"/>	<input type="checkbox"/>
Hay fever	<input type="checkbox"/>	<input type="checkbox"/>
Food allergy	<input type="checkbox"/>	<input type="checkbox"/>
Other hypersensitivity (not allergy)	<input type="checkbox"/>	<input type="checkbox"/>

How many times have you had a cold, influenza (flue), vomiting/diarrhoea, or similar in the last six months?

_____ times

Have you had any of these in the last two weeks?

YES **NO**

ILLNESS IN THE FAMILY

Tick the appropriate box for relatives that have, or have ever had the following illnesses: *Tick "None" if none of your relatives have had the condition.*

	Mother	Father	Brother	Sister	Child	None
Stroke or brain haemorrhage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Myocardial infarction before age 60	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cancer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asthma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stomach/duodenal ulcer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Osteoporosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychological problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Allergy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-age when they got diabetes	___	___	___	___	___	___

SYMPTOMS

Do you cough approximately every day of the year? **YES** **NO**

If "Yes": Is your cough productive?

Have you had this kind of cough for as long as 3 months in each of the last two years?

Have you had periods of wheezing in your chest?

If "Yes", has this occurred:

Tick one box only for each item.

At night

In connection with respiratory infections

In connection with physical exertion

In connection with very cold weather

Have you noticed sudden changes in your pulse or heart rhythm in the last year?

How often do you suffer from sleeplessness?

Never, or just a few times a year

1-2 times a month

Approximately once a week

More than once a week

If you suffer from periods of sleeplessness, what times of the year does it affect you most?

No particular time of year

Especially during the dark winter months

Especially during the midnight sun period

Especially in spring and autumn

Have you in the last twelve months suffered from sleeplessness to the extent that it has affected your ability to work? **YES** **NO**

How often do you suffer from headaches?

Seldom/Never

Once a month or more

Once a week or more

Every day

Does the thought of getting a serious illness ever worry you?

Not at all

Only a little

Some

Very much

USE OF HEALTH SERVICES

How many visits have you made during the past year due to your own health or illness? *Tick 0 if you have not had such contact*

Number of times
the past year

To a general practitioner (GP)/

Emergency GP _____

Psychologist or psychiatrist _____

Other medical specialist (not at a hospital) _____

Hospital out-patient clinic _____

Hospital admission _____

Medical officer at work _____

Physiotherapist _____

Chiropractor _____

Acupuncturist _____

Dentist _____

Alternative medical practitioner

(homoeopath, foot zone therapist, etc.) _____

Healer, Faith healer, clairvoyant _____

MEDICATION AND DIETARY SUPPLEMENTS

Have you for any length of time in the past year used any of the following medicines every day or almost daily?

Indicate how many months you used them for.

Write 0 for items you have not used.

Medication:

Painkillers _____ mths

Sleeping pills _____ mths

Tranquilizers _____ mths

Antidepressants _____ mths

Allergy drugs _____ mths

Asthma drugs _____ mths

Dietary supplements

Iron tablets _____ mths

Calcium tablets or bonemeal _____ mths

Vitamin D supplement _____ mths

Other vitamin supplements _____ mths

Cod liver oil or fish oil capsules _____ mths

Have you in the last 14 days used the following medicines or dietary supplements?

Tick one box only for each item.

Medicines **YES** **NO**

Painkillers

Antipyretic drugs (to reduce fever)

Migraine drugs

Eczema cream/ointment

Heart medicine (not blood pressure)

Lipid lowering drugs

Sleeping pills

Tranquilizers

Antidepressants

Other drugs for nervous conditions

Antacids

Gastric ulcer drugs

Insulin

Diabetes tablets

Thyroxin tablets (for metabolic disorder)

Cortisone tablets

Other medicine(s)

Dietary supplements **YES** **NO**

Iron tablets

Calcium tablets or bonemeal

Vitamin D supplement

Other vitamin supplements

Cod liver oil or fish oil capsules

FRIENDS

How many good friends do you have whom you can talk confidentially with and who give you help when you need it? _____ good friends

Do not count people you live with, but do include other relatives!

How many of these good friends do you have contact with at least once a month? _____

Do you feel you have enough good friends? YES NO

How often do you normally take part in organised gatherings, e.g., sewing circles, sports clubs, political meetings, religious or other associations?

- Never, or just a few times a year
 1-2 times a month
 Approximately once a week
 More than once a week

DIET

If you use butter or margarine on your bread, how many slices does a small catering portion normally cover? By this, we mean the portion packs served on planes, in cafés, etc. (i.e., 10-12g)

A catering portion is enough for about _____ slices.

What kind of fat is normally used in **cooking** (not on the bread) in your home?

- Creamery butter
 Hard margarine
 Soft margarine
 Butter/margarine blend
 Oils

What kind of bread (bought or home-made) do you usually eat? *Tick one or two boxes!*

The bread I eat is most similar to

- White bread
 Light textured brown bread
 Ordinary brown bread
 Coarse brown bread
 Crisp bread

How much (in **number** of glasses, cups, potatoes or slices) do you usually eat or drink **daily** of the following foodstuffs? *Tick one box for each foodstuff.*

	Less				More than 6
	0	than 1	1-2	3-4 5-6	
Full cream milk (fresh or soured) (glasses)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Semi-skimmed milk (low-fat) (fresh or soured) (glasses)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skimmed milk (fresh or soured) (glasses)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tea (cups)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Orange juice (glasses)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potatoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Slices of bread in total (incl. crispbread)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Less				More than 6
	0	than 1	1-2	3-4 5-6	
Slices of bread with fish (e.g., mackerel in tomato sauce)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- lean meat (e.g., ham)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- fat meat (e.g., salami)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- cheese (e.g. Gouda/ Norvegia)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- brown cheese	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- smoked cod caviar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- jam and other sweet spreads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How many **times per week** do you normally eat the following foodstuffs? *Tick a box for all foodstuffs listed.*

	Less				Roughly every day
	Never	than 1	1-2	3-4 4-5	
Yoghurt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boiled or fried egg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breakfast cereal/ oat meal, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For dinner					
- meat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- sausage/meatloaf/ meatballs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- fat fish (e.g., salmon/ redfish)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- lean fish (e.g., cod)					
- fishballs/fishpudding/ fishcakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mayonnaise, remoulade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carrots	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cauliflower/cabbage/ broccoli	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Apples/pears	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oranges, mandarines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sweetened soft drinks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sugarfree ("Light") soft drinks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chocolate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waffles, cakes, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ALCOHOL

How often do you usually drink beer? wine? spirits?

Never, or just a few times a year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1-2 times a month	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roughly once a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2-3 times a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roughly every day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Approximately how often in the last year have you drunk alcohol that equals at least 5 small bottles of beer, a bottle of wine, or 1/4 bottle of spirits?

- Not in the last year
 Just a few times
 1-2 times a month
 1-2 times a week
 3 or more times a week

For approximately how many years has your alcohol consumption been as you described above? _____ years

WEIGHT REDUCTION

About how many times have you deliberately tried to lose weight? Write 0 if you never have.

- before age 20 _____ times
- after age 20 _____ times

If you have lost weight, about how many kilos have you ever lost at the most?

- before age 20 _____ times _____ kg
- after age 20 _____ times _____ kg

What weight would you be satisfied with (your "ideal weight")? _____ kg

URINARY INCONTINENCE

How often do you suffer from urinary incontinence?

- Never
- Not more than once a month
- Two or more times a month
- Once a week or more

Your comments:

Thank you for helping us! Remember to post the form today!
Tromsø Health Survey

TO BE ANSWERED BY WOMEN ONLY

MENSTRUATION

How old were you when you had your first menstruation? _____ years

If you no longer menstruate, how old were you when you stopped having menstruation? _____ years

Apart from pregnancy and after giving birth, have you ever stopped having menstruation for 6 months or more?

- YES NO

If "Yes", how many times? _____ times

If you still menstruate or are pregnant:

What date did your last menstruation begin?

day/month/year ____ / ____ / ____

Do you normally use painkillers to relieve period pains?

- YES NO

PREGNANCY

How many children have you given birth to? _____ children

Are you pregnant at the moment? YES NO Don't know

During pregnancy, have you had high blood pressure and/or proteinuria? YES NO

If "Yes", during which pregnancy? _____ Pregnancy

	First	Later
High blood pressure	<input type="checkbox"/>	<input type="checkbox"/>
Proteinuria	<input type="checkbox"/>	<input type="checkbox"/>

If you have given birth, fill out for each child the year of birth and approximately how many months you breastfed the child.

Child: Year of birth: Number of months breastfed:

- 1 _____ months
- 2 _____ months
- 3 _____ months
- 4 _____ months
- 5 _____ months
- 6 _____ months

CONTRACEPTION AND OESTROGEN

Do you, or have you ever, used: Now Used to Never:

- Contraceptive pills (incl.minipill)
- A hormonal intrauterine device
- Oestrogen (tablets or patches)
- Oestrogen (cream or suppositories)

If you use contraceptive pills, hormonal intrauterine device, or oestrogen, what brand do you currently use?

If you use, or have ever used, contraceptive pills:

Age when you began taking the pill? _____ years

How many years in total have you taken the pill? _____ years

If you have given birth, how many years did you take the pill before your first child? _____ years

If you have stopped taking the pill: Age when you stopped? _____ years

Helseundersøkelsen i Tromsø

for dem som er 70 år og eldre.

Hovedformålet med Tromsøundersøkelsene er å skaffe ny kunnskap om hjerte-karsykdommer for å kunne forebygge dem. De skal også øke kunnskapen om kreftsykdommer og alminnelige plager som f.eks. allergier, smerter i muskulatur og nervøse lidelser. Endelig skal de gi kunnskap om hvorledes den eldste delen av befolkningen har det. Vi ber deg derfor svare på spørsmålene nedenfor.

Skjemaet er en del av Helseundersøkelsen som er godkjent av Datatilsynet og av Regional komite for medisinsk forskningsetikk. Svarene brukes bare til forskning og behandles strengt fortrolig. Opplysningene kan senere bli sammenholdt med informasjon fra andre offentlige helseregistre etter de regler som Datatilsynet og Regional komite for medisinsk forskningsetikk gir.

Hvis du er i tvil om hva du skal svare, sett kryss i den ruten som du synes passer best.

Det utfylte skjema sendes i vedlagte svarkonvolutt. Porto er betalt.

På forhånd takk for hjelpen!

Med vennlig hilsen

Fagområdet medisin
Universitetet i Tromsø

Statens helseundersøkelser

Hvis du ikke ønsker å besvare spørreskjemaet, sett kryss i ruten under og returner skjemaet. Da slipper du purring.

Jeg ønsker ikke å besvare spørreskjemaet.....17

Dag Mnd År

Dato for utfylling av skjema:18/...../.....

OPPVEKST

I hvilken kommune bodde du da du fylte 1 år?

.....24-28

Hvis du ikke bodde i Norge, oppgi land i stedet for kommune.

Hvordan var de økonomiske forhold i familien under din oppvekst?

- Meget gode29 1
Gode 2
Vanskelige 3
Meget vanskelige 4

Hvor gamle ble dine foreldre?

- Mor ble30 _____ år
Far ble32 _____ år

BOLIG

Hvem bor du sammen med?

- Sett ett kryss for hvert spørsmål og angi antall. Ja Nei Antall
- Ektefelle/samboer34 _____
Andre personer over 18 år35 _____
Personer under 18 år38 _____

Hvilken type bolig bor du i?

- Enebolig/villa41 1
Gårdsbruk 2
Blokk/terrasseleilighet 3
Rekkehus/2-4 mannsbolig 4
Annen bolig 5

Hvor lenge har du bodd i boligen du bor i nå?42 _____ år

Er boligen tilpasset til dine behov?44 Ja Nei

Hvis "Nei", er det problemer med:

- Plassen i boligen45
Ujevn, for høy eller
for lav temperatur46
Trapper47
Toalett48
Bad/dusj49
Vedlikehold50
Annet (spesifiser)51

Ønsker du å flytte til en eldrebolig?52

TIDLIGERE ARBEID OG ØKONOMI

Hvordan vil du beskrive det arbeidet du hadde de siste 5-10 årene før du ble pensjonist?

- For det meste stillesittende arbeid?53 1
(f.eks. skrivebordsarbeid, montering)
Arbeid som krever at du går mye? 2
(f.eks. ekspeditørarbeid, husmor, undervisning)
Arbeid hvor du går og løfter mye? 3
(f.eks. postbud, pleier, bygningsarbeid)
Tungt kroppsarbeid? 4
(f.eks. skogsarb., tungt jordbruksarb., tungt bygn.arb.)

Har du hatt noen av følgende yrker (heltid eller deltid)?

- Sett ett kryss for hvert spørsmål. Ja Nei
- Sjåfør54
Bonde/gårdbruker55
Fisker56

Hvor gammel var du da du ble pensjonert?57 _____ år

Hva slags pensjon har du?

- Minstepensjon59
Tilleggs pensjon60

Hvordan er din økonomi nå?

- Meget god61 1
God 2
Vanskelig 3
Meget vanskelig 4

HELSE OG SYKDOM

Er helsen din blitt forandret det siste året?

- Ja, dårligere.....62 1
 Nei, uforandret..... 2
 Ja, bedre..... 3

Hvordan synes du at helsen din er nå i forhold til andre på samme alder?

- Mye dårligere.....63 1
 Litt dårligere..... 2
 Omtrent lik..... 3
 Litt bedre..... 4
 Mye bedre..... 5

EGNE SYKDOMMER

Har du noen gang hatt:

Sett ett kryss for hvert spørsmål. Oppgi alderen ved hendelsen.
 Hvis det har skjedd flere ganger, hvor gammel var du siste gang?

- | | Ja | Nei | Alder |
|---|--------------------------|--------------------------|-------|
| Lårhalsbrudd.....64 | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Brudd ved håndledd/underarm.....67 | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Nakkesleng (whiplash).....70 | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Skade som førte til sykehusinnleggelse.....73 | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Sår på magesekken.....76 | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Sår på tolvfingertarmen.....79 | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Magesår-operasjon.....82 | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Operasjon på halsen.....85 | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

Har du eller har du hatt:

Sett ett kryss for hvert spørsmål.

- | | Ja | Nei |
|--|--------------------------|--------------------------|
| Kreftsykdom.....88 | <input type="checkbox"/> | <input type="checkbox"/> |
| Epilepsi (fallesyke)..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Migræne..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Parkinsons sykdom..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Kronisk bronkitt..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Psoriasis.....93 | <input type="checkbox"/> | <input type="checkbox"/> |
| Benskjørhet (osteoporose)..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Fibromyalgi/fibrositt/kronisk smertesyndrom..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Psykiske plager som du har søkt hjelp for..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Stoffskiftesykdom (skjoldbruskkjertel)..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Sykdom i leveren.....98 | <input type="checkbox"/> | <input type="checkbox"/> |
| Gjentatt, ufrivillig urinlekkasje..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Grønn stær..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Grå stær..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Slitasjegikt (artrose)..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Leddgikt.....103 | <input type="checkbox"/> | <input type="checkbox"/> |
| Nyrestein..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Blindtarmsoperasjon..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Allergi og overfølsomhet | | |
| Atopisk eksem (f.eks. barneeksem)..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Håndeksem..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Høysnue.....108 | <input type="checkbox"/> | <input type="checkbox"/> |
| Matvareallergi..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Annen overfølsomhet (ikke allergi)..... | <input type="checkbox"/> | <input type="checkbox"/> |

Hvor mange ganger har du hatt forkjølelse, influensa, "ræksjuka" og lignende siste halvår? 111 _____ ganger

Har du hatt dette de siste 14 dager?.....113 Ja Nei

SYKDOM I FAMILIEN

Kryss av for de slektingene som har eller har hatt noen av sykdommene:

Kryss av for "Ingen" hvis ingen av slektingene har hatt sykdommen.

	Mor	Far	Bror	Søster	Barn	Ingen
Hjerneslag eller hjerneblødning.....114	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hjerteinfarkt før 60 års alder.....120	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kreftsykdom.....126	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Høyt blodtrykk.....132	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Astma.....138	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Benskjørhet (osteoporose).....144	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Slitasjegikt (artrose).....150	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psykiske plager.....156	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alderdomssløvhet.....162	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes (sukkersyke).....168	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
– alder da de fikk diabetes.....174	_____	_____	_____	_____	_____	_____

SYMPTOMER

Hoster du omtrent daglig i perioder av året?.....184 Ja Nei

Hvis "Ja":

Er hosten vanligvis ledsaget av oppspytt?.....185

Har du hatt slik hoste så lenge som i en 3 måneders periode i begge de to siste år?.....186

Har du hatt episoder med piping i brystet?.....187

Hvis "Ja", har dette oppstått:

Sett ett kryss for hvert spørsmål.

Om natten.....188

Ved luftveisinfeksjoner.....

Ved fysiske anstrengelser.....

Ved sterk kulde.....191

Har du merket anfall med plutselig endring i pulsen eller hjerterytmen siste år?.....192

Har du gått ned i vekt siste året?.....193

Hvis "Ja":

Hvor mange kilo?.....194 _____ kg

Hvor ofte er du plaget av søvnløshet?

Aldri, eller noen få ganger i året.....196 1

1-2 ganger i måneden..... 2

Omtrent en gang i uken..... 3

Mer enn en gang i uken..... 4

Hvis du er plaget av søvnløshet i perioder, når på året er du mest plaget?

Ingen spesiell tid.....197 1

Særlig i mørketiden..... 2

Særlig i midnattstiden..... 3

Særlig vår og høst..... 4

Pleier du å ta en lur på dagen?.....198 Ja Nei

Føler du at du vanligvis får nok søvn?.....

Er du plaget av: Nei Litt I stor grad

Svimmelhet.....200

Dårlig hukommelse.....

Kraftløshet.....

Forstoppelse.....203

Hender det at tanken på å få alvorlig sykdom bekymrer deg?

- Ikke i det hele tatt204
- Bare i liten grad
- En del
- Ganske mye

LEGEMLIGE FUNKSJONER

Klarer du selv disse gjøremålene i det daglige uten hjelp fra andre?

- | | Ja | Med noe hjelp | Nei |
|--|--------------------------|--------------------------|--------------------------|
| Gå innendørs i samme etasje205 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gå i trapper | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gå utendørs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gå ca. 500 meter | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gå på toalettet | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Vaske deg på kroppen210 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bade eller dusje | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Kle på og av deg | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Legge deg og stå opp | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Spise selv | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Lage varm mat215 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gjøre lett husarbeid (f.eks. oppvask) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gjøre tyngre husarbeid (f.eks. gulvvask) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gjøre innkjøp | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ta bussen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- | | Ja | Vanskelig | Nei |
|--|--------------------------|--------------------------|--------------------------|
| Kan du høre vanlig tale (evt. med høreapparat)?220 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Kan du lese (evt. med briller)?221 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Er du avhengig av noen av disse hjelpemidlene?

- | | Ja | Nei |
|-------------------------|--------------------------|--------------------------|
| Stokk222 | <input type="checkbox"/> | <input type="checkbox"/> |
| Krykke | <input type="checkbox"/> | <input type="checkbox"/> |
| Gåstol (rullator) | <input type="checkbox"/> | <input type="checkbox"/> |
| Rullestol | <input type="checkbox"/> | <input type="checkbox"/> |
| Høreapparat | <input type="checkbox"/> | <input type="checkbox"/> |
| Trygghetsalarm227 | <input type="checkbox"/> | <input type="checkbox"/> |

BRUK AV HELSEVESENET

Hvor mange ganger har du siste året, på grunn av egen helse eller sykdom, vært: **Antall ganger siste år**
 Sett 0 hvis du ikke har hatt slik kontakt.

- Hos vanlig lege/legevakt228 _____
- Hos psykolog eller psykiater
- Hos annen legespesialist utenfor sykehus
- På poliklinikk234 _____
- Innlagt i sykehus
- Hos fysioterapeut
- Hos kiropraktor240 _____
- Hos akupunktør
- Hos tannlege
- Hos foterapeut246 _____
- Hos naturmedisiner (homøopat, soneterapeut o.l.)
- Hos håndspålegger, synsk eller "leser"

- | | Ja | Nei |
|-------------------------------------|--------------------------|--------------------------|
| Har du hjemmehjelp? Privat252 | <input type="checkbox"/> | <input type="checkbox"/> |
| Kommunal | <input type="checkbox"/> | <input type="checkbox"/> |

- Har du hjemmesykepleie?

Er du fornøyd med helse- og hjemmetjenesten i kommunen? **Ja** **Nei** **Vet ikke**

- Prinsippet med fast lege255
- Hjemmesykepleien
- Hjemmehjelpen

Er du trygg på at du kan få hjelp av helse- og hjemmetjenesten hvis du trenger det?

- Trygg258 1
- Ikke trygg 2
- Svært utrygg 3
- Vet ikke 4

LEGEMIDLER OG KOSTTILSKUDD

Har du det siste året periodevis brukt noen av de følgende midler daglig eller nesten daglig?

Angi hvor mange måneder du brukte dem.

Sett 0 hvis du ikke har brukt midlene.

Legemidler

- Smertestillende259 _____ mnd.
- Sovemedisin
- Beroligende midler
- Medisin mot depresjon265 _____ mnd.
- Allergimedisin
- Astmamedisin
- Hjertemedisin (ikke blodtryksmedisin)271 _____ mnd.
- Insulin
- Tabletter mot diabetes (sukkersyke)
- Tabletter mot lavt stoffskifte (thyroxin)277 _____ mnd.
- Kortisonletter
- Midler mot forstoppelse

Kosttilskudd

- Jerntabletter283 _____ mnd.
- Vitamin D-tilskudd
- Andre vitamintilskudd
- Kalktabletter eller benmel289 _____ mnd.
- Tran eller fiskeoljekapsler

FAMILIE OG VENNER

Har du nær familie som kan gi deg hjelp og støtte når du trenger det?293

Hvis "Ja": Hvem kan gi deg hjelp?

- Ektefelle/samboer294
- Barn
- Andre

Hvor mange gode venner har du som du kan snakke fortrolig med og gi deg hjelp når du trenger det?297 _____ venner

Tell ikke med dem du bor sammen med, men ta med andre slektninger!

Føler du at du har nok gode venner?299

Føler du at du hører med i et fellesskap (gruppe av mennesker) som stoler på hverandre og føler forpliktelse overfor hverandre (f.eks. i politisk parti, religiøs gruppe, slekt, naboskap, arbeidsplass eller organisasjon)?

- Sterk tilhørighet300 1
- Noe tilhørighet 2
- Usikkert 3
- Liten eller ingen tilhørighet 4

Hvor ofte tar du vanligvis del i foreningsvirksomhet som f.eks. sykkubb, idrettslag, politiske lag, religiøse eller andre foreninger?

- Aldri, eller noen få ganger i året.....301 1
 1-2 ganger i måneden..... 2
 Omtrent en gang i uken..... 3
 Mer enn en gang i uken..... 4

KOSTVANER

Hvor mange måltider spiser du vanligvis daglig (middag og brødmåltid)?.....302 _____ Antall

Hvor mange ganger i uken spiser du varm middag?.....304 _____

Hva slags type brød (kjøpt eller hjemmebakt) spiser du vanligvis?

Sett ett eller to kryss. Loff Fint brød Kneip-brød Grov-brød Knekke-brød
 306 310

Hva slags fett blir til vanligvis brukt til matlaging (ikke på brødet) i din husholdning?

- Meierismør.....311
 Hard margarin.....
 Bløt (Soft) margarin.....
 Smør/margarin blanding.....
 Oljer.....315

Hvor mye (i antall glass, poteter eller brødsiver) spiser/drikker du vanligvis daglig av følgende matvarer?

Kryss av for alle matvarene. Ingen Mindre enn 1 1-2 3 og mer

Melk alle sorter (glass).....316
 Appelsinjuice (glass).....
 Poteter.....
 Brødskiver totalt (inkl. knekkebrød).....
 Brødskiver med
 - fiskepålegg (f.eks. makrell i tomat)
 - gulost.....
 - kaviar.....322
 1 2 3 4

Hvor mange ganger i uka spiser du vanligvis følgende matvarer?

Kryss av for alle matvarene. Aldri Sjeldnere enn 1 1 2 og mer

Yoghurt.....323
 Kokt eller stekt egg.....
 Frokostblanding/havregryn o.l.....
 Middag med
 - rent kjøtt.....
 - feit fisk (f.eks. laks/uer).....
 - mager fisk (f.eks. torsk).....328
 - grønnsaker (rå eller kokte).....
 Gulrøtter (rå eller kokte).....
 Blomkål/kål/brokkoli.....
 Epler/pærer.....
 Appelsiner, mandariner o.l.....333
 1 2 3 4

TRIVSEL

Hvordan trives du med å bli gammel - alt i alt?

- Godt.....334 1
 Ganske bra..... 2
 Opp og ned..... 3
 Dårlig..... 4

Hvordan ser du på livet fremover?

- Lyst.....335 1
 Ikke så verst..... 2
 Nokså bekymret..... 3
 Mørkt..... 4

BESVARES BARE AV KVINNER

MENSTRUASJON

Hvor gammel var du da du fikk menstruasjon første gang?.....336 _____ år

Hvor gammel var du da menstruasjonen sluttet?.....338 _____ år

SVANGERSKAP

Hvor mange barn har du født?.....340 _____ barn

Hvis du har født, fyll ut for hvert barn barnets fødselsår og omtrent antall måneder du ammet barnet.

Hvis du har født mer enn 6 barn, noter fødselsår og antall måneder med amming for dem nederst på siden.

Barn:	Fødselsår:	Antall måneder med amming:
1	342 _____	_____
2	346 _____	_____
3	_____	_____
4	_____	_____
5	358 _____	_____
6	_____	_____

Har du i forbindelse med svangerskap hatt for høyt blodtrykk og/eller eggehvite (protein) i urinen?.....366 Ja Nei

Hvis "Ja", i hvilket svangerskap? Svangerskap Første Senere

For høyt blodtrykk.....367
 Eggehvite i urinen.....369

ØSTROGEN-MEDISIN

Bruker du, eller har du brukt, østrogen-medisin?

Tabletter eller plaster.....371 Nå Før Aldri
 Krem eller stikkpiller.....372

Hvis du bruker østrogen, hvilket merke bruker du nå?

.....373

Dine kommentarer:

English translation of the second questionnaire used in the health survey in Tromsø 1994/95 for subjects 70 years or older.

Based on translations by Kevin McCafferty and Anne Clancy.

TROMSØ HEALTH SURVEY for the over 70s

The main aim of the Tromsø survey is to improve our knowledge of heart and circulatory conditions in order to aid prevention. The survey is also intended to improve our knowledge of cancer and other general conditions, such as allergies, muscle pains and nervous conditions. The ultimate aim is to gain an overview of the general health of the elderly population. We would therefore like you to answer the questions below.

This form is part of the Health Survey, which has been approved by the Norwegian Data Inspectorate and the Regional Board of Research Ethics. The answers will only be used for research purposes and will be treated in strict confidence. The information you give us may later be stored along with information from other public health registers in accordance with the rules laid down by the Data Inspectorate and the Regional Board of Research Ethics.

If you are unsure about what to answer, tick the box that you feel fits best.

The completed form should be sent to us in the enclosed pre-paid envelope.

Thank you in advance for helping us.

Yours sincerely,

Faculty of Medicine
University of Tromsø

National Health
Screening Service

If you do not wish to answer the questionnaire, tick the box below and return the form. Then you will not receive reminders.

I do not wish to answer the questionnaire.

Date for filling in this form: Day/Month/Year

CHILDHOOD/YOUTH

What Norwegian municipality did you live in at the age of 1 year?

If you did not live in Norway, give country instead of municipality.

How was your family's financial situation while you were growing up?

- Very good
Good
Difficult
Very difficult

How old were your parents when they died?

Mother _____ years
Father _____ years

HOME

Who do you live with?

Tick one box for each item and give the number of persons.

	YES	NO	Number
Spouse/partner	<input type="checkbox"/>	<input type="checkbox"/>	
Other persons over 18 years	<input type="checkbox"/>	<input type="checkbox"/>	_____
Persons under 18 years	<input type="checkbox"/>	<input type="checkbox"/>	_____

What type of home do you live in?

Villa/detached house
Farm
Apartment/flat in block/terrace
Terraced/semi-detached house
Other

How long have you lived in your present home? _____ years

Is your home adapted to your needs? YES NO

If "No", do you have problems with:

Space
Variable temperature/too cold/too warm
Stairs
Toilet
Bath/shower
Maintenance
Other (please specify)

Would you like to move into a retirement home?

YES NO

PREVIOUS WORK AND FINANCIAL SITUATION

Which statement best describes the type of work you did for the last 5-10 years before you retired?

I was mainly seated while working
(e.g., desk/assembly work)
My work required a lot of walking
(e.g., shop assistant, housewife, teaching)
My work required a lot of walking and lifting
(e.g., postman, nurse, construction work)
I did heavy physical work
(e.g., forestry, heavy agricultural work, heavy construction work)

Did you do any of the following jobs (full- or part-time)?

Tick one box only for each item.

	YES	NO
Driver	<input type="checkbox"/>	<input type="checkbox"/>
Farmer	<input type="checkbox"/>	<input type="checkbox"/>
Fisherman	<input type="checkbox"/>	<input type="checkbox"/>

How old were you when you retired? _____ years

What kind of pension do you have?

Basic state pension
Additional pension

- How is your current financial situation?
- Very good
 - Good
 - Difficult
 - Very difficult

HEALTH AND ILLNESS

- Has your state of health changed in the last year?
- Yes, it has got worse
 - No, unchanged
 - Yes, it has got better

How do you feel your health is now compared to others of your age?

- Much worse
- A little worse
- About the same
- A little better
- Much better

YOUR OWN ILLNESSES

Have you ever had:
Tick one box only for each item. Give your age at the time. If you have had the condition several times, how old were you last time?

	YES	NO	AGE
Hip fracture	<input type="checkbox"/>	<input type="checkbox"/>	_____
Wrist / forearm fracture	<input type="checkbox"/>	<input type="checkbox"/>	_____
Whiplash	<input type="checkbox"/>	<input type="checkbox"/>	_____
Injury requiring hospital admission	<input type="checkbox"/>	<input type="checkbox"/>	_____
Stomach ulcer	<input type="checkbox"/>	<input type="checkbox"/>	_____
Duodenal ulcer	<input type="checkbox"/>	<input type="checkbox"/>	_____
Stomach/ duodenal ulcer operation	<input type="checkbox"/>	<input type="checkbox"/>	_____
Throat/neck surgery	<input type="checkbox"/>	<input type="checkbox"/>	_____

Have you ever had, or do you still have:
Tick one box only for each item.

	YES	NO
Cancer	<input type="checkbox"/>	<input type="checkbox"/>
Epilepsy	<input type="checkbox"/>	<input type="checkbox"/>
Migraine	<input type="checkbox"/>	<input type="checkbox"/>
Chronic bronchitis	<input type="checkbox"/>	<input type="checkbox"/>
Psoriasis	<input type="checkbox"/>	<input type="checkbox"/>
Osteoporosis	<input type="checkbox"/>	<input type="checkbox"/>
Fibromyalgia/fibrositis/ chronic pain syndrom	<input type="checkbox"/>	<input type="checkbox"/>
Psychological problems for which you have sought help	<input type="checkbox"/>	<input type="checkbox"/>
Thyroid disease	<input type="checkbox"/>	<input type="checkbox"/>
Liver disease	<input type="checkbox"/>	<input type="checkbox"/>
Thyroid disease	<input type="checkbox"/>	<input type="checkbox"/>
Liver disease	<input type="checkbox"/>	<input type="checkbox"/>
Recurrent urinary incontinence	<input type="checkbox"/>	<input type="checkbox"/>
Glaucoma	<input type="checkbox"/>	<input type="checkbox"/>
Cataract	<input type="checkbox"/>	<input type="checkbox"/>
Arthrosis (osteoarthritis)	<input type="checkbox"/>	<input type="checkbox"/>
Rheumatoid arthritis	<input type="checkbox"/>	<input type="checkbox"/>
Kidney stone	<input type="checkbox"/>	<input type="checkbox"/>
Appendectomy	<input type="checkbox"/>	<input type="checkbox"/>
Allergy and hypersensitivity		
Atopic eczema (e.g., childhood eczema)	<input type="checkbox"/>	<input type="checkbox"/>
Hand eczema	<input type="checkbox"/>	<input type="checkbox"/>
Hay fever	<input type="checkbox"/>	<input type="checkbox"/>
Food allergy	<input type="checkbox"/>	<input type="checkbox"/>
Other hypersensitivity (not allergy)	<input type="checkbox"/>	<input type="checkbox"/>

- How many times have you had a cold, influenza (flue), diarrhea/vomiting, or similar in the last six months? _____ times
- Have you had any of these in the last two weeks? YES NO

ILLNESS IN THE FAMILY

Tick off relatives who have, or have ever had, any of the following conditions:
Tick "None" for conditions which none of your relatives have had.

Mother Father Brother Sister Child None

Stroke or brain haemorrhage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Myocardial infarction before age 60	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cancer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypertension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asthma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Osteoporosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arthrosis (osteoarthritis)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychological problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dementia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-age when they got diabetes	_____	_____	_____	_____	_____	_____

SYMPTOMS

Do you cough daily for periods of the year? YES NO

If "Yes":
 Is your cough productive?

Have you had this kind of cough for as long as 3 months in each of the last two years?

Have you had periods of wheezing in your chest?

If "Yes", has this occurred:
Tick one box only for each item.

At night

In connection with respiratory infections

In connection with physical exertion

In connection with very cold weather

Have you noticed sudden changes in your pulse or heart rhythm in the last year?

Have you lost weight in the last year?

If "Yes":
 How many kilograms? _____ kg

How often do you suffer from sleeplessness?
 Never, or just a few times a year

1-2 times a month

Approximately once a week

More than once a week

If you suffer from periods of sleeplessness, what times of the year does it affect you most?
 No particular time of year

Especially during the 'dark winter months'

Especially during the midnight sun period

Especially in spring and autumn

Do you usually take a nap during the day? YES NO

Do you feel that you normally get enough sleep? YES NO

	No	A little	A lot
Do you suffer from:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dizziness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor memory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Constipation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Does the thought of getting a serious illness ever worry you?

Not at all	<input type="checkbox"/>
Only a little	<input type="checkbox"/>
Some	<input type="checkbox"/>
Very much	<input type="checkbox"/>

BODILY FUNCTIONS

Can you manage the following everyday activities on your own without help from others?

	Yes	With some help	No
Walking indoors on one level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking up/down stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking outdoors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking approx. 500 metres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Going to the toilet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Washing yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taking a bath/shower	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dressing and undressing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Getting in and out of bed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eating meals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cooking <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doing light housework (e.g., washing up)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doing heavier housework (e.g., cleaning floors)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Going shopping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taking the bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	With difficulty	No
Can you hear normal speech (if necessary with a hearing aid)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can you read (if necessary with glasses)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are you dependent on any of the following aids?

	Yes	No
Walking stick	<input type="checkbox"/>	<input type="checkbox"/>
Crutches	<input type="checkbox"/>	<input type="checkbox"/>
Walking frame/Zimmer frame	<input type="checkbox"/>	<input type="checkbox"/>
Wheelchair	<input type="checkbox"/>	<input type="checkbox"/>
Hearing aid	<input type="checkbox"/>	<input type="checkbox"/>
Safety alarm device	<input type="checkbox"/>	<input type="checkbox"/>

USE OF HEALTH SERVICES

How many visits have you made during the past year due to your own health or illness:

Tick 0 if you have not had such contact

Number of times the past year

To a general practitioner (GP)/ emergency GP	_____
Psychologist or psychiatrist	_____
Other medical specialist (not at a hospital)	_____
Hospital out-patient clinic	_____
Hospital admission	_____
Physiotherapist	_____
Chiropractor	_____
Acupuncturist	_____

Dentist	_____
Chiropodist	_____
Alternative medical practitioner (homoeopath, foot zone therapist, etc.)	_____
Healer, Faith healer, clairvoyant	_____

Do you have domestic help?	Yes	No
Private	<input type="checkbox"/>	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	<input type="checkbox"/>
Do you receive services from the district nurse?	<input type="checkbox"/>	<input type="checkbox"/>

Are you pleased with the health care and home assistance services your municipality supplies?

	Yes	No	Don't know
Assigned family GP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
District nurse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Home assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you feel confident that you can receive the health care and home assistance you require if you need it?

Confident	<input type="checkbox"/>
Not confident	<input type="checkbox"/>
Very unsure	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

MEDICATION AND DIETARY SUPPLEMENTS

Have you for any length of time in the past year used any of the following medicines every day or almost daily?

Indicate how many months you used them for.

Write 0 for items you have not used.

Medication:

Painkillers	_____ mths
Sleeping pills	_____ mths
Tranquillizers	_____ mths
Antidepressants	_____ mths
Allergy drugs	_____ mths
Asthma drugs	_____ mths
Heart medicine (not blood pressure)	_____ mths
Insulin	_____ mths
Diabetes tablets	_____ mths
Thyroxin tablets (for metabolic disorder)	_____ mths
Cortisone tablets	_____ mths
Remedies for constipation	_____ mths

Dietary supplements:

Iron tablets	_____ mths
Vitamin D supplement	_____ mths
Other vitamin supplements	_____ mths
Calcium tablets or bonemeal	_____ mths
Cod liver oil or fish oil capsules	_____ mths

FAMILY AND FRIENDS

Do you have close relatives who can give you help and support when you need it? Yes No

If "Yes", who can give you help?

Spouse/partner	<input type="checkbox"/>
Children	<input type="checkbox"/>
Others	<input type="checkbox"/>

How many good friends do you have whom you can talk confidentially with and who give you help when you need it?

_____ good friends

Do not count people you live with, but do include other relatives!

Do you feel you have enough good friends? Yes No

Do you feel that you belong to a community or group of people who can depend on each other and who feel committed to each other (e.g., a political party, religious group, relatives, neighbours, work place, or organisation)?

- Strong sense of belonging
- Some sense of belonging
- Not sure
- Little or no sense of belonging

How often do you normally take part in organised gatherings, e.g., sewing circles, sports clubs, political meetings, religious or other associations?

- Never, or just a few times a year
- 1-2 times a month
- Approximately once a week
- More than once a week

DIET

How many meals a day do you normally eat (dinner and smaller meals)? _____ Number

How many times a week do you eat a hot dinner? _____ Number

What kind of bread (bought or home-made) do you usually eat? *Tick one or two boxes!*

The bread I eat is most similar to

- White bread
- Light textured brown bread
- Ordinary brown bread
- Coarse brown bread
- Crisp bread

What kind of fat is normally used in **cooking** (not on the bread) in your home?

- Creamery butter
- Hard margarine
- Soft margarine
- Butter/margarine blend
- Oils

How much (in **number** of glasses, cups, potatoes or slices) do you usually eat or drink **daily** of the following foodstuffs? *Tick one box for each foodstuff.*

	Less					
	0	1	2	3	4	5-6
	than	1-2	3-4	5-6	6-	
Milk of all types (glasses)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Orange juice (glasses)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potatoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Slices of bread in total (incl. crispbread)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Slices of bread with fish (e.g., mackerel in tomato sauce)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- cheese (e.g., Norwegia)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- smoked cod caviar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How many **times per week** do you normally eat the following foodstuffs? *Tick a box for all foodstuffs listed.*

	Less					Roughly
	Never	than 1	1	2-3	4-5	every day
Yoghurt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boiled or fried egg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breakfast cereal/ oat meal, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For dinner						
- meat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- fat fish (e.g., salmon/ redfish)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- lean fish (e.g., cod)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- vegetables (raw or cooked)
- Carrots (raw or cooked)
- Cauliflower/cabbage/broccoli
- Apples/pears
- Oranges, mandarines, etc.

WELL BEING

How content do you generally feel with growing old?

- Good
- Quite good
- Up and down
- Bad

What is your view of the future?

- Bright
- Not too bad
- Quite worried
- Dark

TO BE ANSWERED BY WOMEN ONLY

MENSTRUATION

How old were you when you had your first menstruation? _____ years

How old were you when you stopped having menstruations? _____ years

PREGNANCY

How many children have you given birth to? _____ children

If you have given birth, fill out for each child the year of birth and approximately how many months you breastfed the child. If you have given birth to more than 6 children, note their birthyear and number of months you breastfed at the space provided below for comments.

Child:	Year of birth:	Number of months breastfed:
1	_____	_____ months
2	_____	_____ months
3	_____	_____ months
4	_____	_____ months
5	_____	_____ months
6	_____	_____ months

During pregnancy, have you had high blood pressure and/or proteinuria? Yes No

If "Yes", during which pregnancy?

	Pregnancy	
	First	Later
High blood pressure	<input type="checkbox"/>	<input type="checkbox"/>
Proteinuria	<input type="checkbox"/>	<input type="checkbox"/>

OESTROGEN

Do you, or have you ever used oestrogen:

	Now	Used to	Never
Tablets or patches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cream or suppositories	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you use oestrogen, what brand do you currently use?

Your comments:

Thank you for helping us! Remember to post the form today! Tromsø Health Survey

Appendix B. Questionnaires in the fifth Tromsø Study in 2001-2002

1. Questionnaire, the Tromsø Study 2001-2002, for subjects below the age of 70,
Norwegian
2. Questionnaire, the Tromsø Study 2001-2002, for subjects over the age of 70, Norwegian
3. Second questionnaire, the Tromsø Study 2001-2002, Norwegian

Helseundersøkelsen

Personlig innbydelse

Ikke skriv her.

5.3 (Kommune)

(Fylke)

(Land)

9.3 (Virksomhet)

9.4 (Yrke)

14.7 (Merke)

1. EGEN HELSE

1.1 Hvordan er helsen din nå? (Sett bare ett kryss)

Dårlig 1 Ikke helt god 2 God 3 Svært god 4

1.2 Har du, eller har du hatt?:

	JA	NEI	Alder første gang	
Astma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Høysnue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kronisk bronkitt/emfysem.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes (sukkersyke).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Benskjørhet (osteoporose).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fibromyalgi/kronisk smertesyndrom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psykiske plager som du har søkt hjelp for	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hjerteinfarkt.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angina pectoris (hjertekrampe).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hjerneslag/hjerneblødning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1.3 Har du merket anfall med plutselig endring i pulsen eller hjerterytmen siste året?.....

JA NEI

1.4 Får du smerter eller ubehag i brystet når du:

Går i bakker, trapper eller fort på flat mark?..... JA NEI

1.5 Hvis du får slike smerter, pleier du da å:

Stoppe? 1 Saktne farten? 2 Fortsette i samme takt? 3

1.6 Dersom du stopper, forsvinner smertene da etter mindre enn 10 minutter?.....

JA NEI

1.7 Kan slike smerter opptre selv om du er i ro?.....

JA NEI

2. MUSKEL OG SKJELETTPLAGER

2.1 Har du vært plaget med smerter og/eller stivhet i muskler og ledd i løpet av de siste 4 ukene? (Varighet angis bare hvis du har hatt plager)

	Ikke plaget	En del plaget	Sterkt plaget	Varighet	
				Inntil 2 uker	2 uker eller mer
Nakke/skuldre.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Armer, hender	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Øvre del av ryggen ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Korsryggen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hofter, ben, føtter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Andre steder.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.2 Har du noen gang hatt:

	JA	NEI	Alder siste gang	
Brudd i håndledd/underarm?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lårhalsbrudd?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. ANDRE PLAGER

3.1 Under finner du en liste over ulike problemer. Har du opplevd noe av dette den siste uken (til og med i dag)? (Sett ett kryss for hver plage)

	Ikke plaget	Litt plaget	Ganske mye	Veldig mye
Plutselig frykt uten grunn.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Føler deg redd eller engstelig.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Matthet eller svimmelhet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Føler deg anspent eller oppjaget.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lett for å klandre deg selv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Søvnproblemer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nedtrykt, tungsindig.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følelse av å være unyttig, lite verd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følelse av at alt er et slit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følelse av håpløshet mht. framtida	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1 2 3 4

4. BRUK AV HELSETJENESTER

4.1 Hvor mange ganger de siste 12 månedene har du selv brukt: (Sett ett kryss for hver linje)

	Ingen	1-3 ganger	4 eller flere
Allmennpraktiserende lege	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bedriftslege.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psykolog eller psykiater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(privat eller på poliklinikk)			
Annen spesialist (privat eller på poliklinikk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Legevakt (privat eller offentlig).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sykehusinnleggelse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hjemmesykepleie.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fysioterapeut	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kiropraktor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tannlege	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternativ behandler.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. OPPVEKST OG TILHØRIGHET

5.1 Hvor lenge har du samlet bodd i fylket? (Sett 0 hvis mindre enn et halvt år)

år

5.2 Hvor lenge har du samlet bodd i kommunen? (Sett 0 hvis mindre enn et halvt år)

år

5.3 Hvor bodde du det meste av tiden før du fylte 16 år? (kryss av for ett alternativ og spesifiser)

Samme kommune.....	<input type="checkbox"/> 1	
Annen kommune i fylket.....	<input type="checkbox"/> 2	Hvilken:
Annet fylke i Norge	<input type="checkbox"/> 3	Hvilket:
Utenfor Norge	<input type="checkbox"/> 4	Land:

5.4 Har du flyttet i løpet av de siste fem årene?

Nei 1 Ja, en gang 2 Ja, flere ganger 3

6. VEKT

6.1 Anslå din vekt da du var 25 år gammel: hele kg

7. MAT OG DRIKKE

7.1 Hvor ofte spiser du vanligvis disse matvarene?

(Sett ett kryss pr. linje)	Sjelden /aldri	1-3 g. pr.mnd	1-3 g. pr.uke	4-6 g. pr.uke	1-2 g. pr.dag	3 g. el. mer pr.dag
Frukt, bær.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ost (alle typer).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poteter.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kokte grønnsaker.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rå grønnsaker/salat....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feit fisk (f.eks. laks, ørret, makrell, sild)	1	2	3	4	5	6

7.2 Hva slags fett bruker du oftest? (Sett ett kryss pr. linje)

	Bruker ikke	Meieri-smør	Hard margarin	Myk/lett margarin	Oljer	Annet
På brødet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I matlagingen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.3 Bruker du følgende kosttilskudd:

	Ja, daglig	Iblant	Nei
Tran, trankapsler, fiskeoljekapsler?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamin- og/eller mineraltilskudd?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.4 Hvor mye drikker du vanligvis av følgende?

(Sett ett kryss pr. linje)	Sjelden /aldri	1-6 glass pr.uke	1 glass pr.dag	2-3 glass pr.dag	4 glass el. mer pr.dag
Helmelk, kefir, yoghurt.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lettmelk, cultura, lettyoghurt..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skummet melk (sur/søt).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ekstra lettmelk.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fruktjuice.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vann.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farris, Ramløsa e.l.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cola-holdig leskedrikk.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annen brus/leskedrikk.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.5 Driker du vanligvis brus/cola: Med sukker 1 Uten sukker 2

7.6 Hvor mange kopper kaffe og te drikker du daglig? (Sett 0 for de typene du ikke drikker daglig) Antall kopper

Filterkaffe.....	<input type="checkbox"/>	<input type="checkbox"/>
Kokekaffe/trykkanne.....	<input type="checkbox"/>	<input type="checkbox"/>
Annen kaffe.....	<input type="checkbox"/>	<input type="checkbox"/>
Te.....	<input type="checkbox"/>	<input type="checkbox"/>

7.7 Omtrent hvor ofte har du i løpet av det siste året drukket alkohol? (Lettøl og alkoholfritt øl regnes ikke med)

Har aldri drukket alkohol	Har ikke drukket alkohol siste år	Noen få ganger siste år	Omtrent 1 gang i måneden
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
2-3 ganger pr. måned	ca. 1 gang i uka	2-3 ganger i uka	4-7 ganger i uka
<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8

Til dem som har drukket siste år:

7.8 Når du har drukket alkohol, hvor mange glass eller drinker har du vanligvis drukket? Antall

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

7.9 Omtrent hvor mange ganger i løpet av det siste året har du drukket så mye som minst 5 glass eller drinker i løpet av ett døgn? Antall ganger

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.10 Når du drikker, drikker du da vanligvis: (Sett ett eller flere kryss)

Øl	Vin	Brennevin
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. RØYKING

- 8.1 Hvor lenge er du vanligvis daglig tilstede i røykfylt rom? Antall hele timer

8.2 Røykte noen av de voksne hjemme da du vokste opp?..... JA NEI

8.3 Bor du, eller har du bodd, sammen med noen dagligrøykere etter at du fylte 20 år?..... JA, nå Ja, tidligere Aldri

8.4 Har du røykt/røyker du daglig?..... **Hvis ALDRI: Hopp til spørsmål 9 (UTDANNING OG ARBEID)**

8.5 Hvis du røyker daglig nå, røyker du: JA NEI

Sigaretter?.....

Sigarer/sigarillos?.....

Pipe?.....

8.6 Hvis du har røykt daglig tidligere, hvor lenge er det siden du sluttet? Antall år

8.7 Hvis du røyker daglig nå eller har røykt tidligere:

Hvor mange sigaretter røyker eller røykte du vanligvis daglig? Antall sigaretter

Hvor gammel var du da du begynte å røyke daglig? Alder i år

Hvor mange år til sammen har du røykt daglig? Antall år

9. UTDANNING OG ARBEID

- 9.1 Hvor mange års skolegang har du gjennomført? Antall år

(Ta med alle år du har gått på skole eller studert)

9.2 Er du i inntektsgivende arbeid? JA, full tid 1 JA, deltid 2 Nei 3 T

9.3 Beskriv virksomheten på det arbeidsstedet (avdelingen) der du utførte inntektsgivende arbeid i lengst tid de siste 12 mnd. (F.eks. regnskapsbyrå, ungdomsskole, barneavd. på sykehus, snekkerverksted, bilverksted, bank, dagligvarehandel e.l.)

Virksomhet:.....

Hvis pensjonert, skriv tidligere hovedvirksomhet og yrke. Gjelder også 9.4

9.4 Hvilket yrke/tittel har eller hadde du på dette arbeidsstedet? (F.eks. sekretær, lærer, industriarbeider, barnepleier, møbelsnekker, avdelingsleder, selger, sjåfør e.l.)

Yrke:.....

9.5 Arbeider du i ditt hovedyrke som selvstendig, som ansatt eller som familiemedlem uten fast avtalt lønn?

Selvstendig Ansatt Familiemedlem

9.6 Mener du at du står i fare for å miste ditt nåværende arbeid eller inntekt de nærmeste 2 årene?..... JA NEI

9.7 Mottar du noen av følgende ytelser? JA NEI

Sykepenger (er sykmeldt).....

Alderstrygd, førtidspensjon (AFP) eller etterlattepensjon.....

Rehabiliterings-/attføringspenger.....

Uførepensjon (hel eller delvis).....

Dagpenger under arbeidsledighet.....

Sosialhjelp/stønad.....

Overgangsstønad for enslige forsørgere.....

10. MOSJON OG FYSISK AKTIVITET

10.1 Hvordan har din fysiske aktivitet i fritiden vært det siste året?

Tenk deg et ukentlig gjennomsnitt for året.
Arbeidsvei regnes som fritid. Besvar begge spørsmålene.

	Timer pr. uke			
	Ingen	Under 1	1-2	3 og mer
Let aktivitet (Ikke svett/andpusten).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hard fysisk aktivitet (Svett/andpusten).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4

10.2 Angi bevegelse og kroppslig anstrengelse i din fritid. Hvis aktiviteten varierer meget f.eks. mellom sommer og vinter, så ta et gjennomsnitt. Spørsmålet gjelder bare det siste året. (Sett kryss i den ruta som passer best)

Leser, ser på fjernsyn eller annen stillesittende beskjeftigelse?..... 1

Spaserer, sykler eller beveger deg på annen måte minst 4 timer i uka?..... 2
(Her skal du også regne med gang eller sykling til arbeidsstedet, søndagsturer m.m.)

Driver mosjonsidrett, tyngre hagearbeid e.l.? 3
(Merk at aktiviteten skal vare minst 4 timer i uka)

Trener hardt eller driver konkurranseidrett regelmessig og flere ganger i uka?..... 4

11. FAMILIE OG VENNER

11.1 Bor du sammen med: JA NEI

Ektefelle/samboer?

11.2 Hvor mange gode venner har du? Antall venner

Regn med de du kan snakke fortrolig med og som kan gi deg hjelp dersom du trenger det. Tell ikke med de du bor sammen med, men ta med andre slektninger.

11.3 Hvor stor interesse viser folk for det du gjør? (Sett bare ett kryss)

Stor interesse	Noe interesse	Litt interesse	Ingen interesse	Usikkert
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

11.4 Hvor mange foreninger, lag, grupper, kirkesamfunn e.l. deltar du i på fritiden? (Skriv 0 hvis ingen) Antall

11.5 Føler du at du kan påvirke det som skjer i lokalsamfunnet der du bor? (Sett bare ett kryss)

Ja, i stor grad	Ja, en del	Ja, i liten grad	Nei	Har ikke forsøkt
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

12. SYKDOM I FAMILIEN

12.1 Har en eller flere av dine foreldre eller søsken hatt hjerteinfarkt (sår på hjertet) eller angina pectoris (hjertekrampe)? JA NEI VET IKKE

12.2 Kryss av for de slektningene som har eller har hatt noen av sykdommene: (Sett kryss for hver linje)

	Mor	Far	Bror	Søster	Barn	Ingen av disse
Hjerneslag eller hjerneblødning.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hjerteinfarkt før 60 års alder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Astma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kreftsykdom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes (sukkersyke).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12.3 Hvis noen slektninger har diabetes, i hvilken alder fikk de diabetes (hvis for eks. flere søsken, før opp den som fikk det tidligst i livet):

Vet ikke, ikke aktuelt	Mors alder	Fars alder	Brors alder	Søsters alder	Barns alder
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

13. BRUK AV MEDISINER

Med medisiner mener vi her medisiner kjøpt på apotek. Kosttilskudd og vitaminer regnes ikke med her.

13.1 Bruker du?

	Nå	Før, men ikke nå	Aldri brukt
Medisin mot høyt blodtrykk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kolesterolsenkende medisin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13.2 Hvor ofte har du i løpet av de siste 4 ukene brukt følgende medisiner? (Sett ett kryss pr. linje)

	Ikke brukt siste 4 uker	Sjeldnere enn hver uke	Hver uke, men ikke daglig	Daglig
Smertestillende uten resept.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smertestillende på resept.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sovemedisin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beroligende medisin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medisin mot depresjon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annen medisin på resept.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4

13.3 For de medisinerne som du har krysset av for i pkt. 13.1 og 13.2, og som du har brukt i løpet av de siste 4 ukene:

Angi navnet og hvilken grunn det er til at du tar/har tatt disse (sykdom eller symptom):
(Kryss av for hvor lenge du har brukt medisinen)

Navn på medisinen: (ett navn pr. linje):	Grunn til bruk av medisinen:	Hvor lenge har du brukt medisinen?	
		Inntil 1 år	Ett år eller mer
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Dersom det ikke er nok plass her, kan du fortsette på eget ark som du legger ved.

14. RESTEN AV SKJEMAET SKAL BARE BESVARES AV KVINNER

14.1 Hvor gammel var du da du fikk menstruasjon aller første gang? Alder i år

14.2 Hvis du ikke lenger får menstruasjon, hvor gammel var du da den sluttet? Alder i år

14.3 Er du gravid nå?

Ja	Nei	Usikker	Over fruktbar alder
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

14.4 Hvor mange barn har du født? Antall barn

14.5 Bruker du, eller har du brukt? (Sett ett kryss for hver linje)

	Nå	Før, men ikke nå	Aldri
P-pille/minipille/p-sprøyte.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hormonspiral (ikke vanlig spiral)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Østrogen (tablett eller plaster)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Østrogen (krem eller stikkpiller)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14.6 Hvis du bruker/har brukt reseptpliktig østrogen: Hvor lenge har du brukt dette? Antall år

14.7 Hvis du bruker p-pille, minipille, p-sprøyte, hormonspiral eller østrogen; hvilket merke bruker du?

Helse-undersøkelsen

Personlig innbydelse

Ikke skriv her:

E13 (Kommune)

(Fylke)

(Land)

E15 (Merke)

E1. EGEN HELSE

Hvordan er helsen din nå? (Sett bare ett kryss)

Dårlig 1 Ikke helt god 2 God 3 Svært god 4

Har du, eller har du hatt?:

	T		Alder første gang	
	JA	NEI		
Astma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kronisk bronkitt/emfysem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes (sukkersyke)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Benskjørhet (osteoporose)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fibromyalgi/kronisk smertesyndrom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psykiske plager som du har søkt hjelp for	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hjerteinfarkt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angina pectoris (hjertekrampe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hjerneslag/hjerneblødning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Får du smerter eller ubehag i brystet når du: JA NEI
Går i bakker, trapper eller fort på flat mark?

Hvis du får slike smerter, pleier du da å:
Stoppe? 1 Saktne farten? 2 Fortsette i samme takt? 3

Dersom du stopper, forsvinner smertene da etter mindre enn 10 minutter?

Kan slike smerter opptre selv om du er i ro?

E2. SYKDOM I FAMILIEN

Har en eller flere av dine foreldre eller søsken hatt:

Hjerteinfarkt (sår på hjertet) eller angina pectoris (hjertekrampe)?

Kryss av for de slektningene som har eller har hatt noen av sykdommene: (Sett kryss for hver linje)

	Mor	Far	Bror	Søster	Barn	Ingen av disse
Hjerneslag eller hjerneblødning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hjerteinfarkt før 60 års alder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Astma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kreftsykdom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes (sukkersyke)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hvis noen slektninger har diabetes, i hvilken alder fikk de diabetes (hvis for eks. flere søsken, før opp den som fikk det tidligst i livet):

	Vet ikke, ikke aktuelt	Mors alder	Fars alder	Brors alder	Søsters alder	Barns alder
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

E3. PLAGER

Under finner du en liste over ulike problemer. Har du opplevd noe av dette den siste uken (til og med i dag)?

	Ikke plaget	Litt plaget	Ganske mye	Veldig mye
Plutselig frykt uten grunn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Føler deg redd eller engstelig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Matthet eller svimmelhet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Føler deg anspent eller oppjaget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lett for å klandre deg selv	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Søvnproblemer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nedtrykt, tungsindig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følelse av å være unyttig, lite verd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følelse av at alt er et slit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følelse av håpløshet mht. framtida.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

E4. TENNER, MUSKEL OG SKJELETT

Hvor mange tenner har du mistet/trukket? Antall tenner (Se bort fra melketenner og visdomstenner)

Har du vært plaget med smerter og/eller stivhet i muskler og ledd i løpet av de siste 4 ukene?

	Ikke plaget	En del plaget	Alvorlig plaget
Nakke/skuldre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Armer, hender	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Øvre del av ryggen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Korsryggen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hofter, ben, føtter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Andre steder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Har du noen gang hatt:

	JA	NEI	Alder siste gang
Brudd i håndledd/underarm?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lårhalsbrudd?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Har du falt i løpet av det siste året? (Sett bare ett kryss)

Nei	Ja, 1-2 ganger	Ja, mer enn 2 ganger
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

E5. MOSJON OG FYSISK AKTIVITET

Hvordan har din fysiske aktivitet vært det siste året?

Tenk deg et ukentlig gjennomsnitt for året. Besvar begge spørsmålene.

	Timer pr. uke			
	Ingen	Under 1	1-2	3 og mer
Lett aktivitet (ikke svett/andpusten)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hard fysisk aktivitet (svett/andpusten)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

E6. VEKT

Anslå din vekt da du var 25 år gammel: hele kg

E7. UTDANNING

Hvor mange års skolegang har du gjennomført?

(Ta med alle år du har gått på skole eller studert)

Antall år

E8. MAT OG DRIKKE

Hvor ofte spiser du vanligvis disse matvarene?

(Sett ett kryss for hver linje)

	Sjelden /aldri	1-3 g. pr.mnd	1-3 g. pr.uke	4-6 g. pr.uke	1-2 g. pr.dag	3 g. el. mer pr.dag
Frukt, bær.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ost (alle typer).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poteter.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kokte grønnsaker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rå grønnsaker/salat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feit fisk (f.eks. laks, ørret, makrell, sild)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6

Bruker du kosttilskudd:

	Ja, daglig	Iblant	Nei
Tran, trankapsler, fiskeoljekapsler.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamin- og/eller mineraltilskudd.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hvor mye drikker du vanligvis av følgende?

(Sett ett kryss for hver linje)

	Sjelden /aldri	1-6 glass pr.uke	1 glass pr.dag	2-3 glass pr.dag	4 glass el. mer pr.dag
Helmelk, kefir, yoghurt.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lettmelk, cultura, lettyoghurt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skummet melk (sur/søt).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ekstra lettmelk.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fruktjuice.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vann.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brus, mineralvann.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

Hvor mange kopper kaffe og te drikker du daglig?

(Sett 0 for de typene du ikke drikker daglig)

Antall kopper

Filterkaffe.....	<input type="text"/>
Kokekaffe/trykkanne.....	<input type="text"/>
Annen kaffe.....	<input type="text"/>
Te.....	<input type="text"/>

Omtrent hvor ofte har du i løpet av det siste året drukket alkohol? (Lettøl og alkoholfritt øl regnes ikke med)

Har aldri drukket alkohol	Har ikke drukket alkohol siste år	Noen få ganger siste år	Omtrent 1 gang i måneden
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
2-3 ganger pr. måned	ca. 1 gang i uka	2-3 ganger i uka	4-7 ganger i uka
<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8

Til dem som har drukket siste år:

Når du har drukket alkohol, hvor mange glass eller drinker har du vanligvis drukket?

Antall

Omtrent hvor mange ganger i løpet av det siste året har du drukket så mye som minst 5 glass eller drinker i løpet av ett døgn?

Antall ganger

E9. RØYKING

Hvor lenge er du vanligvis daglig tilstede i et røykfylt rom?

Antall hele timer

Røykte noen av de voksne hjemme da du vokste opp?.....

 JA NEI

Bor du, eller har du bodd, sammen med noen dagligrøykere etter at du fylte 20 år?

 JA NEI

Har du røykt/røyker du daglig?.....

 Ja, nå Ja, tidligere Aldri

Hvis du **ALDRI** har røykt daglig; Hopp til spørsmål E11 (FUNKSJON OG TRYGGHET)

Hvis du røyker daglig **nå**, røyker du:

JA NEI

Sigaretter?.....	<input type="checkbox"/>	<input type="checkbox"/>
Sigarer/sigarillos?.....	<input type="checkbox"/>	<input type="checkbox"/>
Pipe?.....	<input type="checkbox"/>	<input type="checkbox"/>

Hvis du har røykt daglig **tidligere**, hvor lenge er det siden du sluttet?

Antall år

Hvis du røyker daglig nå eller har røykt tidligere:

Hvor mange sigaretter røyker eller røykte du vanligvis daglig? Antall sigaretter

Hvor gammel var du da du begynte å røyke daglig? Alder i år

Hvor mange år til sammen har du røykt daglig? Antall år

E10. FUNKSJON OG TRYGGHET

Ville du følt deg trygg ved å ferdes alene på kveldstid i nrområdet der du bor?

Ja Litt utrygg Svært utrygg

 1 2 3

Når det gjelder førighet, syn og hørsel, kan du: (Sett ett kryss for hver linje)

	Uten problemer	Med litt problemer	Med store problemer	Nei
Gå en 5 minutters tur i noenlunde raskt tempo?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lese vanlig tekst i aviser, evt. med briller?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Høre hva som blir sagt i en normal samtale?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4

Har du på grunn av varige helseproblemer vansker med å: (Sett ett kryss for hver linje)

Ingen vansker Noen vansker Store vansker

Bevege deg rundt i egen bolig?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Komme deg ut av boligen på egen hånd?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delta i foreningsliv eller andre fritidsaktiviteter?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bruke offentlige transportmidler?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utføre nødvendige daglige ærend?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

E11. BRUK AV HELSETJENESTER

Hvor mange ganger de siste 12 månedene har du selv brukt:

(Sett ett kryss for hver linje)

	Ingen	1-3 ganger	4 eller flere
Allmennpraktiserende lege	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spesialist (privat eller på poliklinikk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Legevakt (privat eller offentlig)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sykehusinnleggelse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hjemmesykepleie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fysioterapeut	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kiropraktor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kommunal hjemmehjelp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tannlege	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternativ behandler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Er du trygg på at du kan få hjelp av helseog hjemmetjenesten hvis du trenger det?

JA	NEI	Vet ikke
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

E12. FAMILIE OG VENNER

Bor du: Hjemme? 1 Institusjon/bofellesskap? 2

Bor du sammen med:

	JA	NEI
Ektefelle/samboer?	<input type="checkbox"/>	<input type="checkbox"/>
Andre personer?	<input type="checkbox"/>	<input type="checkbox"/>

Hvor mange gode venner har du?

Regn med de du kan snakke fortrolig med og som kan gi deg hjelp når du trenger det. Tell ikke med de du bor sammen med, men ta med barn og andre slektninger.....

Antall venner

Hvor stor interesse viser folk for det du gjør?

(Sett bare ett kryss)

Stor interesse	Noe interesse	Litt interesse	Ingen interesse	Usikkert
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Hvor mange foreninger, lag, grupper, kirkesamfunn e.l. deltar du i ?

(Skriv 0 hvis ingen)

Antall

E13. OPPVEKST OG TILHØRIGHET

Hvor lenge har du samlet bodd i fylket? år

Hvor lenge har du samlet bodd i kommunen? år

Hvor bodde du det meste av tiden før du fylte 16 år? (Kryss av for ett alternativ og spesifiser)

Samme kommune	<input type="checkbox"/> 1
Annen kommune i fylket	<input type="checkbox"/> 2 Hvilken: _____
Annet fylke i Norge	<input type="checkbox"/> 3 Hvilket: _____
Utenfor Norge	<input type="checkbox"/> 4 Land: _____

Har du flyttet i løpet av de siste fem årene?

Nei	Ja, en gang	Ja, flere ganger
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

E14. BRUK AV MEDISINER

Med medisiner mener vi her medisiner kjøpt på apotek. Kosttilskudd og vitaminer regnes ikke med her.

Bruker du?

(Sett ett kryss for hver linje)

	Nå	Før, men ikke nå	Aldri brukt
Medisin mot høyt blodtrykk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kolesterolsenkende medisin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medisin mot osteoporose (benskjørhet)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tabletter mot sukkersyke	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hvor ofte har du i løpet av de siste 4 ukene brukt følgende medisiner?

(Sett ett kryss for hver linje)

	Ikke brukt siste 4 uker	Sjeldnere enn hver uke	Hver uke, men ikke daglig	Daglig
Smertestillende uten resept	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smertestillende på resept	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sovemedisin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beroligende medisin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medisin mot depresjon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annen medisin på resept	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4

Angi navnet på de medisinerne du bruker nå, og hva grunnen er til at du tar medisinerne (sykdom eller symptom):

(Kryss av for hvor lenge du har brukt medisinen)

Navn på medisinen: (ett navn pr. linje):	Grunn til bruk av medisinen:	Hvor lenge har du brukt medisinen?	
		Inntil 1 år	Ett år eller mer
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Dersom det ikke er nok plass her, kan du fortsette på eget ark som du legger ved.

E15. RESTEN AV SKJEMAET SKAL BARE BESVARES AV KVINNER

Hvor gammel var du da du fikk menstruasjon aller første gang? Alder i år

Hvor gammel var du da menstruasjonen sluttet? Alder i år

Hvor mange barn har du født? Antall barn

Bruker du, eller har du brukt østrogenmedisin? I antall år totalt

	Aldri	Før	Nå
Tabletter eller plaster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Krem eller stikkpiller	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
------------------------------	--------------------------	--------------------------	--------------------------

Hvis du bruker østrogen; hvilket merke bruker du nå?

	JA	NEI
Har du noen gang brukt P-pille?	<input type="checkbox"/>	<input type="checkbox"/>

Tilleggsspørsmål til helseundersøkelsen i Troms og Finnmark 2001-2002

Hovedformålet med Helseundersøkelsen er å skaffe ny kunnskap om hjerte-karsykdommer for å kunne forebygge dem. I tillegg skal undersøkelsen øke kunnskapen om kreftsykdommer og plager som f.eks allergier, smerter i muskulatur og nervøse lidelser. Vi ber deg derfor svare på noen spørsmål om forhold som kan ha betydning for risikoen for disse og andre sykdommer.

Skjemaet er en del av Helseundersøkelsen som er godkjent av Datatilsynet og forelagt Regional komité for medisinsk forskningsetikk. Svarene brukes bare til forskning og behandles strengt fortrolig.

T1. LOKALMILJØ OG BOLIG

1.1 I hvilken kommune bodde du da du fylte 1 år?
(Hvis du ikke bodde i Norge, oppgi hvilket land i stedet for kommune)

1.2 Hvilken type bolig bor du i? (Sett bare ett kryss)

- Enebolig/villa 1
 Gårdsbruk 2
 Blokk/terrasseleilighet 3
 Rekkehus/2-4 mannsbolig 4
 Institusjon/omsorgsbolig 5
 Annen bolig 6

1.3 Hvor stor er din boenhet? kvm (brutto)

1.4 Er du plaget av: (Sett ett kryss for hver linje)

- | | Ikke plaget | En del plaget | Sterkt plaget |
|--|--------------------------|--------------------------|--------------------------|
| Fukt, trekk eller kulde i din bolig | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Andre former for dårlig inneklimate | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Trafikkstøy (biltrafikk eller fly) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Annen støy (bedrift, byggeplass e.l.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Nabostøy | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Dårlig drikkevann | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Luftforurensning fra trafikk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Luftforurensning fra ved-, oljefyring, fabrikk e.l. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

1.5 Hvilket hjemmespråk hadde dine besteforeldre?
(Kryss av for ett eller flere alternativ)

- | | Norsk | Samisk | Kvensk/finnsk | Annet språk |
|--------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Mormor | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Morfar | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Farmor | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Farfar | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Opplysningene kan senere bli sammenholdt med informasjon fra andre offentlige helseregistre etter de regler som Datatilsynet og Regional komité for medisinsk forskningsetikk gir.

Hvis du er i tvil om hva du skal svare, sett kryss i den ruten du synes passer best.

Det utfylte skjemaet sendes i vedlagte svarkonvolutt. Portoen er betalt. På forhånd takk for hjelpen!

Med vennlig hilsen

Institutt for samfunnsmedisin Statens helseundersøkelser
Universitetet i Tromsø

Hvis du ikke ønsker å besvare dette spørreskjemaet, sett kryss i ruten under og returner skjemaet. Da slipper du å bli purret på!

Jeg ønsker ikke å besvare spørreskjemaet

Dato for utfylling:

Dag	Måned	År
<input type="text"/>	<input type="text"/>	<input type="text"/>

T1. LOKALMILJØ OG BOLIG (forts.)

1.6 Hva regner du deg selv som?
(Kryss av for ett eller flere alternativ)

- Norsk Samisk Kvensk/finnsk Annet

1.7 Føler du at du har nok gode venner? JA NEI

1.8 Hvor ofte tar du vanligvis del i foreningsvirksomhet som f.eks. sykkklubb, idrettslag, politiske lag eller andre foreninger?
(Sett bare ett kryss)

- Aldri, eller noen få ganger i året 1
 1-3 ganger i måneden..... 2
 Omtrent 1 gang i uken 3
 Mer enn en gang i uken..... 4

T2. LØNNET OG ULØNNET ARBEID

2.1 Hvis du er i lønnet eller ulønnet arbeid, hvordan vil du beskrive ditt arbeid? (Sett bare ett kryss)

- For det meste stillesittende arbeid?
(f.eks. skrivebordsarbeid, montering) 1
 Arbeid som krever at du går mye?
(f.eks. ekspeditørb., lett industriarb., undervisning) 2
 Arbeid hvor du går og løfter mye?
(f.eks. postbud, pleier, bygningsarbeider)..... 3
 Tungt kroppsarbeid?
(f.eks. skogsarb., tungt jordbruksarb., tungt bygn.arb.)..... 4

2.2 Kan du selv bestemme hvordan arbeidet ditt (lønnet eller ulønnet) skal legges opp? (Sett bare ett kryss)

- Nei, ikke i det hele tatt 1
 I liten grad 2
 Ja, stort sett 3
 Ja, det bestemmer jeg selv..... 4

2.3 Har du skiftarbeid, nattarbeid eller går vakter? JA NEI

T3. TOBAKK

3.1 Røyker du?

Ja, daglig 1 Ja, av og til 2 Nei, aldri 3

Hvis "Ja, av og til",
Hva røyker du?

Sigaretter Pipe Sigar/sigarillos

3.2 Har du brukt, eller bruker du snus daglig?

Ja, nå Ja, tidligere Aldri

Hvis JA:

Hvor mange år har du til sammen
brukt snus? år

T4. ALKOHOL

4.1 Er du totalavholdsmann/-kvinne?..... JA NEI

4.2 Hvor mange ganger i måneden drikker
du vanligvis alkohol?..... Antall ganger
(Regn ikke med lettøl.
Sett 0 hvis mindre enn 1 gang i måneden)

4.3 Hvor mange glass øl, vin eller brennevin
drikker du vanligvis i løpet av 2 uker?
(Regn ikke med lettøl.
Sett 0 hvis du ikke drikker alkohol)

Øl Vin Brennevin

4.4 I omtrent hvor mange år har ditt
alkoholforbruk vært slik du har
svart i spørsmålene over? år

4.5 Har du i en eller flere perioder de siste 5 årene
drukket så mye alkohol at det har hemmet deg
i yrkeslivet eller sosialt?

Ja, i yrkeslivet 1 Ja, sosialt 2 Ja, både i yrkeslivet og sosialt 3 Nei, aldri 4

T5. MAT OG KOSTTILSKUDD

5.1 Spiser du vanligvis frokost hver dag?..... JA NEI

5.2 Hvor mange ganger i uken
spiser du varm middag?..... ganger

5.3 Hvor stor vekt legger du på å ha et sunt kosthold?

Stor 1 Middels 2 Liten 3 Ingen 4

5.4 Bruker du følgende kosttilskudd? Ja, daglig Iblant Nei

Jerntabletter

Kalk eller benmel.....

Vitamin D.....

Tran.....

T6. VEKTEN

6.1 Gjør du for tiden noe forsøk på å endre
kroppsvekten din?

Nei 1 Ja, jeg forsøker å legge på meg 2 Ja, jeg forsøker å slanke meg 3

6.2 Hvilken vekt vil du være tilfreds
med (din "trivselsvekt")?..... kg

T7. SYKDOMMER OG SKADER

7.1 Har du noen gang hatt:

Sett ett kryss for hvert spørsmål. Oppgi også
alderen ved hendelsen. Hvis det har skjedd
flere ganger, hvor gammel var du siste gang? Alder siste gang

Alvorlig skade som førte til
sykehusinnleggelse..... JA NEI år

Ankelbrudd..... år

Magesår..... år

Magesår-operasjon..... år

Operasjon på halsen..... år

Prostata-operasjon..... år

7.2 Har du, eller har du hatt?

(Sett ett kryss for hvert spørsmål)

JA NEI

Kreftsykdom.....

Psoriasis.....

Stoffskiftesykdom (skjoldbruskkjertel).....

Grønn stær.....

Grå stær.....

Slitasjegikt (artrose).....

Krokete fingre.....

Hudstramninger i håndflatene.....

Nyrestein.....

Blindtarmsoperasjon.....

Brokkoperasjon.....

Operasjon/behandling for urinlekkasje.....

Epilepsi.....

Poliomyelitt ("Polio").....

Parkinsons sykdom.....

Migrene.....

Leggsår.....

Allergi og overfølsomhet:

JA NEI

Atopisk eksem (f.eks. barneeksem).....

Håndeksem.....

Matvareallergi.....

Annen overfølsomhet (ikke allergi).....

7.3 Har du hatt forkjølelse, influensa,
"ræksjuka" eller lignende siste 14 dager? JA NEI

7.4 Har du i løpet av de siste 3 ukene vært
forkjølet, hatt influensa, bronkitt, lunge-
betennelse, bihulebetennelse eller annen
luftveisinfeksjon?..... JA NEI

7.5 Har du noen gang hatt bronkitt
eller lungebetennelse?..... JA NEI

7.6 Har du i løpet av de siste 2 årene hatt bronkitt
eller lungebetennelse? (Sett bare ett kryss)

Nei 1 1-2 ganger 2 Mer enn 2 ganger 3

T8. SYMPTOMER

8.1 Har du de siste to ukene følt deg:

(Sett ett kryss for hvert spørsmål)

	Nei	Litt	En god del	Svært mye
Nervøs og urolig.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plaget av angst.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trygg og rolig.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Irritabel.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glad og optimistisk.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nedfor/deprimert.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ensom.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4

8.2 Hoster du omtrent daglig i perioder av året? ...

	JA	NEI
Hvis JA: Er hosten vanligvis ledsaget av oppspytt?.....	<input type="checkbox"/>	<input type="checkbox"/>
Har du hatt slik hoste så lenge som i en 3 måneders periode i begge de to siste år? ...	<input type="checkbox"/>	<input type="checkbox"/>

8.3 Har du hatt episoder med piping i brystet?

	JA	NEI
Hvis JA: Har dette oppstått: (Sett ett kryss for hvert spørsmål)		
Om natten.....	<input type="checkbox"/>	<input type="checkbox"/>
Ved luftveisinfeksjon.....	<input type="checkbox"/>	<input type="checkbox"/>
Ved fysisk anstrengelse.....	<input type="checkbox"/>	<input type="checkbox"/>
Ved sterk kulde.....	<input type="checkbox"/>	<input type="checkbox"/>

8.4 Får du smerter i tykkleggen når du går

	JA	NEI
Hvis JA: Hvor langt kan du gå før du får smerter?	<input type="text"/>	<input type="text"/>
	meter	

8.5 Blir du tungpusten i følgende situasjoner?

(Sett ett kryss for hvert spørsmål)

	JA	NEI
Når du går hurtig på flatmark eller svak oppoverbakke.....	<input type="checkbox"/>	<input type="checkbox"/>
Når du spaserer i rolig tempo på flatmark.....	<input type="checkbox"/>	<input type="checkbox"/>
Når du vasker deg eller kler på deg.....	<input type="checkbox"/>	<input type="checkbox"/>
Når du er i hvile.....	<input type="checkbox"/>	<input type="checkbox"/>

8.6 Må du stoppe på grunn av tung pust når du går i eget tempo på flatmark?.....

	JA	NEI
	<input type="checkbox"/>	<input type="checkbox"/>

8.7 Har du i løpet av det siste året vært plaget med smerter og/eller stivhet i muskler og ledd som har vart i minst 3 måneder sammenhengende?.....

	JA	NEI
	<input type="checkbox"/>	<input type="checkbox"/>

	JA	NEI
Hvis JA: Har plagene ført til redusert aktivitet i fritida?	<input type="checkbox"/>	<input type="checkbox"/>

Hvor lenge har plagene vart totalt?

ca. år og måneder

Har plagene redusert din arbeidsevne det siste året?

(Gjelder også hjemmearbeidende og pensjonister. (Sett ett kryss))

Nei/ubetydelig	I noen grad	I betydelig grad	Vet ikke
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Har du vært sykmeldt pga. disse plagene det siste året?.....

	JA	NEI	Ikke i arbeid
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

T8. SYMPTOMER (fortsettelse)

8.8 Hvor ofte er du plaget av søvnløshet?

(Sett bare ett kryss)

Aldri, eller noen få ganger i året.....	<input type="checkbox"/> 1
1-3 ganger i måneden.....	<input type="checkbox"/> 2
Omtrent 1 gang i uken.....	<input type="checkbox"/> 3
Mer enn en gang i uken.....	<input type="checkbox"/> 4

8.9 Hvis du er plaget av søvnløshet månedlig eller hyppigere, når på året er du mest plaget?

Ingen spesiell tid.....	<input type="checkbox"/> 1
Særlig i mørketiden.....	<input type="checkbox"/> 2
Særlig i midnattsoltiden.....	<input type="checkbox"/> 3
Særlig vår og høst.....	<input type="checkbox"/> 4

8.10 Har du det siste året vært plaget av søvnløshet slik at det har gått ut over arbeidsevnen?

	JA	NEI
	<input type="checkbox"/>	<input type="checkbox"/>

8.11 Pleier du sove om dagen?

	JA	NEI
	<input type="checkbox"/>	<input type="checkbox"/>

8.12 Hvor ofte har du ufrivillig urinlekkasje?

Aldri.....	<input type="checkbox"/> 1
Ikke mer enn en gang i måneden.....	<input type="checkbox"/> 2
To eller flere ganger i måneden.....	<input type="checkbox"/> 3
Ukentlig eller oftere.....	<input type="checkbox"/> 4

8.13 Kan du gå ned 10 trappetrinn uten å holde deg i noe (f.eks. et gelender).....

	JA	NEI
	<input type="checkbox"/>	<input type="checkbox"/>

8.14 Bruker du briller?

	JA	NEI
	<input type="checkbox"/>	<input type="checkbox"/>

8.15 Bruker du høreapparat?

	JA	NEI
	<input type="checkbox"/>	<input type="checkbox"/>

8.16 Hvordan er hukommelsen?

(Sett ett kryss for hvert spørsmål)

	JA	NEI
Glemmer du ting du akkurat har hørt eller lest?	<input type="checkbox"/>	<input type="checkbox"/>
Glemmer du hvor du har lagt ting?	<input type="checkbox"/>	<input type="checkbox"/>
Er det vanskeligere å huske nå enn før?.....	<input type="checkbox"/>	<input type="checkbox"/>
Skriver du huskelapper oftere nå enn før?	<input type="checkbox"/>	<input type="checkbox"/>

Hvis "JA" på ett av disse spørsmålene;

Er det et problem i hverdagen?

	JA	NEI
	<input type="checkbox"/>	<input type="checkbox"/>

T9. MEDISINER

9.1 Bruker du, eller har du brukt noen av følgende medisiner:

	Nå	Før, men ikke nå	Alder ved bruk 1. gang	Aldri brukt
Medisin mot osteoporose (benskjørhet).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> år	<input type="checkbox"/>
Tabletter mot sukkersyke.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> år	<input type="checkbox"/>
Tabletter mot lavt stoffskifte (thyroxin).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> år	<input type="checkbox"/>

9.2 Bruker du noen medisin som du får som sprøyte (injeksjon)?

	JA	NEI
	<input type="checkbox"/>	<input type="checkbox"/>

Hvis JA:

Oppgi navn på medisinen (til sprøyte):

(ett navn pr. linje):

T

T10. SYKDOM I FAMILIEN

10.1 Kryss av for de slektningene som har eller har hatt noen av sykdommene: (Sett kryss for hver linje)

	Mor	Far	Bror	Søster	Barn	Ingen av disse
Hjerteinfarkt (sår på hjertet)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angina pectoris (hjertekrampe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Høyt blodtrykk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utvidet hovedpulsåre i magen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mage-/tolvfingerarm-sår	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lårhalsbrudd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psykiske plager.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Allergi.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Slitasjegikt (artrose)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aldersdemens.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10.2 Hvor mange søsken og barn har du?

	Brødre	Søstre	Barn
Antall	<input type="text"/>	<input type="text"/>	<input type="text"/>

10.3 Fører sykdom e.l. hos noen i nær familie til at du vanligvis utfører ekstra omsorgsarbeid?

Ja, stor sett daglig	Ja, av og til	Nei
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

10.4 Har du/din familie hjemmehjelp eller hjemmesykepleie?

JA NEI

Evt. alder ved død

10.5 Lever din mor?

JA NEI år

10.6 Lever din far?

JA NEI år

T11. MOBILTELEFON

11.1 Disponerer du (eier, leier e.l.) mobiltelefon?

Ja, hele tiden	Ja, av og til	Nei
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

Hvis JA:
Hva bruker du mobiltelefonen til, og hvor ofte bruker du den? (Sett ett kryss for hver linje)

	Antall ganger per døgn				
	30 eller flere	10-29	2-9	1 eller mindre	Aldri
Samtaler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tekstmeldinger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

T12. RESTEN BESVARES BARE AV KVINNER

12.1 Hvis du har født barn, fyll ut hvert barns fødselsår, og hvor mange måneder du ammet etter fødselen.

(Hvis du ikke ammet, skriv 0) Antall mnd med amming:

Barn:	Fødselsår:	Antall mnd med amming:
1. barn	<input type="text"/>	<input type="text"/>
2. barn	<input type="text"/>	<input type="text"/>
3. barn	<input type="text"/>	<input type="text"/>
4. barn	<input type="text"/>	<input type="text"/>
5. barn	<input type="text"/>	<input type="text"/>
6. barn	<input type="text"/>	<input type="text"/>

(Hvis flere barn, bruk ekstra ark)

T12. RESTEN BESVARES BARE AV KVINNER

12.2 Hvis du fremdeles har menstruasjon eller er gravid: Hvilken dato startet din siste menstruasjon?

Dag	Måned	År
<input type="text"/>	<input type="text"/>	<input type="text"/>

12.3 Hvis du ikke lenger har menstruasjon; hvorfor mistet du menstruasjonen? (Sett ett kryss)

- Den stoppet av seg selv 1
 Operasjon på livmoren..... 2
 Opererte bort begge eggstokkene..... 3
 Annen grunn (f.eks. stråling, cellegift-behandling) 4

12.4 Bruker du eller har du brukt reseptpliktig østrogen (tabletter eller plaster)?

JA NEI

Hvis JA:
Hvor gammel var du da du begynte med østrogen?

år

Hvis du har sluttet å bruke østrogen,
Hvor gammel var du da du sluttet med østrogen?

år

12.5 Bruker du eller har du brukt p-piller? ..

JA NEI

Hvis JA:
Hvor gammel var du da du begynte med p-piller?

år

Hvor mange år har du til sammen brukt p-piller?

Antall år

Dersom du har født:
Hvor mange år brukte du p-piller før første fødsel?

Antall år

Hvis du sluttet å bruke p-piller:
Hvor gammel var du da du sluttet?

år

12.6 Når du ser bort fra svangerskap og barselsperiode, har du noen gang vært blødningsfri i minst 6 måneder?

JA NEI

Hvis JA:
Hvor mange ganger?

ganger

12.7 Hvordan er blødningsforholdene for deg nå?

- Jeg har ikke hatt blødninger det siste året 1
 Jeg har regelmessige blødninger..... 2
 Jeg har uregelmessige blødninger..... 3

12.8 Da du var i 25-29 årsalderen, hvor mange dager var det vanligvis mellom starten på to blødninger?

Minimum	Maksimum	Vet ikke
<input type="text"/> dager	<input type="text"/> dager	<input type="checkbox"/>

Pågikk selve blødningen omtrent like mange dager hver gang?

JA NEI

Hvor mange dager varte en typisk menstruasjonsblødning?

dager

Takk for hjelpen!
Husk å postlegge skjemaet i dag!

Appendix C. Questionnaires in the intervention study with high doses of cholecalciferol

1. Food frequency questionnaire, Norwegian
2. Physical activity questionnaire, Norwegian and English
3. Beck's Depression Inventory, Norwegian

HVA SPISER DU?

I dette skjemaet spør vi om dine spisevaner slik de er nå.
Vi er klar over at kostholdet varierer fra dag til dag. Prøv derfor så godt du kan å gi et "gjennomsnitt" av dine spisevaner. Der du er usikker, anslå svaret.

Skjemaet skal leses av en maskin, og det er derfor viktig at du setter et tydelig kryss i avmerket rute.

Riktig markering er slik:

Bruk helst svart eller blå kulepenn (ikke rød).
Bløt blyant kan også brukes, men marker da ekstra tydelig.

Av hensyn til den maskinelle lesingen pass på at arkene ikke blir brettet.

Alle svar vil bli behandlet strengt fortrolig.



Eksempel på utfylling av spørsmål 1.

Kari Nordmann spiser daglig 5 skiver brød og ett knekkebrød. Hun spiser vanligvis kneippbrød, men i helgene blir det en del loff. I tillegg spiser hun ett knekkebrød hver dag. Hun fyller ut første spørsmål slik:

1. Hvor mye brød pleier du å spise?

Legg sammen det du bruker til alle måltider i løpet av en dag.

(1/2 rundstykke = 1 skive, 1 baguett = 5 skiver, 1 ciabatta = 4 skiver)

	Antall skiver pr. dag													
	0	1/2	1	2	3	4	5	6	7	8	9	10	11	12+
Fint brød (loff, baguetter, fine rundstykker o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mellomgrovt brød (lys helkorn, lys kneipp, lys hj.bakt o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grovt brød (fiberkneipp, mørk kneipp, mørkt hj. bakt o.l.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knekkebrød (kavring, grov skonrok o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sum skiver pr. dag = 6

Antall skiver pr. uke: $6 \times 7 = 42$. Tallet brukes i spørsmål 5.

1. HVOR MYE BRØD PLEIER DU Å SPISE?

Legg sammen det du bruker til alle måltider i løpet av en dag.

(1/2 rundstykke = 1 skive, 1 baguett = 5 skiver, 1 ciabatta = 4 skiver)

Antall skiver pr. dag

	0	1/2	1	2	3	4	5	6	7	8	9	10	11	12+
Fint brød (loff, baguetter, fine rundstykker o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mellomgrovt brød (lys helkorn, lys kneipp, lys hj.bakt o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grovt brød (fiberkneipp, mørk kneipp, mørkt hj. bakt o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knekkebrød (kavring, grov skonrok o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sum skiver pr. dag = ____

Antall skiver pr. uke: ____ x 7 = ____ . Tallet brukes i spørsmål 5.

2. HVA PLEIER DU Å SMØRE PÅ BRØDET?

Merk av både for hverdag og helg, selv om du bruker det samme.

3. OM DU BRUKER FETT PÅ BRØD, HVOR MYE BRUKER DU?

Hverdager	Lørdager, søndager	En porsjonspakning på 12 g rekker til antall skiver
<input type="checkbox"/> Bruker ikke	<input type="checkbox"/>	
<input type="checkbox"/> Smør (meierismør)	<input type="checkbox"/>	1 <input type="checkbox"/>
<input type="checkbox"/> Bremykt	<input type="checkbox"/>	2 <input type="checkbox"/>
<input type="checkbox"/> Brelett	<input type="checkbox"/>	3 <input type="checkbox"/>
<input type="checkbox"/> Soft-, soyamargarin (pakke, beger)	<input type="checkbox"/>	4 <input type="checkbox"/>
<input type="checkbox"/> Solsikke	<input type="checkbox"/>	5 <input type="checkbox"/>
<input type="checkbox"/> Oliven	<input type="checkbox"/>	
<input type="checkbox"/> Vita	<input type="checkbox"/>	
<input type="checkbox"/> Olivero	<input type="checkbox"/>	
<input type="checkbox"/> Omega	<input type="checkbox"/>	
<input type="checkbox"/> Soft light	<input type="checkbox"/>	
<input type="checkbox"/> Vita lett	<input type="checkbox"/>	
<input type="checkbox"/> Annen margarin	<input type="checkbox"/>	

4. MELK SOM DRIKK

(1 glass = 1,5 dl)

	Driker sjelden/ ikke	1/2	1	2	3	4	5	6	7	8+
Helmelk, søt, sur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lettmelk, søt, sur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lettmelk, ekstra lett	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skummet melk, søt, sur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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5. PÅLEGGSSORTER

Bruk sum skiver pr. uke fra spørsmål 1. Til antall skiver pr. uke

	0	1/2	1	2-3	4-5	6-7	8-14	15-21	22-28	29-35	36+
Brun ost, prim	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hvit ost, helfet, 27% fett (Jarlsberg, Norvegia o.l., smøreost; eske, tube)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hvit ost, halvfet, 16% fett (Jarlsberg, Norvegia o.l. smøreost; eske, tube)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ost med mer enn 27% fett (kremoster, Normanna, Ridderost)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leverpostei, vanlig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leverpostei, mager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Serelat, vanlig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lett serelat, kalverull, kokt skinke, okserull o.l.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salt pølse, spekepølse (fårepølse, salami o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kaviar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Makrell i tomat, røkt makrell	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sardiner, sursild, ansjos o.l.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laks, ørret	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reker, krabbe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Syltetøy, marmelade, frysetøy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Honning, sirup, sjokolade-, nøttepålegg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grønnsaker som pålegg (agurk, tomat o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frukt som pålegg (banan, eple o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salater med majones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Majones på smørbrød	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. EGG

(kokt, stekt, eggerøre, omelett)

	Mindre enn		Antall pr. uke					
	0	1	1	2	3-4	5-6	7	8+
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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7. FROKOSTGRYN, GRØT OG YOGHURT

Svar enten pr. måned eller pr. uke. <1 betyr sjeldnere enn 1 gang.

	Gang pr. måned					Gang pr. uke					Mengde pr. gang				
	0	<1	1	2	3	1	2-3	4-5	6-7	8+					
Havregryn, kornblandinger (4-korn, usøtet müsli o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	1 <input type="checkbox"/>	11/2 <input type="checkbox"/>	2 <input type="checkbox"/>	3+ <input type="checkbox"/>
Cornflakes, puffet ris, havrenøtter o.l.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	1 <input type="checkbox"/>	11/2 <input type="checkbox"/>	2 <input type="checkbox"/>	3+ <input type="checkbox"/>
Havregrøt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	1-2 <input type="checkbox"/>	3-4 <input type="checkbox"/>	5-6 <input type="checkbox"/>	7 <input type="checkbox"/>
Sukker til frokostgryn, grøt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(ts)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3-4 <input type="checkbox"/>	5+ <input type="checkbox"/>
Yoghurt, naturell, frukt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(beger)	1/2 <input type="checkbox"/>	1 <input type="checkbox"/>	11/2 <input type="checkbox"/>	2+ <input type="checkbox"/>
Lettyoghurt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(beger)	1/2 <input type="checkbox"/>	1 <input type="checkbox"/>	11/2 <input type="checkbox"/>	2+ <input type="checkbox"/>
Go'morgen yoghurt, inkl. müsli	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(beger)	1/2 <input type="checkbox"/>	1 <input type="checkbox"/>	11/2 <input type="checkbox"/>	2+ <input type="checkbox"/>
Melk søt, sur på gryn, grøt og dessert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	3/4 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3+ <input type="checkbox"/>

8. KAFFE OG TE

(1 kopp kaffe = 1,2 dl 1 kopp te = 2 dl)

	Drikker ikke/ikke daglig	Antall kopper pr. dag								
		1/2	1	2	3-4	5-6	7-8	9-10	11+	
Kaffe, kokt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kaffe, traktet, filter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kaffe, pulver (instant)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kaffe, koffeinfri	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Te	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nypete, urtete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Antall teskjeer eller biter pr. kopp					
	0	1/2	1	2	3	4+
Sukker til kaffe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sukker til te	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kunstig søtstoff til kaffe eller te	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fløte til kaffe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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9. ANDRE DRIKKER

Svar enten pr. måned eller pr. uke. < 1 betyr sjeldnere enn 1 gang. Merk at porsjonsenhetene er forskjellige. 1/3 liter tilsvarer en halvflaske øl og 2/3 liter tilsvarer en helflaske.

	Gang pr. måned					Gang pr. uke					Mengde pr. gang						
	0	<1	1	2	3	1	2-3	4-5	6-7	8+		1/2	1	2	3	4	5+
Vann	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appelsinjuice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annen juice, most, nektar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saft, solbærsirup m. sukker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saft, kunstig søtet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brus, Cola, Solo o.l. med sukker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(liter)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brus, Cola, Solo o.l. kunstig søtet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(liter)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farris, Selters, Soda o.l.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(liter)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alkoholfritt øl, vørterøl, lettøl	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(liter)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pilsnerøl	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(liter)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brennevin, likør	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(1 dram =4cl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. MIDDAGSRETTER

Vi spør både om middagsmåltidene og det du spiser til andre måltider. Tell til slutt sammen antall retter du har merket av for å se om summen virker sannsynlig. En "dl" tilsvarer omtrent mengden i en suppeøse. Med "stk" menes en spiseskje.

	Gang pr. måned									Mengde pr. gang					
	0	<1	1	2	3	4	5-6	7-8	9+		1/2	2/3	1	1 1/2	2+
Kjøttpølse, medisterpølse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(kjøttpølse)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hamburger, karbonader o.l.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grill- og wienerpølse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(pølse)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hamburger-, pølsebrød, lomper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kjøttkaker, medisterkaker, kjøttpudding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kjøttdeigretter (saus eller gryte med kjøttdeig, lasagne o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taco (med kjøtt og salat)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastaretter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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Gang pr. måned

Mengde pr. gang

	Gang pr. måned										Mengde pr. gang				
	0	<1	1	2	3	4	5-6	7-8	9+		1/8	1/4	1/2	3/4	1+
Pizza (500-600 g)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(pizza)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biff (alle typer kjøtt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Koteletter (lam, okse, svin)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stek (lam, okse, svin)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(skive)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stek (elg, hjort, reinsdyr o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(skive)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gryterett med helt kjøtt, frikassè, fårikål o.l.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lapskaus, suppelapskaus, betasuppe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bacon, stekt flesk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(skive)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kylling, høne	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leverretter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(skive)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fiskekaker, fiskepudding, fiskeboller	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(kake)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fiskepinner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torsk, sei, hyse (kokt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torsk, sei, hyse (stekt, panert)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sild (fersk, speket, røkt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(filet)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Makrell (fersk, røkt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(filet)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laks, ørret (sjø, oppdrett)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(skive)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fiskegryte, -grateng, suppe med fisk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reker, krabbe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl, rensset)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Risgrøt, annen melkegrøt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannekaker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suppe (tomat, blomkål, ertesuppe o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vegetarrett, vegetarpizza, grønnsaksgrateng, -pai	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(bit/dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brun/hvit saus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smeltet margarin, smør til fisk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(ss)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bearnaisesaus o.l.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(ss)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Majones, remulade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(ss)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ketchup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(ss)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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11. POTETER, RIS, SPAGHETTI, GRØNNSAKER

Svar enten pr. måned eller pr. uke. < 1 betyr sjeldnere enn 1 gang.

Disse spørsmålene dreier seg først og fremst om tilbehør til middagsretter, men spiser du for eksempel en rå gulrot eller salat til lunsj, skal det tas med her.

	Gang pr. måned					Gang pr. uke					Mengde pr. gang					
	0	<1	1	2	3	1	2-3	4-5	6-7	8+		1	2	3	4	5+
Poteter, kokte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pommes frites, stekte poteter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potetmos, -stuing, gratinerte poteter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ris	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spaghetti, makaroni, pasta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gulrot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hodekål	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(skalk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kålrot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(skive)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blomkål	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(bukett)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brokkoli	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(bukett)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rosenkål	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grønnskål	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Løk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(ss)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spinat, andre bladgrønns.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sopp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Avocado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paprika	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(strimmel)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tomat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tomatbønner, bønner/linser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mais	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(ss)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Erter, frosne grønnsak-blandinger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salatblandinger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dressing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(ss)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rømme	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(ss)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hvor mange ganger om dagen spiser du vanligvis grønnsaker utenom grønnsakene du spiser til middag? 0 1 2 3 4 5+



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12. TYPE FETT TIL MATLAGING

- | Smør/margarin | Oljer |
|---|---------------------------------------|
| <input type="checkbox"/> Smør (meierismør) | <input type="checkbox"/> Olivenolje |
| <input type="checkbox"/> Bremykt | <input type="checkbox"/> Soyaolje |
| <input type="checkbox"/> Melange, Per | <input type="checkbox"/> Maisolje |
| <input type="checkbox"/> Soft-, soyamargarin (pakke, beger) | <input type="checkbox"/> Solsikkeolje |
| <input type="checkbox"/> Solsikke | <input type="checkbox"/> Valnøttolje |
| <input type="checkbox"/> Oliven | <input type="checkbox"/> Andre oljer |
| <input type="checkbox"/> Annen margarin | |

13. FRUKT

Svar enten pr. måned eller pr. uke. < 1 betyr sjeldnere enn 1 gang.

	Gang pr. måned					Gang pr. uke						Mengde pr. gang			
	0	<1	1	2	3	1	2-3	4-5	6-7	8+		1/2	1	2	3+
Eple	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appelsin, mandarin, grapefrukt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Banan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Druer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(klase)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eksotisk frukt (kiwi, mango)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annen frukt (fersken, pære m.v.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jordbær, bringebær (friske, frosne)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blåbær	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hvor mange frukter spiser du vanligvis pr. dag? 0 1 2 3 4 5 6 7 8 9+



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14. DESSERT, KAKER, GODTERI

Svar enten pr. måned eller pr. uke. < 1 betyr sjeldnere enn 1 gang.

	Gang pr. måned					Gang pr. uke						Mengde pr. gang			
	0	<1	1	2	3	1	2-3	4-5	6-7	8+		1/2	1	2	3+
Hermetisk frukt, fruktgrøt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Puddinger (sjokolade, karamell o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is (1 dl=1 pinne=1 kremmerhus)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boller, julekake, kringle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skolebrød, skillingsbolle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wienerbrød, -kringle o.l.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smultring, formkake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vafler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(plate)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sjokoladekake, bløtkake, annen fylt kake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Søt kjeks, kakekjeks (Cookies, Bixit, Hob Nobs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sjokolade (60 g)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(plate)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drops, lakris, seigmenn o.l.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(stk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smågodt (1 hg = 100g)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(hg)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potetgull (1 pose 100g=7 dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annen snacks (skruer, crisp, saltstenger, lettsnacks o.l.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(dl)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peanøtter, andre nøtter (1 pose 100g = 4 never)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(neve)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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15. KOSTTILSKUDD (bs = barneskje, ts = teskje)

	Hele året	Bare vinter-halvåret	Gang pr. uke						Mengde pr. gang				
			0	<1	1	2-3	4-5	6-7	1 ts	1 bs	1 ss		
Tran	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Trankapsler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	kapsler	1 <input type="checkbox"/>	2+ <input type="checkbox"/>		
Fiskeoljekapsler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	kapsler	1-2 <input type="checkbox"/>	3-4 <input type="checkbox"/>	5-6 <input type="checkbox"/>	7+ <input type="checkbox"/>
Multipreparater													
Sanasol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	bs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
Biovit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	bs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
Vitaplex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
Kostpluss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
Vitamineral	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
Annet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>

Hvis annet, hvilket?.....

	Hele året	Bare vinter-halvåret	Gang pr. uke						Mengde pr. gang				
			0	<1	1	2-3	4-5	6-7	1	2	3	4+	
Ferro C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hemofer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
Duroferon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
Duretter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
Annet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>

Hvis annet, hvilket?.....

	Hele året	Bare vinter-halvåret	Gang pr. uke						Mengde pr. gang				
			0	<1	1	2-3	4-5	6-7	1	2	3	4+	
B-vitaminer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C-vitamin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
D-vitamin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
E-vitamin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
Folat (folsyre)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
Kalktabletter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
Fluortabletter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
Annet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tablett	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>

Hvis annet, hvilket?.....



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16. NÅR SPISER DU PÅ HVERDAGER?

HOVEDMÅLTIDER som frokost, formiddagsmat, middag, kvelds.

Omtrent klokken

6 8 10 12 14 16 18 20 22 24 2 4

MELLOMMÅLTIDER som kaffe, frukt, godteri, snacks m.v.

Omtrent klokken

6 8 10 12 14 16 18 20 22 24 2 4

17. MENER DU SVARENE I SPØRRESKJEMAET GIR ET BRUKBART BILDE AV KOSTHOLDET Ja Nei

Er det matvarer/produkter du regelmessig bruker, og som ikke er nevnt i skjemaet?
.....
.....

18. ER DU FORNØYD MED KROPPSVEKTEN DIN SLIK DEN ER NÅ?

- Ja
- Nei, jeg ønsker å slanke meg
- Nei, jeg ønsker å legge på meg

19. KJØNN Mann Kvinne

Vennligst se etter at du har svart på alle spørsmål.

Takk for innsatsen!



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Navn:

ID nr:

Dato:

Baseline

12 mnd

INTERNASJONALT SPØRRESKJEMA OM FYSISK AKTIVITET

Vi ønsker å finne ut hva slags fysisk aktivitet folk gjør som del av sitt hverdagsliv. Spørsmålene går på hvor mye tid du var i aktivitet i løpet av **de siste 7 dagene**. Vennligst svar på alle spørsmålene, selv om du ikke betrakter deg som en aktiv person. Vennligst tenk på aktiviteter du gjør på jobb, som del av hus eller utarbeid, for å komme fra sted til sted, og i fritiden i forbindelse med rekreasjon, mosjon eller idrett.

Tenk på all **intens** fysisk aktivitet du gjorde i løpet av de **siste 7 dagene**. Med **intens** fysisk aktivitet menes aktivitet som krever innsats, og som gjør at du blir mye mer tungpusten enn vanlig. Tenk *kun* på fysisk aktivitet som du holdt på med i minst 10 minutter om gangen.

1. I løpet av de **siste 7 dagene**, på hvor mange av dagene utførte du **intens** fysisk aktivitet så som tunge løft, gravearbeid/snømåking, aerobics, løping eller rask sykling/skigåing?

_____ **dager per uke**

Ingen intens fysisk aktivitet → **Gå til spørsmål 3**

2. Hvor mye tid brukte du vanligvis på slik **intens** fysisk aktivitet i løpet av en av disse dagene?

_____ **timer per dag** (eller _____ **minutter per dag**)

vet ikke/usikker

Tenk på all **moderat** (mindre intens) fysisk aktivitet du gjorde i løpet av de siste 7 dagene. Med **moderat** aktivitet menes aktivitet som krever middels innsats og som gjør at du puster litt tyngre enn vanlig. Tenk kun på fysisk aktivitet som du holdt på med i minst 10 minutter om gangen.

3. I løpet av de **siste 7 dagene**, på hvor mange dager utførte du **moderat** aktivitet, så som bæring, rolig sykling/skigåing eller lett jogging? Ikke ta med gåing/spaserturer.

_____ **dager per uke**

Ingen moderat fysisk aktivitet → **Gå rett til spørsmål 5**

4. Hvor mye tid brukte du vanligvis på **moderat** fysisk aktivitet i løpet av en av disse dagene?

_____ **timer per dag** (eller _____ **minutter per dag**)

vet ikke/usikker

Tenk på tiden du har brukt på **gåing/spaserturer** i løpet av de **siste 7 dagene**. Det inkluderer gåing på jobb, hjemme, for å komme fra sted til sted, og annen gåing som du har gjort for rekreasjon, idrett, mosjon, eller som fritidsaktivitet.

5. I løpet av de **siste 7 dagene**, på hvor mange dager **gikk** du minst 10 minutter om gangen?

_____ **dager per uke**

Ingen gåing → **Gå rett til spørsmål 7**

6. Hvor mye tid brukte du vanligvis på å **gå** i løpet av en av disse dagene?

_____ **timer per dag** (eller _____ **minutter per dag**)

vet ikke/usikker

Det siste spørsmålet handler om hvor mye tid du **sitter i ro** i løpet av hverdagene de **siste 7 dagene**. Inkluder tid på jobb, hjemme, og i forbindelse med fritid. Det kan omfatte sitting ved skrivebord, besøk hos venner, lesing, eller å sitte eller ligge og se på TV.

7. I løpet av de **siste 7 dagene**, hvor mye **satt du i ro** på hverdagene?

_____ **timer per dag** (eller _____ **minutter per dag**)

vet ikke/usikker

Dette er slutten på spørreskjemaet, takk for at du deltok.

INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE

We are interested in finding out about the kinds of physical activities that people do as part of their everyday lives. The questions will ask you about the time you spent being physically active in the **last 7 days**. Please answer each question even if you do not consider yourself to be an active person. Please think about the activities you do at work, as part of your house and yard work, to get from place to place, and in your spare time for recreation, exercise or sport.

Think about all the **vigorous** activities that you did in the **last 7 days**. **Vigorous** physical activities refer to activities that take hard physical effort and make you breathe much harder than normal. Think *only* about those physical activities that you did for at least 10 minutes at a time.

1. During the **last 7 days**, on how many days did you do **vigorous** physical activities like heavy lifting, digging, aerobics, or fast bicycling?

_____ **days per week**

No vigorous physical activities → **Skip to question 3**

2. How much time did you usually spend doing **vigorous** physical activities on one of those days?

_____ **hours per day**

_____ **minutes per day**

Don't know/Not sure

Think about all the **moderate** activities that you did in the **last 7 days**. **Moderate** activities refer to activities that take moderate physical effort and make you breathe somewhat harder than normal. Think *only* about those physical activities that you did for at least 10 minutes at a time.

3. During the **last 7 days**, on how many days did you do **moderate** physical activities like carrying light loads, bicycling at a regular pace, or doubles tennis? Do not include walking.

_____ **days per week**

No moderate physical activities → **Skip to question 5**

4. How much time did you usually spend doing **moderate** physical activities on one of those days?

_____ **hours per day**

_____ **minutes per day**

Don't know/Not sure

Think about the time you spent **walking** in the **last 7 days**. This includes at work and at home, walking to travel from place to place, and any other walking that you might do solely for recreation, sport, exercise, or leisure.

5. During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time?

_____ **days per week**

No walking → **Skip to question 7**

6. How much time did you usually spend **walking** on one of those days?

_____ **hours per day**

_____ **minutes per day**

Don't know/Not sure

The last question is about the time you spent **sitting** on weekdays during the **last 7 days**. Include time spent at work, at home, while doing course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading, or sitting or lying down to watch television.

7. During the **last 7 days**, how much time did you spend **sitting** on a **week day**?

_____ **hours per day**

_____ **minutes per day**

Don't know/Not sure

This is the end of the questionnaire, thank you for participating.

BECK INVENTORY

Navn: _____ Alder: _____ Kode: _____ Dato _____

INSTRUKSJON: I dette spørreskjemaet vil du finne setninger inndelt i grupper. Vennligst les alle setningene innenfor hver gruppe nøye. Deretter velger du den setningen i hver gruppe som best beskriver hvordan du har følt deg DE SISTE TO UKENE, I DAG INKLUDERT. Sett så en ring rundt tallet utenfor setningene du har valgt. Dersom flere setninger innenfor samme gruppe synes å passe like godt, sett en ring rundt tallene til hver av dem.

Husk å lese alle setningene innenfor en gruppe før du velger, og pass på at du gir svar innenfor alle gruppene.

1. 0 Jeg føler meg ikke trist.
 1 Jeg er lei meg eller føler meg trist.
 2 Jeg er lei meg eller trist hele tiden og klarer ikke å komme ut av denne tilstanden.
 3 Jeg er så trist eller ulykkelig at jeg ikke holder det ut.

2. 0 Jeg er ikke særlig pessimistisk eller motløs overfor fremtiden.
 1 Jeg føler meg motløs overfor fremtiden.
 2 Jeg føler at jeg ikke har noe å se frem til.
 3 Jeg føler at fremtiden er håpløs og at forholdene ikke kan bedre seg.

3. 0 Jeg føler meg ikke som et mislykket menneske.
 1 Jeg føler at jeg har mislykkes mer enn andre mennesker.
 2 Når jeg ser tilbake på livet mitt, ser jeg ikke annet enn mislykkethet.
 3 Jeg føler at jeg har mislykkes fullstendig som menneske.

4. 0 Jeg får like mye tilfredsstillelse ut av ting som før.
 1 Jeg nyter ikke ting på samme måte som før.
 2 Jeg får ikke ordentlig tilfredsstillelse ut av noe lenger.
 3 Jeg er misfornøyd eller kjeder meg med alt.

5. 0 Jeg føler meg ikke særlig skyldbetyngt.
 1 Jeg føler meg skyldbetyngt en god del av tiden.
 2 Jeg føler meg temmelig skyldbetyngt mesteparten av tiden.
 3 Jeg føler meg skyldbetyngt hele tiden.

6. 0 Jeg har ikke følelsen av å bli straffet.
 1 Jeg føler at jeg kan bli straffet.
 2 Jeg forventer å bli straffet.
 3 Jeg føler at jeg blir straffet.

7. 0 Jeg føler meg ikke skuffet over meg selv.
 1 Jeg er skuffet over meg selv.
 2 Jeg avskyr meg selv.
 3 Jeg hater meg selv.

8. 0 Jeg føler ikke at jeg er noe dårligere enn andre.
 1 Jeg kritiserer meg selv for mine svakheter eller feilgrep.
 2 Jeg bebreider meg selv hele tiden for mine feil eller mangler.
 3 Jeg gir meg selv skylden for alt galt som skjer.

9. 0 Jeg har ikke tanker om å ta livet mitt.
 1 Jeg har tanker om å ta livet mitt, men jeg vil ikke omsette dem i handling.
 2 Jeg ønsker å ta livet mitt.
 3 Jeg ville ta livet mitt om jeg fikk sjansen til det.

10. 0 Jeg gråter ikke mer enn vanlig.
 1 Jeg gråter mer nå enn jeg gjorde før.
 2 Jeg gråter hele tiden nå.
 3 Jeg pleide å kunne gråte, men nå kan jeg ikke gråte selv om jeg gjerne vil.

11. 0 Jeg er ikke mer irritert nå enn ellers.
 1 Jeg blir lettere ergerlig eller irritert enn før.
 2 Jeg føler meg ganske irritert en god del av tiden.
 3 Jeg blir ikke irritert i det hele tatt over ting som pleide å irritere meg.
12. 0 Jeg har ikke mistet interessen for andre mennesker.
 1 Jeg er mindre interessert i andre mennesker enn jeg pleide å være.
 2 Jeg har mistet det meste av min interesse for andre mennesker.
 3 Jeg har mistet all interesse for andre mennesker.
13. 0 Jeg tar avgjørelser omtrent like lett som jeg alltid har gjort.
 1 Jeg forsøker å utsette det å ta avgjørelser mer enn tidligere.
 2 Jeg har større vanskeligheter med å ta avgjørelser enn før.
 3 Jeg klarer ikke å ta avgjørelser i det hele tatt lenger.
14. 0 Jeg føler ikke at jeg ser dårligere ut enn jeg pleide å gjøre.
 1 Jeg er bekymret for at jeg ser gammel eller lite tiltrekkende ut.
 2 Jeg føler at det er varige forandringer i mitt utseende som får meg til å se lite tiltrekkende ut.
 3 Jeg tror at jeg ser stygg ut.
15. 0 Jeg kan arbeide omtrent like godt som før.
 1 Det kreves en ekstra anstrengelse for å ta fatt på noe.
 2 Jeg må presse meg selv meget hardt for å gjøre noe.
 3 Jeg klarer ikke å gjøre noe arbeid i det hele tatt.
16. 0 Jeg sover like godt som ellers.
 1 Jeg sover ikke så godt som før.
 2 Jeg våkner 1-2 timer tidligere enn ellers og har vanskelig for å sovne igjen.
 3 Jeg våkner flere timer tidligere enn jeg pleide og får ikke sove igjen.
17. 0 Jeg blir ikke fortere trett enn ellers.
 1 Jeg blir fortere trett enn før.
 2 Nesten alt jeg gjør, blir jeg trett av.
 3 Jeg er for trett til å gjøre noe som helst.
18. 0 Matlysten min er ikke dårligere enn ellers.
 1 Matlysten min er ikke så god som den var før.
 2 Matlysten min er mye dårligere nå.
 3 Jeg har ikke matlyst i det hele tatt lenger.
19. 0 Jeg har ikke gått ned meget i vekt, om i det hele tatt noe, i den senere tid.
 1 Jeg har tatt av mer enn 2 kg. Jeg prøver bevisst å gå ned i vekt ved å spise mindre.
 2 Jeg har tatt av mer enn 4 kg.
 3 Jeg har tatt av mer enn 6 kg. Ja_____, Nei_____
20. 0 Jeg er ikke mer bekymret for helsen min enn vanlig.
 1 Jeg er bekymret over fysiske plager som verking og smerter; eller urolig mage; eller forstoppelse.
 2 Jeg er meget bekymret over mine fysiske plager og det er vanskelig å tenke på stort annet.
 3 Jeg er så bekymret over mine fysiske plager at jeg ikke klarer å tenke på noe annet
21. 0 Jeg har ikke merket noen forandring i mine seksuelle interesser i det siste.
 1 Jeg er mindre interessert i sex enn jeg var før.
 2 Jeg er mye mindre interessert i sex nå.
 3 Jeg har helt mistet interessen for sex.

Appendix D. Copy of internet pages from the Tromsø Study

1. Invited subjects and participants in the Tromsø studies, information from 2004
2. Invited subjects and participants in the Tromsø studies, information from 2005
3. Invited subjects and participants in the Tromsø studies, information from 2007

Tromsø-undersøkelsen ble startet i 1974 på bakgrunn av den høye dødeligheten av hjerte- og karsykdommer i Nord-Norge. Hensikten var primært å finne forklaringer på dette (årsaker) samt utvikle metoder for å forebygge hjerteinfarkt og hjerneslag. Etter hvert er undersøkelsen utvidet til også å omfatte mange andre sykdomsgrupper som revmatiske lidelser, neurologisk sykdom, hudsykdom, sykdom i mage/tarm, kreft og osteoporose (beinskjørhet).

Undersøkelsen er lagt opp som gjentatte helseundersøkelser av store deler av befolkningen i kommunen:

I 1974 (6595 menn i alderen 20-49 år),
i 1979-80 (16610 menn og kvinner i alderen 20-54 år),
i 1986-87 (21826 menn og kvinner i alderen 12-62 år),
i 1994-95 (27159 menn og kvinner i alderen 25-99 år).

Av de 35443 inviterte i 1994-95, møtte 77%.

Alle mellom 55 og 75, samt et utvalg på 5-10% av de som var i alderen 25-54 og 75-85 år, fikk tilbud om et nytt oppmøte for spesialundersøkelser. 7965 personer møtte til denne andre screeningrunde i 1994-95 (78% av innkallingsfilen som var planlagt invitert til en andre screening). I utvalget som fikk hjerte- karrelaterte undersøkelser som ultralyd av hjerte og kar og EKG (6891 personer) var oppmøteprosenten 88% pga høyere alder i utvalget.

Siste helseundersøkelse ble gjennomført i 2001. 8128 menn og kvinner i alderen 30 - 89 år deltok. Innkallingsfilen besto av alle hjemmehørende i Tromsø kommune som var i live og hadde deltatt ved den andre screeningrunde ved helseundersøkelsen i 1994-95 (Tromsøundersøkelsesutvalget) eller fylte 30, 40, 45, 60 eller 75 år i løpet av 2001 (SHUS utvalget). Dette utgjorde 10419 personer hvorav 78% møtte. For Tromsøundersøkelsesutvalget var oppmøtet 89% og for SHUS utvalget 56% (til dels overlappende utvalg).

Tromsø-undersøkelsen har gitt mye informasjon om såkalte risikofaktorer for de vanligste alvorlige sykdommer. Kort kan nevnes betydningen av HDL-kolesterol ("det gode kolesterol"), at fysisk aktivitet beskytter mot flere av de vanligste kreftformer og hvordan kokekaffe hever kolesterolet.

Trolig kan Tromsø-undersøkelsen ta noe av æren for at forekomsten av hjerteinfarkt har gått ned så markant.

Undersøkelsen gjennomføres i samarbeid mellom **ISM, Folkehelseinstituttet**, Regionsykehuset i Tromsø og Tromsø kommune.

Delprosjekter (pdf)

Spørreskjemaer og dokumentasjon

Publikasjonsliste

*Personer som ønsker publikasjoner, vil vite mer om eller ønsker å vurdere Tromsø-undersøkelsen som utgangspunkt for mulig studentoppgave, bes benytte mailadressen: **tromsous@ism.uit.no** eller telefonkontakt med konsulent **Gerd Furumo - tlf 77 64 48 89***

Tromsø V

Tromsø-V ble gjennomført i 2001. I alt deltok 8130 menn og kvinner i alderen 30 - 89 år. To grupper personer ble invitert. Den største gruppen av innkalte besto av 6961 menn og kvinner som var alle personene i Tromsø kommune som hadde deltatt ved spesialundersøkelsen i 1994-95 ("Tromsøundersøkelsesutvalget").

En noen mindre gruppe på 3363 menn og kvinner besto av personer som Folkehelseinstituttet (FHI) ønsket å undersøke som en del av sin landsomfattende helseundersøkesle av personer i aldergruppene 30, 40, 45, 60 eller 75 år ("FHI utvalget").

Deltagelse i Tromsø V, 2001

Alder	Inviterte menn	Inviterte kvinner	Møtte menn	Møtte kvinner	% menn	% kvinner
30-34	628	654	237	348	37,7	53,2
35-39	55	87	46	75	83,6	86,2
40-44	533	559	315	389	59,1	69,6
45-49	479	520	299	373	63,2	71,7
50-54	160	96	144	92	90,0	95,8
55-59	232	674	219	630	94,4	93,5
60-64	744	916	657	827	88,3	90,3
65-69	637	687	591	636	92,8	92,6
70-74	542	683	495	604	91,3	88,4
75-79	470	627	390	495	83,0	78,9
80-84	156	202	114	145	73,1	71,8
85-89	6	8	4	5	66,7	62,5
90+	0	4	0	0	0	0
TOTALT	4636	5717	3511	4619	75,7	80,8

Responsraten blant personer som hadde tatt del i spesialundersøkelsen i Tromsø-IV (Tromsøundersøkelsesutvalget) var meget høy, 89 %, mens det var lavere blant personer i SHUS-utvalget, 56 %, og særlig lav blant 30 år gamle menn (36 %).

Undersøkelsesmetoder og målinger

Med innkallingen fulgte det et spørreskjema på 3 sider. Spørreskjemaet var noe ulikt for personer under 70 år og for personer 70 år og eldre. Spørreskjemaet inkluderte spørsmål om bl.a. generell helsetilstand, egne sykdommer og sykdommer i familien, muskel-smerter og psykiske plager, bruk av helsevesenet, kosthold og alkoholbruk, passiv røyking og egne røykevaner, fysisk aktivitet i fritiden, utdanningsnivå og bruk av medisin. Personer som kom til undersøkelsen fikk utdelt et nytt spørreskjema som de skulle fylle ut og sende tilbake med posten.

Alle som møtte, gjennomgikk bare en relativt enkel undersøkelse bestående av måling av høyde, vekt, midje og hofteomkrets, samt blodtrykk og det ble tatt en blodprøve for å måle serum total kolesterol, HDL kolesterol, triglyserider og glukose.

De av Tromsøundersøkelsesutvalget som møtte, 89 % av de inviterte, fikk invitasjon til en langt mer omfattende undersøkelse (spesialundersøkelsen) på samme måte som i Tromsø-IV.

Universitetet i Tromsø, Det medisinske fakultet, 9037 Tromsø, tlf. 776 44601
Oppdatert av Bright Dale den 25.04.2005 15:33
Ansvarlig redaktør: konst. fakultetsdir. Eilif Nilssen

tromsundersokelsen > tromso4 > 2



Tromsø IV

Tromsø-IV, som ble gjennomført i 1994-95, er den største av Tromsø-undersøkelsene og inkluderer 27 158 personer (12 865 menn og 14 293 kvinner i alderen 25-97 år). Alle i Tromsø som var 25 år eller eldre (født før 1970) ble invitert til undersøkelsen.

Deltagelse i Tromsø-IV-undersøkelsen, 1994-95

Alder	Inviterte menn	Inviterte kvinner	Møtte menn	Møtte kvinner	% menn	% kvinner
25-29	2919	3138	1515	1794	51,9	57,2
30-34	2651	2681	1556	1798	58,7	67,1
35-39	2474	2359	1649	1811	66,7	76,8
40-44	2324	2138	1681	1718	72,3	80,4
45-49	2094	1981	1604	1665	76,6	84,0
50-54	1595	1449	1306	1281	81,9	88,4
55-59	1077	1025	918	941	85,2	91,8
60-64	906	855	796	774	87,9	90,5
65-69	810	970	691	860	85,3	88,7
70-74	733	824	592	701	80,8	85,1
75-79	483	724	343	539	71,0	74,4
80-84	249	521	154	293	61,8	56,2
85-89	110	291	43	106	39,1	36,4
90+	55	122	17	12	30,9	9,8
TOTALT	18480	19078	12865	14293	69,6	74,9

Hvis man ikke regner med inviterte som hadde flyttet eller døde før undersøkelsen, kom 77 % av de inviterte.

Undersøkellesmetoder og målinger

Med innkallingen fulgte det et kort spørreskjema. Det inkluderte spørsmål om bl.a. generell helsetilstand, diagnostisert hjerte-karsykdom eller diabetes samt hjertesykdom i familien, egne muskelsmerter og psykiske plager, passiv røyking og egne røykevaner, fysisk aktivitet i fritiden, bruk av kaffe, alkohol og fett på brødiskiver, utdanningsnivå og arbeidssituasjon. Det ble foretatt måling av høyde, vekt og blodtrykk og det ble tatt en blodprøve for å måle serum total kolesterol, HDL kolesterol, triglyserider, gamma-glutamyltransferase (GT), hemoglobin og blodcelle-antall ("plot"). Personer som kom til undersøkelsen fikk utdelt et spørreskjema som de skulle fylle ut og sende tilbake med posten. Dette spørreskjemaet var ulikt for personer under 70 år og de som var 70 år eller eldre.

Alle som var i aldersgruppen 55-74 år, samt et utvalg på 5-10% av de som var i alderen 25-54 og 75-85 år, fikk tilbud om å få gjennomgå en meget omfattende spesialundersøkelse. I alt møtte 7965 personer til denne. > >

Hva fant vi?

Tromsø-IV-undersøkelsen gav mulighet for en rekke longitudinelle studier der opplysninger fra tidligere undersøkelser kunne knyttes til opplysninger som nå ble samlet. For eksempel kunne man nå vise hvordan alderen påvirker utviklingen av fedme (Jacobsen et al, 2001) over en 20-årsperiode, og om personer som i 1979 hadde høy kolesterol også hadde det 15 år senere (Wilsgaard et al, 2001).

Tromsø V

Tromsø-V ble gjennomført i 2001. I alt deltok 8130 menn og kvinner i alderen 30 - 89 år. To grupper personer ble invitert. Den største gruppen av innkalte besto av 6961 menn og kvinner som var alle personene i Tromsø kommune som hadde deltatt ved spesialundersøkelsen i 1994-95 ("Tromsøundersøkelsesutvalget").

En noen mindre gruppe på 1916 menn og kvinner besto av personer som Folkehelseinstituttet (FHI) ønsket å undersøke som en del av sin landsomfattende helseundersøkelse av personer i aldergruppene 30, 40, 45, 60 eller 75 år ("FHI utvalget").

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80-84	156	202	114	145	73,1	71,8
85-89	6	8	4	5	66,7	62,5
90+	0	4	0	0	0	0
TOTALT	4636	5717	3511	4619	75,7	80,8

Responsraten blant personer som hadde tatt del i spesialundersøkelsen i Tromsø-IV (Tromsøundersøkelsesutvalget) var meget høy, 89 %, mens det var lavere blant personer i SHUS-utvalget, 57 %, og særlig lav blant 30 år gamle menn (38 %).

Undersøkelsesmetoder og målinger

Med innkallingen fulgte det et spørreskjema på 3 sider. Spørreskjemaet var noe ulikt for personer under 70 år og for personer 70 år og eldre. Spørreskjemaet inkluderte spørsmål om bl.a. generell helsetilstand, egne sykdommer og sykdommer i familien, muskel-smerter og psykiske plager, bruk av helsevesenet, kosthold og alkoholbruk, passiv røyking og egne røykevaner, fysisk aktivitet i fritiden, utdanningsnivå og bruk av medisin. Personer som kom til undersøkelsen fikk utdelt et nytt spørreskjema som de skulle fylle ut og sende tilbake med posten.

Alle som møtte, gjennomgikk bare en relativt enkel undersøkelse bestående av måling av høyde, vekt, midje og hofteomkrets, samt blodtrykk og det ble tatt en blodprøve for å måle serum total kolesterol, HDL kolesterol, triglyserider og glukose.

De av Tromsøundersøkelsesutvalget som møtte, 89 % av de inviterte, fikk invitasjon til en langt mer omfattende undersøkelse (spesialundersøkelsen) på samme måte som i Tromsø-IV.

