



UiT Norges arktiske universitet

Idrettshøyskolen

## **Young football players' dietary beliefs and practices - a qualitative study**

Aleksander Bjørnvåg

Master thesis in Sports Science ...IDR-3901... May 2023

## Summary

The purpose of this master's thesis is to investigate the dietary habits and beliefs among young football players and to examine whether there are differences between those participating in private sports programs in Eastern Norway and those participating in public sports programs in Finnmark. Through qualitative interviews with six young football players, the study has found that young athletes heavily rely on advice from coaches and family members when it comes to their diet, and they face significant challenges in trying to maintain healthy eating habits while balancing school and training. The study emphasizes the need for collaboration between schools and sports clubs to provide more comprehensive education and support to young athletes regarding their dietary practices and beliefs. Furthermore, geographic, and resource-related factors should be taken into consideration when developing targeted interventions aimed at improving nutritional knowledge. The valuable insights into the dietary habits and beliefs of young football players have important implications for strengthening the nutritional support provided to young athletes. By utilizing a combination of inductive and deductive data analysis, significant implications related to supporting the nutritional needs of young athletes emerge. These findings have important implications for enhancing the nutritional support offered to young athletes.

Masteroppgavens formål er å undersøke kostholdsvanene og troen knyttet til kosthold hos unge fotballspillere, og se om det er noen forskjeller mellom de som deltar i private idrettsprogrammer på Østlandet og de som deltar i offentlige idrettsprogrammer i Finnmark. Kvalitative intervjuer med seks unge fotballspillere viser at unge idrettsutøvere i stor grad er avhengige av råd fra trenere og familiemedlemmer når det gjelder kosthold. De står også overfor betydelige utfordringer når de forsøker å opprettholde sunne spisevaner, samtidig som de balanserer skole og trening. Studien understreker behovet for samarbeid mellom skoler og idrettsklubber, for å gi mer omfattende opplæring og støtte til unge idrettsutøvere når det gjelder deres kostholdspraksis og tro. Videre bør geografiske og ressursmessige faktorer tas i betraktning ved utvikling av målrettede tiltak rettet mot å forbedre kostholdskunnskapen. Funnenes verdifulle innsikt i unge fotballspilleres kostholdsvaner og tro gir viktige implikasjoner for å styrke den ernæringsmessige støtten som tilbys unge utøvere. Ved å bruke en kombinasjon av induktiv og deduktiv dataanalyse fremkommer betydelige implikasjoner knyttet til støtte av unge idrettsutøveres ernæringsbehov. Disse funnene har viktige implikasjoner for å forbedre den ernæringsmessige støtten som tilbys unge utøvere.

Framework: The theoretical framework: "The Developmental Model on Transitions Faced by Athletes" by Wylleman and Lavalle (2004) and "Athletic Career Transition Model" by Stam Bulova (2016) is used as the main theoretical framework.

There is room for improvement in providing sufficient guidance and education on diet and nutrition in both schools and sports clubs. It has also been demonstrated that collaboration between these two entities is crucial in supporting young athletes to maintain healthy eating habits and achieve their athletic goals. Furthermore, challenges that young football players face in balancing their education and training requirements have been identified, as well as the importance of healthy food choices and education in effective time management. Another important factor that emerged was the differences in knowledge and practice regarding diet among young football players in private and public sports programs, where geographical factors played a role.

**Discussion:** The findings of this research highlight the need for collaboration between schools and sports clubs to provide comprehensive education and support for young athletes regarding their dietary practices and beliefs. The lack of guidance and education on nutrition provided by schools and sports clubs, and the heavy reliance of young football players on coaches and family members for dietary advice, emphasizes the need for a more prominent focus on nutrition in the school curriculum. The challenges faced by young football players in maintaining healthy eating habits while balancing school and training, such as time constraints, highlight the need for sports clubs and schools to provide healthy food options before and after training and educate young athletes on time management skills. The differences in dietary knowledge and practices between young football players in private sports programs and those in public sports programs, as well as the role of geographic and resource factors in these differences, emphasize the need for targeted interventions aimed at improving the dietary knowledge and practices of young football players.

**Conclusion:** Based on the results and theoretical framework, this study suggests the need for closer monitoring of football players concerning their dietary practices and beliefs.

## **Foreword**

In the fall of 2021, I started my master's degree program at UiT The Arctic University of Norway. I have come to know new fellow students through the gatherings we have had, and through online classes that were conducted digitally. Working on my master's thesis has been an educational and exciting process. I have experienced both success and challenges during this period. It is a great feeling to finally be able to submit this master's thesis.

First and foremost, I would like to thank my supervisors, June Anthonsen Røsbø and Marcel Reinold, for their excellent guidance and support throughout the past year. Despite being in different locations during the last six months, I have learned a lot through digital meetings. This master's thesis would not have been possible without the participants who agreed to be interviewed. Thank you for sharing your experiences and thoughts.

At times, it has been challenging to balance thesis writing with my new job. However, I am now ready to submit and eager to apply all the knowledge I have acquired, which I have already found useful in my new job.

Enjoy reading.

Aleksander Bjørnvåg

# Table of content

|  |           |
|--|-----------|
| <i>Summary</i> .....   | 3         |
| <b>1 Introduction</b> .....  | <b>1</b>  |
| 1.1 <i>Insights from literature and research. Exploring adolescent nutritional needs and social environmental contexts</i> ..... | 2         |
| 1.2 <i>Dietary advice, debates, and controversies for the general population</i> .....   | 4         |
| 1.3 <i>Dietary advice for athletes</i> .....   | 6         |
| 1.4 <i>The age group and some themes</i> .....   | 6         |
| <b>2 Purpose and formulating research questions</b> .....  | <b>12</b> |
| 2.1 <i>Key concepts</i> .....  | 12        |
| 2.2 <i>The role of specialized schools and regular sports programs in developing young athletes in Norway</i> 13                 |           |
| 2.3 <i>Structure of the thesis</i> .....   | 15        |
| <b>3 Concept and theoretical frameworks</b> .....  | <b>16</b> |
| 3.1 <i>Nourishing the future for performance and general health</i> .....  | 17        |
| 3.2 <i>Understanding dietary needs and decision-making factors</i> .....   | 20        |
| 3.2.1 <i>Understanding the complexity of nutrition in Sports: Considerations for Athletes and Coaches</i> 21                     |           |
| 3.2.2 <i>Nutrition and Health for Football Players</i> .....   | 23        |
| 3.2.3 <i>Nutrition Strategies for Athletes:</i> .....  | 24        |
| 3.3 <i>Time pressure, balancing the clock, the challenges and importance of being a 24-hour athlete...</i> 25                    |           |
| <b>4 Method and Methodology</b> .....  | <b>28</b> |
| 4.1 <i>Part 1. Qualitative Research</i> .....  | 28        |
| 4.2 <i>Scientific grounding</i> .....  | 28        |
| 4.3 <i>Method</i> .....  | 30        |
| 4.3.1 <i>Sampling and approaching the field</i> .....  | 30        |
| 4.3.2 <i>The creation of an interview guide, and interview qualities</i> .....   | 31        |
| 4.4 <i>Semi-structured interview</i> .....   | 32        |
| 4.5 <i>Test interview</i> .....  | 33        |
| 4.6 <i>Background for method selection</i> .....   | 34        |
| 4.6.1 <i>The Interview guide tested and built self-confidence</i> .....  | 35        |

|          |   |           |
|----------|---|-----------|
| 4.6.2    | Conducting interviews .....   | 36        |
| 4.6.3    | Transcribing .....  | 37        |
| 4.7      | <i>The role of a researcher and ethical considerations</i> .....  | 38        |
| <b>5</b> | <b>Part 2. Analysis and data processing .....</b>   | <b>41</b> |
| 5.1      | <i>Thematical analysis, how has data been handled and analyzed</i> .....  | 41        |
| 5.2      | <i>Weaknesses of the method</i> .....   | 42        |
| 5.3      | <i>Epistemological orientation</i> .....  | 43        |
| 5.4      | <i>The six phases of the analysis process</i> .....   | 44        |
| 5.5      | <i>Enhancing the quality and validity of qualitative research: A focus on credibility, reflexivity, and transferability</i> ..... | 46        |
| 5.6      | <i>Consent</i> .....  | 47        |
| 5.7      | <i>Selection</i> .....  | 48        |
| 5.8      | <i>Confidentiality</i> .....  | 49        |
| <b>6</b> | <b>Chapter Presentation and analysis.....</b>   | <b>50</b> |
| 6.1      | <i>Who are these athletes?</i> .....  | 50        |
| 6.2      | <i>Analyze</i> .....  | 53        |
| 6.3      | <i>Understanding food, culture biography, and identity</i> .....  | 53        |
| 6.4      | <i>Combining Food and Education</i> .....   | 55        |
| 6.5      | <i>Lack of support and guidance</i> .....   | 57        |
| 6.6      | <i>The athlete as a product</i> .....   | 59        |
| 6.7      | <i>Discussion</i> .....   | 62        |
| 6.8      | <i>Discussion and the way forward</i> .....   | 64        |
|          | <b>References</b> .....   | <b>67</b> |
|          | <b>Attachment</b> .....   | <b>83</b> |
|          | <b>Interview guide</b> .....  | <b>83</b> |
|          | <b>Approved application from NSD</b> .....  | <b>86</b> |
|          | <b>Information letter</b> .....   | <b>88</b> |



# 1 Introduction

Adequate nutrition is essential for peak athletic performance, and young athletes must grasp good nutritional practices to reach their maximum potential. Research has shown that nutrition is an important factor in sports science and exercise physiology (Arenas-Jal et al., 2020; Burke et al., 2019). Diet and nutrition are considered to have a significant impact on the performance of athletes and are influenced by various factors, including cultural, knowledge-based, and economic factors (Thomas et al., 2016). This study is interested in the most popular sport in the world, football. Of particular interest are athletes who are at the start of their career, young adolescents in high school programs. The main research question that served as the starting point for this study inquiry related to football and athletes: In what ways do knowledge and diet manifest in relation to them? In addition to the primary question, a second question was formulated based on literature and prior research: Does geographic location matter, and does attending a public or private school make a difference?

However, food relations are complex as it is influenced by various societal forces and systems, such as governments and commercial forces. The national government regulates diet through information that is aimed at the general public to promote healthy lifestyles. Commercial forces entice both healthy lifestyles as well as to lure people into consumer habits. Therefore, this study aims to explore how social forces might affect the diet and nutrition of young football players through a qualitative investigation of their beliefs and practices.

To achieve this goal, a comprehensive review of relevant literature from various countries, including the USA, Norway, the UK, Belgium, Finland, Australia, Spain, and Sweden, has been conducted. Previous research in the field will be presented, and prominent researchers will be highlighted, such as Arenas-Jal et al. (2020), who emphasized the influence of societal forces on athletes' relationships with food and nutrition, and Burke et al. (2019), who examined diet and nutrition among athletes at different levels and in various sports. In the Norwegian context, significant contributions have been made by researchers such as Jorunn Sundgot-Borgen and Ina Garthe, who have studied nutrition and eating disorders among female athletes, as well as diet and nutrition in football and swimming. To investigate the beliefs and practices of young football players, the study has conducted interviews with three students attending public schools in Finnmark known as the sports program, and three students attending private schools in the Eastern region of Norway, such



as Wang and NTG, known as the elite sports program. Through this qualitative investigation, this study aims to shed light on the complexities of the relationship between diet and nutrition and the societal forces that influence them.

Through a review of existing research, this study will also identify areas that require further investigation and provide insights into how different societal forces influence diet and nutrition for football players. Thus, this task will contribute to a deeper understanding of athletes' relationships with food and nutrition in football and provide insights into how societal forces impact this complex relationship.

### **1.1 Insights from literature and research. Exploring adolescent nutritional needs and social environmental contexts**

A lot happens to the body and psyche during adolescence. You players have a busy schedule and have commitments in a variety of settings. Adequate nutrition and a balanced diet are crucial in supporting healthy adolescent growth and sports development. This is emphasized by Hargreaves et al. (2022), who found that the physiological changes during adolescence result in increased energy demands and that a nutritious and varied diet is an essential tool for promoting optimal health outcomes. A balanced diet is essential for health at all life stages, but adolescence matters most (Fitzgerald et al., 2010). Research conducted by Hargreaves et al. (2022), explored the impact of family influence on the formation of nutritional status and dietary habits among student youth, and the results suggest that the dietary habits established during youth can have lasting effects into adulthood. Fitzgerald et al. (2010) conducted a qualitative study to examine the factors impacting the food choices of Irish children and adolescents. According to the study, a sizable share of young people's diets was deficient in several essential nutrients. The study's authors offer further in-depth insights into the root reasons for this problem and suggest potential intervention tactics to improve young people's eating habits. Drawing from the results of the qualitative investigation conducted by Fitzgerald et al. (2010), it is evident that many factors influence Irish children's and adolescents' food choices. The authors delve deeper into this issue and shed light on the underlying causes of inadequate nutrient intake among young people. They propose a range of intervention tactics that could enhance the dietary habits of this population. Such strategies may encompass altering cultural attitudes and beliefs, the provision of healthy food choices, and promoting education and awareness about the significance of nutritious eating. These are studies that offer me a frame and a springboard of how to reflect and view the habits of my participants who are adolescent football players in high school programs. These are athletes

that are in transition, or at the beginning of a possible football career, where food is considered as one factor to optimize bodily and sportive performance.

According to a study by Heiman and Olenik-Shemesh (2019) published in the *International Journal of Environmental Research and Public Health*, many young people today associate appearance and performance with diet. The study, which investigated the perceptions and eating habits of young and adult students attending higher education, found that many participants viewed diet as crucial in achieving and maintaining the desired appearance and physical performance. These findings suggest a strong connection between how young people view their bodies and the types of food they choose to consume. This highlights the importance of promoting healthy and balanced eating habits, as well as being aware of this element of ideal body images when media are also brought into the mix. Youth are hence even more closely associated with diet. Overall, these studies highlight topics and elements related to nutrition, food, social, structural, and cultural practices, as well as general health-body discourses. Therefore, knowledge of nutrition in these forms affects food choices and the perception of food for health (Alkerwi et al., 2015).

The development of nutritional knowledge from childhood to adulthood can still be linked to what one learns at school, where knowledge is obtained from reliable sources without any particular form of self-reflection (Jezewska-Zychowicz et al., 2022). At the same time, food is about much more than just calories in and out. Because there are so many additional factors to consider, factors that come into play include the social environment and social media (Chau et al., 2018). Although the media has an impact, an individual's food knowledge is also influenced by their own experiences and competence, impacting their food choices (Alkerwi et al., 2015).

Several variables, including gender, age, socioeconomic level, and education, might influence an athlete's diet. Individuals with lower socioeconomic status often face the challenge of working longer hours, leading to an unhealthy lifestyle and inferior health outcomes. (Jensen, 2020). In Norway, the Norwegian Directorate of Health has traditionally been the one to follow regarding diet and nutrition. However, there have been significant changes in food knowledge over the last few years. Therefore, new dietary recommendations should now be available in 2023; however, this appears to be postponed due to revised specifications for sustainable recommendations. The most recent requests were issued in 2012 (Lerø, 2020).

This indicates that it is now imperative to change dietary recommendations, given all the recent diet-related research that is being published.

## **1.2 Dietary advice, debates, and controversies for the general population**

The guidelines issued by the Directorate of Health are commonly considered to possess a credible reputation. It can be observed that there is an existing societal structure in Norway that may potentially lead certain individuals to doubt specific recommendations. Taking into account the importance of informed decision-making regarding food and nutrition, it is crucial to recognize that these guidelines should be regarded as one of several sources of information and should be integrated with other relevant data. In the context of young footballers' dietary beliefs and practices, it can be important to understand the various sources of information that are the basis for their food choices, for example, young footballers may have different perspectives on what constitutes a healthy diet. According to the Directorate of Health, they actively work to increase the population's knowledge about food and diet. As a result, the provided information must be examined considering diverse prerequisites, contexts, and purposes. What is appropriate for one person may not be appropriate for another. It will be intriguing to observe the modifications made considering the new dietary guidelines issued by the Norwegian Directorate of Health in 2023 (Lerø, 2020). Nutritionist Dag Viljen Poleszynski, has criticized the process around the guidelines, highlighting that nutrition knowledge comes from multiple sources and that dietary guidelines are in a state of tension between research and intellectual communities (Poleszynski, 2020). This tension may be particularly relevant in the case of young soccer players, who are likely to be influenced, direct and indirect, by various sources such as coaches, peers, social media, and personal experience. Therefore, it is important to acknowledge that institutionalized guidelines provided by the state serve as a form of public health policy.

There are many voices in the food field. Food is challenging and intricate, and there is no "gold standard" for how each person should eat. The Directorate of Health's application of the dietary recommendations has received criticism from nutritionist Poleszynski, who furthermore, is the responsible editor 'Helsemagasinet'. He believes that more experts with different perspectives should be involved, and not just those the public government highlights (Poleszynski, 2020). Already in 2009, Dag Viljen Poleszynski and the authors of the article "Governmental nutrition guidelines should be revised" argued that the Norwegian authorities' dietary guidelines were outdated and needed to be revised. They presented studies showing

that a high intake of sugar and carbohydrates could increase the risk of several health problems, including cardiovascular disease, diabetes, and obesity (Poleszynski et al., 2009). Furthermore, on nutritious aspects, the authors also argued that increasing the intake of healthy fats, especially unsaturated fats, could have positive health effects (Poleszynski et al., 2009). Besides these nutritious recommendations, the authors also discussed how dietary guidelines should be communicated to the public. They asserted that current policies need to be simplified and made more accessible for most people to understand and that efforts should be made to simplify and clarify the message (Poleszynski et al., 2009). The more effectively one conveys a message, the more likely people, especially young individuals, are to heed the advice. Despite Poleszynski et al (2009) controversial arguments around nutrition, their work kickstarted debates around guidelines and how to communicate nutritious health to the public. Hence, nutrition is a matter of natural science and social science, that are part of a sociality.

The same debates are found in Denmark, Arne Astrup, former head of Danish nutrition education, has altered his perspective on food and now advocates for the potential benefits of a low-carbohydrate diet (Poleszynski, 2020). The field of nutrition is complex, with multiple voices offering different recommendations. There is a desire for high-quality guidance, but this, in turn, leads to debates within the field of nutrition. Arne Astrup has written, among other things, "Goodbye to the egg-white omelet – welcome back to the whole-egg omelet." The more researchers participate with slightly different diet opinions, the more credibility the advice gains. At the same time, Jensen & Lindseth (2021) believe there needs to be more quality assurance around the Norwegian Directorate of Health's dietary advice. On the other side is The Norwegian Directorate of Health, dietary advice is based on scientific research. It promotes overall health and prevents chronic diseases like heart disease, diabetes, and cancer (Helsedirektoratet, 2011).

It emphasizes the importance of a balanced diet that includes a variety of fruits, vegetables, whole grains, lean protein sources, and healthy fats. The advice also promotes moderate alcohol consumption and limits the intake of processed foods and added sugars. Additionally, it encourages regular physical activity as part of a healthy lifestyle. The advice is well-rounded and holistic, considering different dietary choices' short-term and long-term health benefits (Helsedirektoratet, 2011). So, it does not mean those critical of the Directorate of Health dietary advice disagree with everything said; for example, most will agree that reducing alcohol intake and avoiding processed food is a vital way to improve health. These recommendations exist and could be beneficial for a young football player to follow, even

though they are not directly related to sports and football. It would be interesting to hear how these controversies and the many voices regarding nutrition reveal themselves in the field, in my conversations with football athletes.

### **1.3 Dietary advice for athletes**

Nutrition is a critical component of athletic performance and understanding the dietary beliefs and practices of young football players is essential for promoting optimal health and performance. While the Olympic Summit dietary advice Olympiatoppen (2023) provides a valuable framework for athletes to optimize their nutrition based on scientific research and individualized needs, Potgieter's (2013) research highlights some challenges with implementing this dietary advice, particularly for individuals with busy lifestyles. Specifically, the guidelines may not always be cost-effective or feasible to implement daily, which can be especially challenging for young football players who have competing demands on their time. Additionally, the lack of specificity in the guidelines may make it difficult for young athletes to apply them to their individual dietary needs.

To address these challenges, targeted nutrition education programs may be necessary to improve young athletes' understanding of nutrition and support them in making healthier food choices. For instance, Devlin et al. (2017) found that many young football players have inadequate nutrition knowledge, particularly regarding the appropriate timing and quantity of macronutrient intake. This highlights the need for educational interventions that are tailored to the specific needs of young football players. Furthermore, social and cultural factors can also influence young athletes' dietary beliefs and practices. Thomas et al. (2016) found that young male football players' food choices were influenced by peer pressure and the desire to fit in with their teammates. This suggests that interventions to promote healthier eating among young football players should also consider social and cultural factors that may affect their dietary behaviors.

### **1.4 The age group and some themes**

Optimal nutrition can play a crucial role in achieving peak athletic performance, but young athletes may face challenges when trying to follow general dietary advice. This is often due to individual differences and unique challenges that each athlete may encounter. As a result, there may be a need for more personalized interventions that take these differences into account and help young athletes optimize their diets to achieve their best possible performance. Young athletes have different nutritional requirements than non-athletes due to

the demands of training and competition (Burke, Deakin, & Minehan, 2021). Proper nutrition can enhance athletic performance, promote growth and development, and reduce the risk of injury (Burke, Deakin, & Minehan, 2021). On the other hand, inadequate or inappropriate dietary practices can negatively impact athletic performance and health (Jäger et al., 2017).

Studies in this field have shown that young athletes need higher energy and protein intake to support the growth and repair of tissues and to replenish energy stores depleted during exercise (Burke, Deakin, & Minehan, 2021). Despite the importance of this topic, there are challenges in obtaining accurate and comprehensive dietary information and variability in nutritional needs among young athletes (Purcell, 2013).

Despite these challenges, there has been significant research in this field. Studies have investigated the effects of low carbohydrate and high protein diets on athletic performance and health in young athletes (Jäger et al., 2017). Other studies have explored the impact of specific nutrients, such as carbohydrates and protein, on athletic performance and recovery (Burke, Deakin, & Minehan, 2021). The interaction between young athletes, diet, and nutrition is critical to sports performance and overall health. Childhood and adolescence are crucial years for the growth and development of the body and the formation of future eating habits (Battistini et al., 2020). Despite some challenges in this field, there has been a significant amount of research over the years, providing valuable insights into the nutritional needs of young athletes (Purcell, 2013).

Several studies have explored the relationship between media use, sports, and well-being among youth (Kim, Liu, & Shan, 2017; Booker, Skew, Kelly, & Sacker, 2015; Vuong et al., 2021; Moeri et al., 2022). One study by Vuong et al. (2021) found that social media use can lead to increased body dissatisfaction among youth, especially when they internalize ideals of a thin or muscular body. Moeri et al. (2022) also support this observation and argue that it is essential to understand how young people are affected by images of bodies on social media.

On the other hand, another study by Kurz et al. (2022) showed that school-based interventions could improve youth's body image and media literacy. These results indicate that it is possible to contribute to positive change by offering young people tools and resources to manage the influence of media. The studies by Kim et al. (2017) and Booker et al. (2015) also provide insights into the relationship between media use, sports participation,

and well-being among youth. These studies suggest that participating in sports and healthy media use can positively impact youth's well-being.

The determinants of young people's diets are complex and multifaceted. Furthermore, societal pressures, including those related to body image and social media, may affect young people's health and dietary behaviors. It is essential to consider the nuances and complexities of these factors in understanding their impact on dietary habits.

Young athletes require specific attention regarding their relationship with food. Their nutritional needs and patterns can significantly impact their physical and mental development, ultimately influencing their long-term health and athletic performance (Case, 2016).

Inadequate support and resources for young athletes can make it difficult to receive proper treatment and assistance when needed, leaving them more vulnerable to issues such as malnutrition and disordered eating (Mountjoy et al., 2018). Research has identified unique challenges facing elite athletes in aesthetic and weight-class sports when it comes to body weight and composition, which can increase the risk of developing negative patterns and behaviors around food and sports, having significant negative impacts on mental health and overall well-being (Sundgot-Borgen & Garthe, 2011). Therefore, further research on the relationship between young athletes and food and providing necessary resources and support is essential for ensuring their long-term health and success. Physical activity decreases with age, while individuals often gain more freedom in their dietary choices (Belton et al., 2014; Nelson et al., 2008). Of significant importance, habits developed during childhood, particularly those associated with physical activity and nutrition, can endure throughout adulthood, exerting a lasting impact on long-term health and weight-related outcomes. (Nelson et al., 2008). Therefore, it is crucial to target young individuals and promote skills that support lifelong health and obesity prevention, such as healthy eating habits, food shopping, and cooking abilities.

Eating disorders are a problem that frequently arises in elite athletics, especially weight-class-related sports. Because you sign up for a specified weight class before the competition, you must weigh yourself "in" before participating. Distance runners and ski jumping are sports that emphasize weight and the body. Being as light as feasible is highly advantageous (Busanich et al., 2014). Therefore, young athletes need to learn what is helpful about diet and nutrition to develop a positive relationship with food.

According to recent research in football sports science, disordered eating is prevalent among elite athletes, including those who play football (Abbott et al., 2021; Godoy Izquierdo et al., 2019; Homayounnia et al., 2012). In a study by Abbott et al. (2021), male and female soccer players reported a significant prevalence of disordered eating behaviors, with female players at a higher risk for such behaviors. Similarly, Godoy Izquierdo et al. (2019) found that athletes in high-risk sports, such as gymnastics and aesthetic sports, had a higher risk of developing eating disorders than athletes in low-risk sports, such as football. These findings suggest that football requires a certain level of physicality and body weight.

To address this issue, it is essential for coaches, sports organizations, and healthcare professionals to recognize the risk factors for eating disorders in football players and other athletes and to implement appropriate prevention and intervention strategies (Godoy Izquierdo et al., 2019). This could include education on healthy nutrition, body image, psychological support, and monitoring of athletes for disordered eating behaviors (Abbott et al., 2021). Taking a proactive approach to addressing disordered eating in soccer and other sports can help ensure our athletes' health and well-being on and off the field.

Therefore, focusing on the diet of 18 and 19-year-olds in football is important because they are in a critical stage in their physical and cognitive development, as well as they are in the transition to becoming professional players. Adequate nutrition during this period supports optimal growth, physical development, and cognitive function, which can benefit their performance on the field (Thomas et al., 2016). Furthermore, adequate, and balanced nutrition also helps to prevent injuries and improve recovery after training and matches. (Okta & Yildiz, 2021; Thomas et al., 2016). Proper nutrition can also help support young footballers' psychological well-being and mental health, which is important for their well-being and future career (McCabe et al., 2021). Therefore, educating young footballers on appropriate nutrition can set them up for long-term success on and off the field.

Soccer is the most popular sport worldwide, giving it much attention and constantly developing. The physical, technical, and technical demands of soccer have constantly changed over the years (Bush et al., 2015; Mohr et al., 2022). Nutrition gives special attention to optimizing the player's performance. Being healthy and injury-free is especially vital for athletes competing at the highest level to perform at their best throughout practice and competition. To recover after practice and competition as effectively as possible (Thomas, Erdman & Burke, 2016). Sports nutrition moves quickly, so athletes must keep up with it and



pay attention. The Union of European Football Associations (UEFA) has collected experts in sports nutrition science, people who work in elite football, and the national federation. To better understand numerous subjects linked to professional athletes' diets." Football nutrition, match day nutrition, training day nutrition, body composition, stressful environment, and travel, cultural diversity and dietary considerations, dietary supplements, rehabilitation, referees and high-level junior players" were some of the themes they tackled (Collins et al., 2021).

Making a solid nutritional decision is never simple, but eating the proper foods at the correct times is crucial to recover quickly between workouts and games. Also, in professional football, new guidance has been formulated because of the quick evolution of the sport and our knowledge of sports nutrition. The prior dietary guidance for professional football players was published by UEFA before this updated advice was released in 2009, eleven years later (Collins et al., 2021).

The relationship between nutrition and sports performance has been studied for many years, and the importance of a balanced diet for athletes is well-established (Thomas, Erdman, & Burke, 2016). However, the last decade has seen a growing awareness of the impact of nutrition on young athletes, emphasizing the importance of a balanced diet for optimizing sports performance and preventing injury and illness. Research has shown a high prevalence of low energy availability in young athletes (Mountjoy et al., 2014), which can negatively affect sports performance. In addition, different dietary patterns have been shown to have varying effects on sports performance (Maughan, 2018). Therefore, it is essential to monitor stress and recovery to ensure that young athletes consume enough nutrients to meet their energy needs and support optimal performance (Halson, 2014).

It can be challenging to determine the best option because there have been many nutrition studies in recent years. Elite-level athletes should follow the recommendations of science-based nutrition research, but it can sometimes be complicated. One of the causes is the significant influence of social media, through which it is possible to obtain inaccurate information. Because much of the information we obtain about nutrition on social media may need to be corrected, we must verify everything we learn. This task often falls upon the individual athlete, requiring them to take personal responsibility and develop a mindful connection. However, the data can be highly beneficial (Chau et al., 2018). Hence, it is imperative to have qualified professionals with expertise in sports nutrition, along with a

skilled chef who can prepare nutritious meals for athletes. When we consider the player's eating habits and behavioral patterns, one of the issues is that studies on players at the lower levels need to be conducted correctly. Additionally, there needs to be more research on the top athletes. Publication bias could be one of the causes. It is only sometimes simple to publish a study if the results differ from what you hoped. Especially if you consider research incorporating supplements, you may want to demonstrate the effectiveness of the supplements (Collins et al., 2021).

We have noticed that even when athletes have the best support staff, they need help getting proper nutrition consistently. Consider the challenges faced by young athletes who lack the opportunity to train in esteemed academies and receive adequate nutritional and dietary guidance. Because it is only at the best academies that young footballers receive close follow-up from nutrition coaches and chefs to help them eat correctly. A study by Brigges et al. (2017) addressed and emphasized the importance of nutrition for young athletes. They compared professional youth footballers' breakfasts. One hundred thirty-five minutes before the match, one group consumed 500 kcal and the other 250 kcal. Furthermore, the study found that players who finish 500 kcal of 60% carbohydrates gain more dribbling speed than players who consume 250 kcal of 60% carbohydrates. This demonstrates the importance of eating a large breakfast before a game (Brigges et al., 2017).

In this master's thesis, I will use a qualitative approach and data from interviews to see how, information sources, geography and culture, and educational background influence young football players' dietary beliefs and practices.

## **2 Purpose and formulating research questions**

This study aims to get a greater spotlight on young footballers' relationship with food. This is in combination between school, training, and club. In the study, I have been interested to identify distinct differences between going to sports and top varsity sports programs in high school. The way to do that is to examine two different school orientations in the Norwegian school system. In the southeast of Norway, three students attending private schools, Wang, and Norge Toppidrettsgymnas (NTG) were interviewed. These schools are also named elite sports programs. The other system is public "sports programs" where also three students in a program in Finnmark were interviewed. In the end, I arrived at the research topic: young football players' dietary beliefs and practices - a qualitative study. With my background, field of interest, and past studies, I am highly interested in how young players relate to food. The research questions are formulated as follows:

The aim of this qualitative study is to investigate the dietary beliefs and practices among young football players in Norway and to determine if there are any differences between those participating in private sports programs in eastern Norway and those in public sports programs in Finnmark. The study seeks to examine the impact of level and resources on diet, as well as whether a geographical perspective plays a role. Additionally, the study will explore how young players understand dietary knowledge, its significance, and its impact on their dietary practices. Adherence to dietary recommendations and the influence of socioeconomic status on dietary beliefs and practices will also be contextually interesting to investigate.

### **2.1 Key concepts**

Key concepts used in this study include "diet beliefs" and "practice." These concepts are used to ensure that readers understand the terminology used in the study. "Diet beliefs" refers to the beliefs, values, and attitudes that young football players have about their diet, and how this affects their perception and choice of food and drink. This may include their beliefs about what constitutes healthy or unhealthy food and their belief that a healthy diet is crucial for optimal performance and health. "Practice" refers to the actions and habits that young football players have concerning their diet. This includes what they eat and drink before, during, and after training and matches, and how they handle various situations that may affect their diet. This may also include their habits surrounding planning, purchasing, and preparing food. The rationale for interviewing young football players aged 18-19 and including participants from

both Eastern Norway and Finnmark was based on the idea that this age group is likely to have more reflective ability and life experience. 18-19-year-olds have typically spent two years in high school and faced some challenges and experiences that may have influenced their thinking and attitudes. Additionally, many in this age group may have already moved out of their parent's homes and experienced living on their own or with others, which may have contributed to increased maturity and reflection ability, but also significant changes in dietary habits. The inclusion of participants from Eastern Norway and Finnmark was intended to explore the geographical perspective of how upbringing affects diet.

## **2.2 The role of specialized schools and regular sports programs in developing young athletes in Norway**

The concept of the top-level sport is essential for athlete development, particularly in Norway, as it ensures that young athletes receive high-quality education and training to excel in their respective sports. Kristiansen and Houlihan (2017) note that specialized schools such as Norges Toppidrettsgymnas (NTG) and Wang Toppidrett play a crucial role in this regard by offering a combination of academic and sports education to their students.

NTG and Wang Toppidrett aim to develop athletes who can compete at national and international levels while also ensuring they receive adequate education (Kristiansen & Houlihan, 2017). These institutions offer a unique opportunity for athletes to pursue their athletic dreams while receiving an education that prepares them for life after sports.

In addition to specialized schools, regular sports programs that offer "studiespesialisering" provide young athletes with the opportunity to simultaneously achieve academic and athletic excellence. According to Kristiansen and Houlihan (2017), these programs help young athletes acquire a broad range of skills and knowledge that can be applied in various areas of their lives. In conclusion, the concept of top-level sport is crucial for the development of young athletes in Norway. The provision of high-quality education and training through specialized schools and regular sports programs ensures that young athletes are equipped with the skills and knowledge they need to compete at national and international levels. By offering a unique combination of academic and sports education, institutions such as NTG and Wang Toppidrett play a crucial role in nurturing athletic talent in Norway (Kristiansen & Houlihan, 2017).

It is essential to consider the differences between specialized sports schools such as Wang toppidrett and NTG (Norges Toppidrettsgymnas), and regular sports programs with

studiespesialisering, because the interviewed individuals attend these various schools. Based on the findings of Kristiansen and Houlihan (2017), private sports schools have emerged as crucial contributors to the development of young athletes in Norway. These specialized schools offer a unique opportunity for students to combine their passion for sports with their academic pursuits. One of the critical differences between specialized sports schools and regular sports programs is the level of specialization. Wang toppidrett and NTG are explicitly designed for athletes who wish to focus on a single sport and receive specialized coaching and training. In contrast, regular sports programs may have a broader focus that includes multiple sports and may be less specialized. Additionally, students at specialized sports schools often have access to better equipment and facilities for training than those at regular sports programs.

Another important distinction is specialized sports schools' level of coaching and training support. According to Kristiansen and Houlihan (2017), students at Wang toppidrett and NTG have the opportunity to receive more training and coaching support than those in regular sports programs. This can be particularly important for athletes who wish to achieve high performance in their sport. Finally, there may be differences in the admission requirements for specialized sports schools compared to regular sports programs. Kristiansen and Houlihan (2017) note that specialized sports schools often require high performance in the student's sport of choice. This can make these programs more competitive-oriented than regular sports programs.

According to Kristiansen and Houlihan (2017) the key differences between specialized sports schools, such as Wang toppidrett and NTG, and regular sports programs with studiespesialisering. These differences include the level of specialization, coaching and training support, access to equipment and facilities, and admission requirements. Specialized sports schools offer a higher level of specialization for athletes who want to focus on a single sport, allowing them to receive specialized coaching and training that may not be available in regular sports programs.

In addition, specialized sports schools such as Wang toppidrett and NTG are often more competitive-oriented, requiring a high level of performance in the student's sport of choice. This competitive environment can benefit athletes who thrive under pressure and want to push themselves to excel. Specialized sports schools such as Wang toppidrett and NTG provide

young athletes with unique opportunities to combine their passion for sports with their academic pursuits while receiving specialized coaching, training, and access to better equipment and facilities. By understanding these differences, young athletes and their families can decide which program best suits their needs and goals.

### **2.3 Structure of the thesis**

The thesis is comprised of X chapters. In the previous chapter, I provided conceptual backdrops, some literature review that paved the way for my research questions, and topics of interest in Chapters One and Two. The first chapters present contextual frames for the thesis, previous research I have relied on, and findings derived from participants' narratives. In Chapter Two, I present the theoretical framework that informs my analysis, including essential theories, notions, and concepts that serve as the foundation for the thesis.

Chapter Three explains the research methodology in greater detail. I present the specified research methodology and explain how the research has been carried out. I also reflect on the research process and evaluate research selection and submission criteria. The method chapter concludes by assessing reliability, validity, and ethical considerations.

In Chapters Four and Five, I offer analytical discussions. I initiate the first analytical discussion in Chapter Four, while Chapter Five provides further analytical insights.

### 3 Concept and theoretical frameworks

The relationship between elite athletes in football and their dietary practices and beliefs is a multifaceted issue that extends beyond the realms of natural sciences. It involves an intricate interplay of physiological factors related to the body and nutrition, as well as sociocultural influences stemming from individual backgrounds, upbringings, as well cultural contemporary contexts. This chapter aims to delve into the holistic nature of the athlete, leaning on previous research stemming from mixed disciplines as demonstrated in chapter one. However, with the background and context of the age group, nutrition and physiology, and a diverse field of information resources functioning as a discourse on the matter of health, health, and sport – I further make use of the theoretical frameworks developed by renowned researchers in the field of sports, particularly Stambulova's "Athletic Career Transition Model" (2016) and Wylleman and Lavalle's "The developmental model on transitions faced by Athletes" (2004), are thoroughly examined and used as guidance and reference points to analyze young football players' dietary perceptions and practices. These frameworks provide a comprehensive understanding of how dietary beliefs and practices evolve among young football players throughout their athletic journeys.

In 2003, Stambulova introduced her groundbreaking model, known as the "Athletic Career Transition Model," to visually represent the potential outcomes of transitions in an athletic career. The model was carefully developed to describe and explain the transition process by focusing on the interplay of several key components involved in these transitions (Stambulova, 2016, p. 256). Stambulova's model emphasizes the conception of athletes as whole persons, acknowledging that their athletic careers are just one aspect of their lives. This holistic perspective recognizes the interconnectedness of various life domains and highlights the need for a comprehensive approach to studying and supporting athletes during career transitions. It adopts a lifespan perspective, considering the challenges and opportunities athletes face at different stages and transitions in their careers, while also considering the ecological context in which athletes operate. This ecological perspective acknowledges the interplay between personal, social, and environmental factors and the dynamic interactions that influence successful career transitions.

Stambulova's model also provides insights into the psychological, social, and environmental factors that impact athletes' adjustment during career transitions. It outlines different phases of career transitions, including the pre-transition, transition, and post-transition stages, shedding

light on the challenges and opportunities that arise during these critical periods. Furthermore, the model underscores the significance of tailored support and guidance from various stakeholders, including coaches, parents, teammates, and sport psychology practitioners, to facilitate smooth transitions and enhance the overall well-being of athletes. By applying these theoretical frameworks in the study, a more comprehensive and nuanced perspective on young football players' dietary perceptions and practices is achieved. It enables the analysis and interpretation of findings considering a well-established theoretical foundation, considering the holistic understanding of athletes as whole persons, the lifespan perspective, the ecological context, and the need for targeted support during career transitions. Additionally, the cultural praxis of athletes' careers paradigm acknowledges the influence of cultural factors on athletes' career experiences, highlighting the importance of culturally sensitive approaches when studying and supporting athletes from diverse backgrounds.

Within this framework, the study aims to investigate changes in dietary beliefs within the sports domain and explore the role of crucial support systems such as schools, football clubs, parents, and coaches. It seeks to gain a deeper comprehension of the intricate connections between dietary beliefs and practices among young football players who are in career transitions. This holistic approach contributes to a more nuanced exploration of the factors influencing their dietary choices, as well as identifying potential challenges and opportunities they may encounter throughout their careers, including the development of healthy eating habits through interventions in school and club settings.

### **3.1 Nourishing the future for performance and general health**

The early stages of childhood play a pivotal role in establishing healthy habits, encompassing physical activity and dietary behaviors. These can persist into adulthood and have significant implications for long-term health and weight outcomes (Nelson et al., 2008). Therefore, it is essential to catch young people and establish and reinforce the value of skills that promote lifetime health and obesity prevention, such as good eating habits, food shopping, and cooking abilities (Chaudhary et al., 2020). Moreover, food and sport are inextricably linked to cultural elements and contemporary society (Skuland & Ånestad, 2013). In a knowledge-based society, individuals build their relationship with food and exercise through various cultural contexts, including the past, present, and future, which can shape their understanding and practices related to nutrition and physical activity (Islam et al., 2019).



Furthermore, our reflections and practices related to food and sport may be associated with specific contemporary phenomena, such as dietary advice, various diets, and concepts like health, obesity, and habits. The meaning of food can vary significantly for individuals, depending on their cultural background, geographic location, and personal preferences, even when they share a common interest in sports such as football and the associated institutions.

Vázquez-Espino, Rodas-Font, and Farran-Codina (2022) examined team sport athletes' knowledge, attitudes, information sources, and dietary habits, considering their cultural backgrounds and personal preferences. Their research highlights that the significance of food can differ substantially for individuals, even when they share a common interest in sports such as football and the associated institutions. Furthermore, the authors underscore that contemporary phenomena such as health, obesity, and habits significantly impact our reflections and practices related to food and sport.

Stambulova and Wylleman recognize the importance of coaches and support staff in an athlete's career, highlighting their responsibility to possess comprehensive knowledge and understanding of the athlete's needs holistically. They propose that coaches and support personnel should develop expertise and be capable of adapting their guidance and support to align with the athlete's individual needs and career transitions.

In sum, the complex relationship between food and sport requires an abstract and nuanced approach to understanding the multidimensional aspects of nutrition and its impact on athletic performance and long-term health outcomes. By exploring previous research on this topic, we can better understand the social, cultural, and individual factors that shape young athletes' practices and perceptions of food and sport.

Youth sports programs offer a unique opportunity to educate young athletes about proper refill and hydration during exercise and the potential benefits of sports nutrition and supplements. Unfortunately, many young athletes may not prioritize nutritious food during athletic events or lack optimal dietary options (Manore et al., 2017). By fostering healthy dietary habits during adolescence, young athletes can develop and maintain these practices throughout adulthood, potentially enhancing their overall health and athletic performance (Thomas et al., 2016). High school sports programs can also serve as a valuable platform to emphasize the importance of lifelong physical activity and good nutrition choices (Manore et al., 2017). Which is also in the interest of governmental actions regarding information.

From a school perspective, this study aims to address the gap in understanding the specific dietary needs of high school athletes by examining their dietary behaviors and perceptions in the context of football. While existing studies by Nascimento et al. (2016), Spendlove et al. (2012), Spronk et al. (2015), Wiita and Stombaugh (1996), and Cupisti et al. (2002) have contributed to this field, they have primarily focused on elite or club athletes, providing limited exploration among high school youth athletes in general, as done by Manore et al. (2017). Therefore, there is still a need for further exploration of knowledge, practices, and attitudes toward sports nutrition, especially among high school athletes. By examining the dietary habits and perceptions of these athletes, valuable insights can be gained to inform interventions aimed at promoting healthy dietary practices, which can contribute to improved overall health and enhanced athletic performance. This research gap serves as a central motivation for my master's thesis.

Manore et al. (2016) found that high school female volleyball players with excellent nutrition knowledge had more favorable attitudes toward nutrition. However, this did not translate into improved food choices. Manore et al. (2017) reported that male high school rugby players needed a better understanding of the nutritional requirements for their refill before and after games and training, with only 60% having adequate knowledge. The use of alcohol and dietary supplements was prevalent among the participants, with 87.7% and 64.5% of the respondents, respectively, using these substances. By incorporating the study conducted by Manore et al. (2017), which demonstrates the positive influence of sports nutrition education on the dietary practices of high school soccer players, valuable insights are gained regarding the significance of targeted interventions in fostering healthy eating behaviors among young athletes. The study recommended using environmental interventions, such as promoting healthy food alternatives in schools, homes, and training/competition settings, alongside sports nutrition education programs targeting team sports players. Manore et al. (2017) noted that athletes would benefit from optimal eating habits. However, research suggests that athletes often must implement these ideal practices, resulting in insufficient energy intake and other related concerns. Nevertheless, previous studies have found that individuals with high nutrition awareness are more likely to adhere to dietary guidelines (Wardle et al., 2000; Spronk et al., 2014; Alaunyte et al., 2015; Folasire et al., 2015).

Staskiewicz et al. (2023) recently studied football players' body composition and nutritional awareness according to age. The study found that younger players had lower levels of nutritional awareness and were more likely to consume unhealthy food choices. Therefore, it

is essential to provide sports nutrition education and interventions that are age-appropriate and accessible to young athletes. Furthermore, Wilson et al. (2023) compared the nutrition knowledge, sources, and dietary habits of an NAIA and an NCAA Division I women's soccer team. The study found that both teams had similar nutrition knowledge and sources, but the NAIA team had better dietary habits. The study suggests that there is a need for more research to develop strategies to improve the dietary habits of collegiate athletes.

In summary, the current body of research highlights the importance of sports nutrition education and interventions targeting young athletes, including high school and collegiate athletes. The studies suggest that increasing nutritional awareness and promoting healthy food alternatives in training and competition settings can improve athletes' nutrition practices. Further research is needed to develop age-appropriate and accessible sports nutrition education and interventions to ensure young athletes receive the necessary knowledge and support to fuel their bodies optimally.

### **3.2 Understanding dietary needs and decision-making factors**

As illustrated in the previous section, coaches, schools, nutrition professionals and teams supporting athletes work in a complex and multifarious landscape in their effort to support their athlete's performances. Proper nutrition is essential for athletes to achieve optimal athletic performance (Nelson et al., 2008). Numerous studies have consistently emphasized the importance of maintaining good dietary habits for athletes' health and fitness (Karpinski & Rosenbloom, 2017; Skuland & Ånestad, 2013). These findings further support the notion that athletes have unique nutritional requirements due to their high energy expenditure and intense physical demands (Chaudhary et al., 2020). However, when it comes to making food choices, athletes face a complex and multifaceted decision-making process (Eck & Byrd-Bredbenner, 2021). At a phenomenological level Eck and Byrd-Bredbenner (2021) shed light on this aspect and found that the taste and enjoyment of food play a significant role in influencing the dietary preferences of collegiate Division I athletes. Additionally, factors such as convenience, affordability, health considerations, and performance benefits also contribute to their decision-making process. It may be important to consider athletes' need for clarity regarding various dietary options to prevent confusion and uncertainty. In this regard, personalized nutrition advice and education can significantly empower athletes to make informed choices about their diets. By offering tailored guidance, athletes are better equipped

to navigate the complex landscape of nutrition and make decisions that optimize their performance.

Previous research has also identified specific nutritional requirements for athletes based on their sport, gender, and age (Maughan et al., 2018; Burke et al., 2018). For example, endurance athletes may benefit from a higher intake of carbohydrates, while strength athletes may require more protein to support muscle growth and recovery. Additionally, research has shown that inadequate nutrition can lead to fatigue, decreased performance, and an increased risk of injury (Thomas et al., 2016).

It is important to note that there are limitations to the studies cited. For instance, Eck and Byrd-Bredbenner's (2021) study focused on collegiate Division I athletes and may not be generalizable to athletes in other settings or at different levels of competition. Additionally, there is a need for further research to identify the optimal nutritional strategies for athletes, particularly in relation to specific sports and events (Thomas et al., 2016). Proper nutrition is crucial for athletes to achieve optimal athletic performance. Personalized nutrition advice and education can be valuable tools for helping athletes make informed diet choices.

### **3.2.1 Understanding the complexity of nutrition in Sports: Considerations for Athletes and Coaches**

In addition to macronutrients, athletes also require sufficient micronutrients, such as vitamins and minerals, to support immune function, bone health, and other physiological processes (Vázquez-Espino, Rodas-Font & Farran-Codina, 2022). Belton et al. (2014) and Nelson et al. (2008) emphasize the importance of hydration, as even mild dehydration can reduce performance and increase the risk of heat illness. Having a thorough understanding of athletes' nutritional needs and how nutrition affects performance can be particularly relevant when considering dietary adjustments, such as transitioning to a vegan diet. According to Davey, Malone, and Egan (2021), athletes, including football players with high energy expenditure, face challenges when adhering to a vegan diet. It is important for vegan athletes to be mindful of their protein, iron, calcium, and vitamin B12 intake and consider supplementation or fortified foods to meet their nutritional needs. However, when exploring the complexity of nutrition, it is worth considering why certain dietary trends have gained popularity, potentially influenced by the food industry. In my interviews, I have extensively inquired about athletes' eating habits, which serve as a way to assess their training regimens.

But as a social researcher, I also examine other aspects such as values, habits, discourses, and the perspectives of those who emphasize the significance of the body and food. By delving into these practices, one gains insight into the underlying structures, values, norms, and processes that influence and shape an athlete's life, both within and beyond the realm of nutrition. This can be particularly demanding for young athletes, highlighting the challenges of transitioning to a vegan diet and the need for assistance in making such a drastic change. Nutrition strategies for athletes should be individualized based on their specific needs, goals, and preferences, with particular emphasis on meeting the requirements for macro and micronutrients to support optimal performance. In addition to the physiological aspects, it is important to recognize that food can have cultural and social significance. Our society's perception of food can be influenced by different voices and beliefs about what is healthy or unhealthy, wise, or unwise, and how performance food can be categorized. Cultural factors, such as hunting in the north, can also play a role. Food can be linked to a complexity that includes both natural and social sciences. Therefore, considering these different layers is important when discussing nutrition and food in the context of sports.

For athletes and coaches, it can be central, and important to be aware of their knowledge, what structures that work through them, and employ various approaches when making decisions about nutrition. This entails having a broad understanding of different aspects related to nutrition in sports, including current trends, various diet methods, and principles specific to the sports they are involved in (Arenas-Jal et al., 2020; Thomas, Erdman, & Burke, 2016). Having a conscious approach to nutrition involves actively seeking and updating oneself on the latest research and knowledge in sports nutrition (Arenas-Jal et al., 2020). This includes being aware of and evaluating new trends and methods that can impact athletes' performance and health (Arenas-Jal et al., 2020). It is important to be critical and base decisions on solid scientific evidence (Thomas et al., 2016). According to Arenas-Jal et al. (2020), there is a growing focus in research on the importance of staying updated on new approaches in nutrition. The research provides numerous recommendations that can be beneficial for athletes and coaches. By staying informed about the latest research, athletes can make informed choices regarding nutritional strategies and optimize both performance and overall athletic development. This may involve being aware of popular diets or dietary strategies that have received attention in the media or among other athletes (Arenas-Jal et al., 2020). However, it is important to be critical of such trends and assess whether they are based

on solid science and align with the individual athlete's needs and goals (Arenas-Jal et al., 2020).

In addition, understanding different types of diets is important (Hespel, Maughan, & Greenhaff, 2006). This includes understanding macronutrients and micronutrients, their functions in the body, and how they can affect athletic performance (Hespel et al., 2006). Athletes and coaches are already exposed to various diet methods, such as low-carbohydrate diets, high-carbohydrate diets, ketogenic diets, etc., through different discourses, including media, research, and governmental recommendations. It is essential for them to be familiar with these methods and understand how they can be tailored to individual needs and sport-specific requirements (Hespel et al., 2006). Understanding sports nutrition is also essential (Jeukendrup & Cronin, 2011). This involves knowledge of the specific nutritional needs associated with the sport one engages in, including energy intake requirements, protein needs, fluid balance, and meal timing in relation to training and competition (Jeukendrup & Cronin, 2011). Sports nutrition may also involve knowledge of dietary supplements and their potential effects and limitations (Jeukendrup & Cronin, 2011). Considering cultural preferences and bodily habits is also important (Ono et al., 2012). Athletes and coaches should be mindful of individual differences regarding food culture, food allergies or intolerances, religious or ethical dietary beliefs, and personal preferences (Ono et al., 2012). This can contribute to adapting nutrition plans and meals that are both nutritionally optimal and align with the individual's needs and values (Ono et al., 2012).

### **3.2.2 Nutrition and Health for Football Players**

Proper nutrition is crucial for young football players to maintain their health and enhance their athletic performance. Several studies, including Manore et al. (2017), Nascimento et al. (2016), and Spendlove et al. (2012), emphasize the importance of nutrition in improving energy levels, increasing endurance, and accelerating post-training recovery. Furthermore, Spronk et al. (2015) and Wiita and Stombaugh (1996) highlight the significance of nutrition in injury prevention and facilitating injury rehabilitation. However, it is important to note that there can be a complex relationship between subjective perceptions of health and performance and the scientific literature, which may contain conflicting findings and opinions. Therefore, it may be necessary to consider various sources and evaluate the overall evidence when drawing conclusions about what works and what does not.

On the other hand, poor nutrition can lead to decreased performance, increased fatigue, and heightened injury risk, as noted by Cupisti et al. (2002) and Perron et al. (2016). In addition to improving physical performance, proper nutrition can also have a significant impact on the overall health and well-being of young football players. Lopez et al. (2018) argue that proper nutrition is essential for maintaining athletes' health and preventing chronic diseases such as cardiovascular disease and diabetes. Furthermore, adequate nutrition can reduce inflammation and oxidative stress, which can enhance recovery and reduce the risk of chronic diseases, as emphasized by Arenas-Jal et al. (2020) and Hargreaves et al. (2022). Heiman and Olenik-Shemesh (2019) and Jezewska-Zychowicz et al. (2022) suggest that proper nutrition can also improve mental health and well-being, which are crucial for athletes' overall performance. This information is relevant to my study as it provides insights into the importance of proper nutrition for young football players' performance, injury risk, and recovery. By being aware of the physiological significance of diet and the research findings presented, one can understand to what extent nutrition can influence outcomes for football players.

### **3.2.3 Nutrition Strategies for Athletes:**

In the context of young football players, nutrient timing, supplementation, and sports-specific nutrition strategies such as carbohydrate loading, and fluid replacement may be particularly relevant. Potgieter's (2013) and Burke, Deakin, and Minehan's (2021) reviews suggest that these strategies can enhance athletic performance. However, it is important to note that the effectiveness of these strategies may vary depending on individual differences such as age, gender, and type of sport. Therefore, it is crucial to consult with a qualified sports nutritionist or healthcare provider to determine individual needs, as suggested by Maughan et al. (2018) and Burke et al. (2019).

Regarding protein supplementation, Jäger et al. (2017) emphasized its importance in supporting muscle growth and recovery, while Cintineo et al. (2018) reported that it positively affected athletic performance. However, Jonvik et al. (2019) found that protein supplementation may not enhance adaptations to endurance exercise training, indicating that it may not be necessary or practical for all young football players. Furthermore, Bergamo et al. (2023) reported that excessive protein intake might negatively affect bone mass and bone geometry in adolescent soccer players, highlighting the importance of balanced nutrition.

Given the lack of research on young football players' dietary beliefs and practices, it is important to examine how they perceive the role of nutrition in their athletic performance and how this translates into dietary practices. By doing so, we can identify potential areas for intervention and education to improve the nutritional habits of young football players, and ultimately, enhance their athletic performance and overall health and well-being.

In conclusion, the existing research highlights the potential benefits of nutrient timing, supplementation, and sports-specific nutrition strategies in improving the athletic performance of young football players. However, given the scarcity of research on this specific population's dietary beliefs and practices, it is imperative to delve deeper into how these players perceive nutrition's impact on their performance and how this perception shapes their dietary choices. This understanding will provide valuable insights for developing interventions and educational initiatives aimed at enhancing the nutritional habits of young football players, leading to improved athletic performance, overall health, and well-being.

### **3.3 Time pressure, balancing the clock, the challenges and importance of being a 24-hour athlete**

Recognizing that being a 24-hour athlete demands a meticulous approach to prioritization and coping with challenges that may arise (Fiskerstrand & Rimeslåtten, 2008). Optimal choices concerning rest, nutrition, and recovery are crucial to achieving optimal performance (Fiskerstrand & Rimeslåtten, 2008). However, time becomes scarce as young athletes seek to perform at school, social gatherings, training, and games (Fiskerstrand & Rimeslåtten, 2008). The idea of the 10,000-Hour Rule, initially proposed by Ericsson et al. (1993) and popularized by Gladwell (2008), suggests that approximately ten years or 10,000 hours of deliberate practice are required to attain expertise in a given field. However, recent studies by Williams & Reilly (2000) emphasize the importance of considering both innate talent and other factors, particularly genetics, and the environment, when assessing the significance of diet in athletic success. Genetic research has revealed that genetic factors can influence how the body absorbs and utilizes nutrients, and certain individuals may have genetic predispositions that make them more receptive to specific dietary approaches (Rankinen & Bouchard, 2006). Furthermore, studies have shown that environmental factors, such as access to healthy food and nutrition education, can have a significant impact on an athlete's ability to achieve optimal nutrition (Story, Neumark-Sztainer, & French, 2002).



The significance of nutrition in athletic performance must be considered (Walsh, 2019). Several social, psychological, and physiological factors may influence athletes to varying degrees (Walsh, 2019). According to recent studies, dietary supplements, particularly those containing creatine, beta-alanine, and caffeine, can improve physical performance and enhance recovery in athletes (Trexler et al., 2014; Harty et al., 2020). Moreover, adequate hydration is essential for optimal athletic performance and is crucial in preventing dehydration, which can impair cognitive function and physical performance (McDermott et al., 2017).

In addition to physical training and nutrition, psychological factors play a crucial role in athletic performance (Hays & Brown, 2004). Mental preparation, goal-setting, and self-talk are essential psychological skills that can help athletes achieve optimal performance (Hays & Brown, 2004). Research also suggests that mindfulness-based interventions and cognitive-behavioural therapy can improve athletes' psychological well-being and performance (Noetel et al., 2019; Dehghani et al., 2018).

When it comes to dietary habits, it is important to understand that nutrition plays a crucial role in athletic performance. Eating right can have a direct impact on energy levels, recovery, and the body's ability to function optimally during training and competitions. It is also worth noting that dietary habits can influence an athlete's mental state. For example, a balanced diet can contribute to regulating mood and reducing feelings of stress and anxiety that can negatively affect performance.

To better link dietary habits to performance, one can explore how proper nutrition can improve mental skills and psychological well-being. For instance, certain nutrients such as omega-3 fatty acids and B vitamins have been found to have positive effects on brain function and cognitive performance, which can be crucial for athletes needing to maintain focus and concentration during competitions (Gomez-Pinilla, 2008; Kennedy et al., 2016). Furthermore, a balanced diet that includes an adequate amount of carbohydrates, proteins, and healthy fats can help maintain stable blood sugar levels and prevent fatigue, which can directly impact athletic performance (Thomas et al., 2016; Nédélec et al., 2015). It is important to note that each athlete is unique, and their nutritional needs may vary based on their individual goals, sport, and body composition. A thorough assessment and adaptation of the nutrition plan in collaboration with a qualified nutrition expert can be crucial for optimizing dietary habits and performance (Thomas et al., 2016).

In summary, dietary habits play a significant role in athletic performance by influencing both physical and mental health, energy levels, recovery, concentration, and mood (Gomez-Pinilla, 2008; Kennedy et al., 2016; Thomas et al., 2016; Nédélec et al., 2015). By individually tailoring the nutrition plan and ensuring a balanced diet that meets the athlete's needs, it is possible to potentially improve performance and contribute to optimal athletic achievement (Thomas et al., 2016). It is therefore important to recognize the significance of nutrition as an integrated component of the overall performance factor, along with physical training and mental skills.

In conclusion, becoming a 24-hour athlete requires a skillful balance across various aspects of life, including nutrition, sleep, recovery, and psychological factors (Fiskerstrand & Rimeslåtten, 2008). Among these factors, nutrition plays a pivotal role in performance and overall well-being. Optimizing the body's fuel supply with the right balance of macronutrients and micronutrients can have a profound effect on an athlete's capacity to meet the physical requirements of their chosen sport. However, it is important to acknowledge that athletic success is a multifaceted phenomenon influenced by various factors beyond sheer dedication. While the 10,000-Hour Rule, which suggests that extensive practice is necessary for mastery, provides some guidance, it is crucial to consider additional elements, such as natural talent, genetic predisposition, and environmental factors (Macnamara et al., 2014).

Furthermore, recent studies highlight the potential benefits of dietary supplements and psychological interventions in enhancing athletic performance and well-being (Trexler et al., 2014; Noet et al., 2019; Dehghani et al., 2018; Walsh, 2019; Hays & Brown, 2004). However, it is important to approach these interventions with caution, as the impact may vary depending on individual needs and circumstances. Achieving optimal nutrition and addressing psychological aspects can be integral components of an athlete's journey, reflecting the intricate nature of performance. By recognizing the complexity of the interplay between nutrition, physical abilities, and other contributing factors, athletes can make informed choices and cultivate healthy habits to maximize their potential in their respective fields.

## **4 Method and Methodology**

In this chapter, I give an outline of the research method and how the research as a process unfolded. This will be done in two parts. Part one will show how the empirical data was gathered, and I will go into scientific grounding, method chosen, participation criteria, development of interview guide, conducting interviews, and interview problems in greater depth. Part two will show how the data was handled and analyzed. Furthermore, ethical considerations are stressed. This, being transparent, is done so the reader can understand the research method and the foundation for the conclusions (Thagaard, 2018).

### **4.1 Part 1. Qualitative Research**

Qualitative research aims to understand and interpret human behavior and experiences by collecting and analyzing non-numerical data such as observations, interviews, and written or visual materials. Qualitative research aims to understand a particular subject, social, cultural, or psychological phenomenon in-depth. As a phenomenon, it can be broad, such as a person's experience with food in relation to elite sports. Due to my interest in the practitioner's experiences concerning diet, I chose a qualitative approach and interviews to explore the topic. A qualitative assignment can be based on a person's interests and tries to understand human experiences from the inside (Brinkmann & Tanggaard, 2012, s.55), and moreover, this approach is appropriate for gaining deeper knowledge and a more holistic understanding of specific contexts. In qualitative research, the research process is often dynamic. It is characterized by a flexible research design, which means that the design and the problem can be changed or developed (Thagaard, 2018).

### **4.2 Scientific grounding**

Scientific grounding concerns the research process's direction and how the data material is interpreted and processed. Therefore, reflecting on one's position in the research will be vital (Thagaard, 2018). Regarding scientific theory, my projects could be labeled under constructivism but also with a phenomenological side to them. With a constructivist phenomenological grounding, I understand that I explore how my athlete's understandings and practices related to food and nutrition are shaped by their social, cultural, and contextual frames. Furthermore, I will also get access to how they experience food and nutrition in their sporting practices at this moment in their career.

A constructivist perspective opens scientific theory so that the prerequisites for investigation can be systematic (Solli, 2021). The basic idea of constructivism is that the world is something that people actively construct and thus cannot be considered objective (Postholm & Jacobsen, 2018). My informants might be part of different food cultures and/or are socialized differently in relation to food/nutrition. Additionally, they might also be part of different structures and institutions and hence will have different experiences. For instance, some athletes might have tight relations to Olympiatoppen's recommendations for sport and nutrition. One aim for me was to explore informants' experiences within the type of school they attend (public or elite). Although there are still various stereotypes and traditional perceptions about constructivism. The debate surrounding constructivism revolves around questions about the relationship between theory and reality. (Solli, 2021). Based on this starting point, it can be challenging to decide what is true and what is not because the structures and experiences of reality are different. Instead of emphasizing objective truth, constructivism considers how people are placed in the world. This means that a good representation of reality is when several people share the same perception, but that still does not mean it is reality (Postholm & Jacobsen, 2018). Constructivism consists of different directions and variations, whereas phenomenology is a form of constructivism (Postholm, 2010).

Based on Thagaard (2018), phenomenology is starting from subjective experiences and trying to understand the deeper meaning that each individual has inside. According to the phenomenological point of view, consciousness sees a person's lifeworld, whereas consciousness has an experience of perception (Postholm, 2010). Experience, therefore, shapes how people interpret and experience the surrounding context of which they are a part. With such an approach, scientific knowledge is formed based on the interview of participants' experiences. As a researcher, this entails actively listening to athletes' narratives, comprehending their unique contexts, and discerning the significant aspects that pertain to their comprehension, beliefs, and behavior. Furthermore, it is the case that people are different and are affected by the experiences that arise in different situations. Values and previous experiences influence the formation of experience. As people constantly evolve, their understanding continuously influences their experiences (Postholm, 2010).

## **4.3 Method**

The method can be said to mean ‘the path to the goal’ (Brinkmann & Tanggaard, 2012). The way forward. The choice of method is a matter of technique, and there must be a match between the purpose of the study and the strategy for data production (Creswell, 2013). The research question aimed at exploring how social forces, cultural elements, and the type of knowledge affect the diet and nutrition of young football players. For this, I found the interview to be a productive and appropriate way forward, and through this, I would get a hold of individual meanings, stories, and practices. Thus, through interviews, a researcher can learn a lot about the phenomenon from players placed in different types of backgrounds, as well as schools and different geographical locations in Norway.

### **4.3.1 Sampling and approaching the field**

The choice of sampling and approaching the field is an essential aspect of research, (Thagaard 2018). To ensure detailed and meaningful insights, a smaller number of interviews were prioritized over a larger, less detailed sample.

A strategic selection of informants was undertaken to represent the phenomena under investigation, as suggested by Thagaard (2018). Specifically, football athletes aged 18 to 19 from Finnmark and the Eastern regions of Norway were targeted. Drawing on Thagaard's suggestions, the sample was chosen to reflect and make maximal diversity of contexts, including athletes attending public sports programs in Finnmark and those in private schools such as Wang or NTG in the eastern part of Norway. Recruiting participants at the highest possible level of competition for this age group was sought. Therefore, interviewees affiliated with the second division in Finnmark and the elite series in the eastern part of Norway were selected. Drawing on my personal experience as a lifelong football player I was able to recruit interviewees who belonged to elite series clubs.

In this study, there is the potential for gender imbalance, it is important to acknowledge the limitations of focusing exclusively on male soccer players. The exclusion of female football players may weaken the validity and generalizability of the findings, as noted by Chinurum & Ogunjimi (2014), and O’Neill (2014). It is valued to include both genders in research on athletes to gain a more holistic understanding of dietary practices and challenges. However, due to the scope of the thesis, the focus was narrowed down to male teams and athletes, as Thagaard (2018) suggests making pragmatic decisions based on the time available for a master thesis undertaking.

Regarding the interview process, Thagaard's (2018) recommendations for establishing rapport and creating a relaxed atmosphere were followed. To build rapport, I traveled to the player's home places and conducted interviews at homes and at schools. I initiated each interview with general topics, such as discussing football and the well-being of the person, following Thagaard's (2018) guidance on creating a comfortable and conversational environment. I knew some players from before, while others were strange to me. I used the time to get to know them before the interview was implemented. This approach allowed for tailoring the conversation to each individual and creating a good atmosphere for conversations. General topics were discussed, and the research project and its rationale were explained. Throughout the interview process, Thagaard's (2018) emphasis on adaptability and flexibility was kept in mind. Recognizing that interviewees may have different needs and desires, efforts were made to accommodate their preferences and create an encouraging environment for open and authentic dialogue.

#### **4.3.2 The creation of an interview guide, and interview qualities**

Kvale and Brinkmann (2015) have written about the characteristics of a good research interview in their book "Det kvalitative forskningsintervju". According to them, a good research interview should have some qualities: First, it should be structured. The interview should have a well-defined plan and structure to cover relevant topics. This structure helps to ensure that the interview is comprehensive and systematic. Second, the interview should be open. It should allow for flexibility and openness in the conversation so that the informant can express themselves freely, as I have mentioned this is a quality I wanted to strive for. According to Braun, Clarke, Hayfield, Moller, and Tischner (2019), it is crucial to understand the research questions or purpose of the interview. This note helped me structure the interview and ensure that the questions were open-ended, allowing for different answers to be elicited.

During the interview, I worked to be flexible, allowing detours in conversations and being open to unexpected answers while still maintaining an overall structure. In other words, it became important for me to give room for personal stories, and let topics stall and mature in the conversation, and this allowed for more detailed and nuanced answers, and more comprehensive data to be collected. In line with Rabionet (2016), being flexible also enables researchers to follow up on unexpected or interesting answers and hence live up to the idea of more detailed and nuanced answers from the interviewee. This is also in line with Kvale and

Brinkmann's (2015) third quality, the interview should be depth oriented. The focus should be on the informant's subjective experiences and perspectives rather than surface-level information, guided by "a guide". The interviewer should maintain the same approach, as far as possible, and style throughout the interviews to ensure that the data collected is reliable and valid. Finally, the interviewer should be empathetic. They should have a deep understanding of the informant's experiences and be able to approach the conversation with empathy and understanding. This helps build rapport and trust between the informant and interviewer, leading to more meaningful and insightful conversations. Due to my background as a former elite player. On the importance of building trust with the interviewee, it is also essential to create a comfortable atmosphere where they felt at ease and felt that they could share their insights openly.

#### **4.4 Semi-structured interview**

To ensure that a semi-structured interview study is effective and valuable, several important aspects must be taken into consideration. According to Braun, Clarke, Hayfield, Moller, and Tischner (2019), it is crucial to understand the research questions or purpose of the interview. This helped me structure the interview and ensure that the questions were open-ended, allowing for different answers to be elicited. The importance of building trust with the interviewee was essential in creating a comfortable atmosphere where they felt at ease and felt that they could share their insights openly. This is supported by research from Braun et al. (2019), who emphasize the importance of establishing a friendly and welcoming tone, actively listening to the interviewee, and showing interest in their insights. During the interview, it was crucial to be flexible and open to unexpected answers while still maintaining an overall structure. This allowed for more detailed and nuanced answers and for more comprehensive data to be collected. According to Rabionet (2016), being flexible and able to follow up on unexpected or interesting answers is essential to obtain more detailed and nuanced answers from the interviewee. Additionally, it is important to be aware of any biases and consider the cultural context of the interviewee to ensure that the data collected is valid and reliable. Being mindful of these factors helped ensure that the data collected accurately reflected the interviewee's perspectives.

Finally, it was essential to have a plan for transcribing, analyzing, and interpreting the data collected from the interview. Braun et al. (2019) note that this may involve the use of transcription software, coding of data, and drawing conclusions based on emerging themes

and patterns. Data coding was performed, but not with the assistance of transcription software. This process helped me draw meaningful conclusions from the data collected during the interviews. Considering these factors, I conducted semi-structured interviews that provided valuable insights and ensured that the data collected was reliable and valid. This aligns with the findings of Braun et al. (2019) and Rabionet (2016), who emphasize the importance of these factors in conducting successful semi-structured interviews.

#### **4.5 Test interview**

Kvale and Brinkmann (2015) have written about the characteristics of a good research interview in their book "Det kvalitative forskningsintervju". According to them, a good research interview should have the following qualities: First, it should be structured. The interview should have a well-defined plan and structure to cover all relevant topics. This structure helps to ensure that the interview is comprehensive and systematic.

Second, the interview should be open. It should allow for flexibility and openness in the conversation so that the informant can express themselves freely. This creates a more natural and less rigid environment, allowing the informant to share their experiences and perspectives more authentically. Third, the interview should be depth oriented. The focus should be on the informant's subjective experiences and perspectives rather than surface-level information. This helps to uncover deeper insights and understandings that can be missed in more superficial interviews.

Fourth, the interview should be consistent. The interviewer should maintain the same approach and style throughout the interview to ensure that the data collected is reliable and valid. Finally, the interviewer should be empathetic. They should have a deep understanding of the informant's experiences and be able to approach the conversation with empathy and understanding. This helps build rapport and trust between the informant and interviewer, leading to more meaningful and insightful conversations.

In conclusion, Kvale and Brinkmann (2015) emphasize that a good research interview should be carefully planned and thoughtfully executed. The interviewer should be aware of their approach and style and work towards creating a structured, open, depth-oriented, consistent, and empathetic conversation. At the same time, good research interviews must be learned through trial and error. This means that preparation and training are important to get a good interview. Just like it is in sports.



Because of this, I, therefore, chose to take individual pilot interviews. Pilot interviews play an important role in qualitative research as they allow researchers to test and improve the interview guide, practice the interview technique, and enhance the interviewer's ability to conduct an open and compelling conversation. They also allow for identifying potential limitations or challenges during the research interview, enabling the researcher to improve their approach. Pilot interviews allow the researcher to gain a deeper understanding of the informant's experiences and perspectives, which can improve the interview approach and the quality of the collected data. Therefore, pilot interviews were helpful (Thagaard, 2018). I did the first trial interview with my brother, who knew the team. The questions were asked informally to examine how the question wording should be. The following two interviews were conducted with informants who had the experience of combining school with sport and therefore had matching criteria as the study's selection. The primary objective of the pilot interviews was to assess the efficacy of the interview protocol in eliciting information pertinent to the stated research problem, to evaluate the pertinence of the inquiry, and to gauge the duration of the interview process. Additionally, the pilot interviews provided skills-building opportunities to establish rapport, active listening, and question formulation. These interviews increased confidence and practical expertise deemed necessary for conducting the actual research interviews.

#### **4.6 Background for method selection**

Analysis of meaning and interpretation is frequently the goal of qualitative research. As a researcher, I am interested in their thoughts on reality from the viewpoint of how they perceive it. This means that I, as a researcher, will not have any representation of the athletes' perspectives in any way. My job as a researcher is to analyze their different interpretations (Järvinen & Mik-Meyer., 2017).

In this project, I want to learn more about how 18-19 young footballers relate themselves to food, diet, and nutrition, using thematical analyses. The data material is discussed and structured in-depth utilizing theme analysis. As previously said, this strategy allows for further exploration by analyzing the study group's various points of view. Thematic analysis is a versatile research approach that allows for theoretical independence while also assisting in the detailed description of the material. The freedom that analysis enables can be a problem when adopting this approach; thus, the six steps I have examined help maintain focus on what

one should do (Braun & Clarke, 2006). I want to utilize interpretative thematic analysis to find meaning patterns in my thesis.

Concerning my problem setting, thematic analysis is an appropriate method for data analysis because it allows for a detailed examination of the participants' experiences and perspectives. This method is beneficial for qualitative research, as it allows for identifying patterns and themes within the data, which can provide insight into the participants' dietary knowledge and practices. One of the key strengths of thematic analysis is its ability to identify patterns and themes that may take time to be apparent in the raw data. This allows for a deeper understanding of the participants' experiences and perspectives and can provide insight into the factors influencing their dietary knowledge and practices. Additionally, Thematic analysis can help identify the cultural, social, and personal factors that affect the dietary habits of young football players, which is essential for understanding the dietary knowledge of players in Eastern Norway and Finnmark. (Braun & Clarke, 2006; Braun & Clarke, 2013; Braun & Clarke, 2022).

In summary, thematic analysis is an appropriate method for analyzing data in this problem setting as it allows for a detailed examination of the participants' experiences and perspectives and provides insight into the factors that influence their dietary knowledge and practices, including cultural, social, and personal factors.

#### **4.6.1 The Interview guide tested and built self-confidence**

In the field of qualitative research, it is essential to approach the research process with a reflexive and iterative mindset, as emphasized in the works of Whiting (2008), Krauss et al. (2009), and Cridland et al. (2015). When I designed the interview guide, I strived to follow methodological guidelines as stated in the previous section – to have clear, specific objectives and to formulate open-ended and non-leading questions to elicit a wide range of participant responses. In conclusion, Kvale and Brinkmann (2015) emphasize that a good research interview should be carefully planned and thoughtfully executed. The interviewer should be aware of his/hers approach and style, and work towards creating a structured, open, depth-oriented, consistent, and empathetic conversation. What does this mean in practice? For a novel researcher, this means that good research interviews must be learned through trial and error. This means that preparation and training are important to get a good interview. Just like it is in sports. Because of this, I, conducted pilot test interviews, with someone I trusted. Pilot interviews play an important role in qualitative research as they allow researchers to test and

improve the interview guide, practice the interview technique, and enhance the interviewer's ability to conduct an open and compelling conversation. I did the first pilot interview with my brother, who is a football player. The questions were asked informally to examine how the question wording should be. Subsequently, two interviews were conducted with informants who had the experience of combining school with sport and therefore had matching criteria as the study's selection. The primary objective of the pilot interviews was to assess the efficacy of the interview protocol in eliciting information pertinent to the stated research problem, to evaluate the pertinence of the inquiry, and to gauge the duration of the interview process. Additionally, the pilot interviews provided me with skills-building, sensitivity to establish rapport, practice active listening, and question formulation. These interviews increased confidence and practical expertise deemed necessary for conducting the actual research interviews.

#### **4.6.2 Conducting interviews**

The interview process is an important part of the research process, but it can also be challenging. To ensure a relaxed and safe atmosphere for the interviewee, it is important to have a thorough plan for the interviews and to inform them of their rights. An open approach can also help create a more relaxed atmosphere and obtain valuable data in the research process (Thagaard, 2018). I conducted 3 interviews with football players from Finnmark that were done at my own home and 3 interviews with football players from Eastern Norway that were done at my parents' home. I had the advantage of knowing some of the athletes beforehand, which made it easier to connect with them, but also presented some challenges in terms of keeping the interview on track (Thagaard, 2018). I started each interview by talking about general topics, such as football and how the person was doing, before explaining what my research project was about and informing them of their rights (Thagaard, 2018). This created a more relaxed atmosphere, and the interviews felt more like conversations than formal interviews. I noticed that by having an open approach and asking open-ended questions, the athletes began to tell stories that were valuable data in the research process (Thagaard, 2018). Later, I conducted interviews with football players in Eastern Norway, where I did not have as much familiarity with the athletes. Here, I took the time to get to know them before the interview started and used the information, I received to tailor the interview to each athlete. I continued to start with general topics and explain the research project and their rights. In addition, I told them a little about myself and the rationale behind my research project. The reason for doing this was that they did not know me to the same

extent as the athletes from Finnmark did (Thagaard, 2018). I noticed that I had to work a little harder to get the answers I needed from these athletes and had to ask more follow-up questions to get the necessary answers. But eventually, I was able to establish a good conversation flow that yielded good results. It is important to be aware that interviewees may have different needs and desires when it comes to the interview, and that one must adapt to this (Thagaard, 2018). Having a thorough plan and informing about rights is important to ensure that the interview is conducted in an ethical and professional manner. According to Thagaard (2018), an interview guide should be designed in such a way that it allows for all the information one wishes to obtain, while also being open to unexpected answers and questions from the interviewee. It is also important to ensure that one does not ask leading questions or influence the interviewee in any way that may affect the answers. I noticed that this could be challenging in some cases where I received shorter answers than I had desired. When it comes to informing about rights, it is important to provide clear guidelines on what will happen with the information given in the interview, how it will be used, and how long it will be stored. In addition to informing about the right to withdraw information and to access what is being done with the information. This will help create trust between the interviewee and the interviewer and ensure that the interview is conducted in an ethical manner (Thagaard, 2018).

### **4.6.3 Transcribing**

Lastly, it was crucial to establish a systematic approach for transcribing, analyzing, and interpreting the interview data. According to Braun et al. (2019), this may involve the use of transcription software, coding of data, and drawing conclusions based on emerging themes and patterns. Although I did not utilize transcription software, I transcribed the interviews meticulously, enabling me to extract meaningful insights while the information was still fresh in my mind, and I could re-live the situation. At the same time, all the material was deleted as it was no longer needed. It is essential to accurately transcribe qualitative data to ensure the reliability and validity of the subsequent analysis. By including detailed information such as pauses and interjections, the transcription can provide a rich and nuanced account of the conversation, capturing not only the words spoken but also the tone, pace, and overall flow of the discussion (Thagaard, 2018). This level of detail is particularly important in fields such as sports science, where subtle nuances in communication can have a significant impact on performance outcomes.

Furthermore, it is crucial to maintain the confidentiality and anonymity of research participants to protect their privacy and ensure ethical research practices. By deleting all identifying information, we can ensure that the research process is conducted with integrity and respect for the participants' rights (Liamputtong, 2013). In summary, transcription is an essential step in qualitative research, particularly in sports science, where clear and accurate communication is vital to success. By ensuring the accuracy and confidentiality of the transcribed data, researchers can conduct their analyses with confidence and integrity.

#### **4.7 The role of a researcher and ethical considerations**

In the context of this master's thesis, the role of the researcher and ethical considerations are of utmost importance. The interactions between the researcher and the participants, both direct and indirect, hold significant value in shaping the knowledge generated, aligning with a constructivist view of science (Thagaard, 2018). As a former football player with a keen interest in elite sport and nutrition, my interactions with student participants who are at the early stages of their careers become the foundation for the communicated and created knowledge. Recognizing my influence and position in the interview situation is crucial, as the participants may perceive me as a peer or an insider with specialized knowledge. This becomes a micro situation in the interview situation (Alvesson 2011:34) where various norms, expectations, and discourses might come into play (ibid). For me then it became important to be mindful of their perspectives and limited experience with being interviewed about their experiences and opinions. Therefore, throughout the interview process, I have strived to reflect on my role as a researcher and consider the participants' viewpoints (Thagaard, 2018). Establishing rapport with the participants has been a key aspect discussed in the previous section, as it can greatly influence the outcomes of the interviews. To initiate the interviews, I provided a detailed account of my athletic background and educational qualifications, aiming to establish transparency and credibility. Moreover, I actively encouraged the participants to ask any questions they had, and I responded to their inquiries while guiding the conversation toward the desired direction (Thagaard, 2018). Recognizing that the data material produced is influenced by the interplay between the interviewer and the interviewee, I adopted a subjective approach in both the execution and interpretation of the interviews (Merriam & Tisdell, 2015). It is important to recognize that as a researcher I am a co-creator of knowledge and that the interview process itself is a social interaction (Alveson, 2011).

Ethical considerations play a crucial role in this research, particularly regarding the origin and group of participants. In accordance with the guidelines provided by the Norwegian National Research Ethics Committees (NESH, 2016), it is necessary to obtain permission from the Regional Committee for Medical and Health Research Ethics (REK) to conduct this type of project. These guidelines exist because research involving athletes requires special attention due to the potential impact it can have on their well-being (Bruusgaard, 2015). Throughout the research process, I have followed these strict guidelines, ensuring that the athletes' participation is voluntary and that their rights and welfare are protected. Informed consent was obtained from all participants, and measures were implemented to maintain confidentiality and protect their identity and personal information. By actively considering these ethical considerations and adhering to the guidelines set by REK, this research has been conducted in a responsible and respectful manner, safeguarding the rights and welfare of the participating athletes. This reflective and iterative approach, combined with a subjective interview methodology, has contributed to a comprehensive understanding of the participants' experiences. It has also created a safe and trusting environment, promoting optimal and uninterrupted exchange of individual perspectives and experiences (Brinkmann & Kvale, 2015). This approach enhances the quality of the interviews and fosters deeper dialogue.

I examine my own work in relation to understanding because I come from a sports/football culture where hard work and thorough training generally contribute to solid performances. Some preconceived opinions may influence my investigation of dietary knowledge among young Norwegian football players. These may include: the assumption that players from private sports programs have better dietary knowledge and practices than those from public programs, the expectation that players from Eastern Norway have better dietary knowledge and practices than those from Finnmark due to the region's economic and cultural differences, the assumption that young football players are primarily interested in performance-enhancing supplements rather than a balanced diet, and the expectation that young football players must be more knowledgeable and interested in the nutritional aspect of the sport. When conducting research that involves collecting personal data through direct contact with interview subjects, it is crucial for me to comply with strict requirements for the treatment of personal information to ensure ethical research practices (NSD). This ensures that I follow guidelines and requirements established by relevant authorities and privacy legislation. I take the time to thoroughly review applicable guidelines and requirements to ensure full compliance with privacy laws (NSD).

To ensure ethical treatment of personal information in my research, I ensure that informed consent is obtained from the participants (Thagaard, 2018). I take the time to explain the research purpose, data collection process, and how the data will be used. This gives participants the opportunity to make informed choices about their participation and ensures that their rights are respected (Thagaard, 2018). I am also committed to maintaining confidentiality and security for all collected personal information, anonymizing identifiable information to protect participants' privacy (NSD). This involves taking necessary measures to ensure that participants' personal information is handled in a secure and responsible manner (NSD).

I also take ethical responsibility by considering the implications my research may have for the participants and society at large (Thagaard, 2018). My goal is to avoid causing harm or distress to the participants, and I communicate my findings in a way that respects their dignity and privacy (Thagaard, 2018). By following guidelines and ethical principles, I ensure that my research is responsible and upholds the rights and dignity of the participants (Thagaard, 2018). Regarding the possibility of encountering eating disorders in my research, I acknowledge my limitations as a young researcher with limited resources and expertise to handle such sensitive information. Therefore, I have decided to exclude this topic from my study and present it as a potential weakness.

I examine my work in connection to understanding because I come from a sports/football culture where hard effort and rigorous training generally contribute to solid performances. Some preconceived meanings could influence my investigation of dietary knowledge among young Norwegian football players. These could include: The assumption is that players from private sports programs have better dietary knowledge and practices than those from public programs. The expectation is that players from Eastern Norway have better dietary knowledge and practices than those from Finnmark due to the region's economic and cultural differences. The assumption is that young football players are primarily interested in performance-enhancing supplements rather than a balanced diet. The expectation is that young football players must be more knowledgeable and interested in the nutritional aspect of their sport.

## **5 Part 2. Analysis and data processing**

The analytical process adopted a structured approach, which allowed for the fragmentation and segmentation of data into smaller elements directly pertinent to addressing the overarching research question (Miles, Huberman & Saldaña, 2019). This method facilitated a comprehensive and systematic inquiry of the dataset to identify essential patterns and uncover key features that could significantly contribute to a more nuanced understanding of the specific problem under investigation. In the study, I use a combination of inductive and deductive thematic analysis. With a deductive approach, I applied principles from relevant theoretical frameworks and the research question to guide my search for themes (Thagaard, 2018). This involved using pre-existing concepts and categories as a starting point for identifying patterns and themes in the data (Thagaard, 2018). Inductive analysis, on the other hand, involved allowing themes to emerge from the data itself, without being constrained by preconceived notions or theoretical frameworks.

The deductive analysis involves using existing concepts and categories as a starting point to identify patterns and themes in the data (Thagaard, 2018). For example, Stambulova's model could contribute to identifying transitional periods and challenges related to nutrition that young football players may encounter at different stages of their careers. On the other hand, inductive analysis involved allowing themes to emerge from the data itself, without being constrained by predefined concepts or theoretical frameworks. This allowed me to discover new and unexpected themes related to participants' dietary habits and practice adaptations that might not have been captured without an open approach. For instance, through inductive analysis, themes emerged concerning participants' upbringing and family activities that influenced their dietary choices, as illustrated by the quotes "I have grown up, we had fish at least 2-3 times a week" and "We had a lot of fish and dried fish, and I used to hunt grouse frequently.

### **5.1 Thematical analysis, how has data been handled and analyzed**

The findings of this master's thesis are derived from an inductive-deductive thematic analysis of the data. Braun and Clarke's (2015) comprehensive and structured framework for conducting thematic analysis was employed, which emphasizes the non-linear nature of the process, even though it is composed of distinct phases. In this study, the method of thematic analysis (Braun & Clarke, 2015) was utilized for analyzing the qualitative data collected from



6 young football players. This method is widely used in social sciences and falls between essentialism and constructionism, acknowledging the role of both the researcher and participants in constructing themes (Braun & Clarke, 2022). The thematic analysis emphasizes the significance of individual experiences and social and cultural context (Cohen et al., 2018). A characteristic of thematic analysis is its fluid and recursive approach to analysis, as emphasized by Clark et al. (2021). The six phases of the analysis, include familiarization with data, generating initial codes, searching for themes, reviewing themes, defining, naming themes, and producing the report (Braun & Clarke, 2013; Braun & Clarke, 2006). This model was utilized to derive, analyze, and present the patterns of meaning from the qualitative data. Adopting a neutral and unbiased stance is considered a fundamental principle of qualitative research, as highlighted by Sparkes and Smith (2014), and this approach was also considered in this study.

## **5.2 Weaknesses of the method**

Thematic analysis is recognized as a valuable approach, but it is important to be aware of several potential limitations in the method (Braun & Clarke, 2006). By reflecting on these limitations, I have attempted to enhance the validity and reliability of my findings. One of the central limitations I have considered is the inherent subjectivity involved in the coding and theme identification process (Braun & Clarke, 2006). I have been mindful that my own biases and perspectives can influence the results and potentially introduce unintended interpretations. To reduce this subjectivity, I have been aware of my biases and strived to achieve objectivity in the analysis.

Another important limitation I have considered is the time-consuming and labor-intensive nature of the thematic analysis, especially when working with large datasets (Braun & Clarke, 2006). To address this challenge, I have carefully planned and allocated sufficient resources to the thematic analysis, and I have set realistic expectations for my research timeline. Furthermore, I have reflected on the lack of clarity in a theoretical framework for thematic analysis, which requires extensive preparation before the actual investigation can be conducted (Braun & Clarke, 2013). I have conducted thorough literature reviews and established a solid theoretical foundation for my study to ensure that my thematic analysis is contextualized within a broader theoretical perspective.

I have also been mindful of the challenge of limited transparency in thematic analysis, where it can be difficult to replicate or explain the coding and theme identification process (Braun &

Clarke, 2006). To address this limitation, I have documented and explained my coding process thoroughly, providing detailed descriptions to increase transparency and facilitate the replication of my study. A significant limitation that I have considered is the limited generalizability of findings from thematic analyses (Braun & Clarke, 2006; Braun & Clarke, 2013). I have been cautious about generalizing my findings to a larger population and have acknowledged the need for complementary quantitative methods to enhance the generalizability of my findings. By carefully considering this limitation, I have ensured that my conclusions are not drawn beyond what is reasonable based on my thematic analyses. Finally, I have been mindful that thematic analysis is based on assumptions that can be difficult to confirm or refute (Braun & Clarke, 2006; Braun & Clarke, 2013). I have recognized the importance of being critical of my own assumptions and have been open to challenge them throughout the research process. This has helped ensure that my findings are based on a solid foundation and not solely on untested assumptions. Throughout my master's thesis, I have carefully addressed and reflected on these limitations presented by Braun and Clarke (2006; 2013). By being aware of my biases, effectively planning and managing my time and resources, establishing a theoretical foundation, documenting my coding process, considering the generalizability of my findings, and being critical of my assumptions, I have strengthened the validity and reliability of my findings based on thematic analysis.

I have emphasized being a reflective and critical researcher throughout the research process and have sought to minimize potential limitations and uncertainties in the method. By taking these limitations into account, I have ensured that my findings are thorough, reliable, and generalizable within the context in which they were studied. It is important to note that while thematic analysis has its limitations, it is a valuable method that provides insights and understanding of complex phenomena. By being aware of the strengths and limitations of the method, researchers can use it in a critical and informed manner, thereby contributing to the advancement of knowledge in their field.

### **5.3 Epistemological orientation**

In this master's thesis, I have chosen thematic analysis as my data analysis method, influenced by my epistemological orientation (Ültanir, 2012; Carter & Little, 2007). Thematic analysis is suitable for a constructivist epistemological orientation, which focuses on knowledge construction between the researcher and participants. As a researcher, it allows me to identify themes that are important to the participants and reflect on their perspectives and experiences.

Through thematic analysis, I can also understand the meaning and context of the participants' experiences (Ültanir, 2012; Carter & Little, 2007). However, thematic analysis is a method that allows the researcher to identify patterns and themes in the data, independent of epistemological orientation. It is a useful tool for uncovering underlying meaning and context in the data (Hiller, 2016).

I have chosen to approach my research question from both a constructivist and postpositivist perspective. Constructivism assumes that knowledge is socially constructed and acknowledges that reality is diverse and subjective. As a researcher, I approach the study with an open mind and acknowledge that there may be different perspectives on dietary knowledge among young Norwegian football players. I am also prepared to revise or reject research questions as new insights emerge from the data (Tenny et al., 2022). Regarding thematic analysis, I will be open to new themes that emerge in the data and avoid imposing my own assumptions on the data (Hiller, 2016).

#### **5.4 The six phases of the analysis process**

The first phase of thematic analysis involves familiarizing oneself with the data and identifying relevant content through active and analytical reading (Braun et al., 2015). This process begins during transcription, where a thorough reading of the transcriptions allows for a deep immersion in the data and an understanding of the content of each interview. As a researcher, I noted down keywords that capture the essence of the text, such as "Diet and upbringing," "Balancing football, school, and dietary habits," and "Support and guidance on nutrition and exercise." These keywords are important for subsequent analyses and can serve as useful reflections on the research question.

Furthermore, during this initial analysis, it is crucial to engage in an iterative process of reading and revisiting the data, taking notes, and reflecting on emerging themes. This process requires a thorough and systematic approach to ensure that all relevant content is captured, and that themes and patterns are accurately identified. It is also important to maintain an open mind and be attentive to unexpected or deviant findings that may challenge initial assumptions or hypotheses (Braun et al., 2015). By following a thorough and iterative process, the researcher can ensure that the analysis is comprehensive, precise, and insightful, and provides a solid foundation for subsequent analyses.

In the second phase of thematic analysis, the goal was to generate robust codes that accurately captured the meaning of the data (Braun et al., 2015). I used a systematic approach to code generation, first employing an inductive approach to develop descriptive codes for the data. Then, I used a deductive approach where I applied concepts from the theoretical framework of the study as codes, where relevant. This approach allowed me to create a clear and organized representation of the relevant content in the data. However, this part of the analysis was time-consuming. Furthermore, as thematic analysis is a dynamic process, I went back and revised some of the codes after further readings (Braun et al., 2015). The codes consisted of either short phrases or single words, and the best codes were easily understandable and avoided the need to refer back to the original text (Braun et al., 2015).

Next, the codes were transferred into a tabular format, where a list of codes was presented along with their respective descriptions (Braun et al., 2015). The systematic process resulted in a clear and concise overview of the content of the interviews. An example of an inductively generated code that was later modified through a deductive approach is the code "The importance of diet for football performance," which was revised to "The effect of dietary habits on sports performance." This illustrates that a code that was originally generated using an inductive approach was later changed to a different code using a deductive approach. This was due to repeated engagement with the data and a systematic process of generating and refining the codes (Knutsen, 2018).

In the third phase of the analysis, I searched for themes that had broader significance than the codes, as a theme should encompass multiple codes (Braun et al., 2015). To identify the themes, codes with similarities were grouped, and descriptive words or short phrases were used to generate the themes. Initially, an inductive approach was used, where the themes were derived directly from the participants' experiences without imposing any preconceptions. Then, a deductive approach was employed, where the themes were based on the theoretical framework and previous research. This facilitated the categorization of codes into thematic groups and the naming of the themes.

In the fourth phase, the themes underwent a thorough evaluation to ensure their descriptive validity and relevance to the overall textual context. To achieve this, I conducted a comprehensive review of the original dataset to assess whether the themes captured the essence of the text, as recommended by Braun et al. (2015). The evaluation involved asking questions such as "Is it relevant to the research question?" and "Does it include diverse

perspectives in the data?" with the help of Braun et al. (2015) to critically assess the themes. Some themes were either discarded or replaced with new ones based on the results of the evaluation. Additionally, the themes had to be conceptually meaningful and relevant to the research question, going beyond merely describing characteristic features of the text (Braun et al., 2015).

In the fifth phase of thematic analysis, the themes were further refined and defined. This involved a detailed exploration of each theme and underlying codes to ensure a thorough understanding of their meaning and context. I performed a careful reading of the transcriptions and went through the codes and themes multiple times to ensure a precise and comprehensive analysis. This in-depth analysis allowed me to identify any subcategories or sub-themes within each main theme and contributed to developing a more complete understanding of the data.

In the sixth phase of thematic analysis, the findings were presented in a meaningful and coherent manner. I developed a narrative description of the themes and their relationships, using quotes and examples from participants' transcriptions to support and illustrate each theme. This presentation of the findings was structured and organized, reflecting careful consideration of the research question and the overall purpose of the study.

To ensure scientific integrity and quality throughout the analysis, I employed a combination of internally and externally guided reflection. I engaged in reflective discussions with colleagues and supervisors to explore and challenge my own interpretations and findings. This helped ensure objectivity and validity in the thematic analysis.

## **5.5 Enhancing the quality and validity of qualitative research: A focus on credibility, reflexivity, and transferability**

By ensuring credibility, reflexivity, and transferability, I can strengthen the quality and relevance of my qualitative research findings and contribute to knowledge development in my field (Nadim, 2015; Carminati, 2018; Delmar, 2010). Credibility is crucial for determining whether the study was conducted reliably. This involves the researcher describing how the data were processed and being transparent about how the interpretations were formed based on the data (Yardley, 2017). By describing the method I have used, in detail, and honestly, and by providing access to the raw data that underlies the analysis, I can help ensure the

replicability of the results and increase the credibility of my study (Fineberg & Allison, 2020).

Reflexivity also plays a vital role in assessing the quality and validity of my research. By being aware of my own biases, perspectives, and potential influences, I can reduce subjectivity and understand how my attitudes may have influenced the research process and interpretation of the data (Carminati, 2018; Delmar, 2010). This leads to a more critical and conscious approach, increases confidence in my findings, and provides a solid foundation for further analysis and conclusions.

On the other hand, transferability relates to the extent to which my findings can be generalized to other contexts or populations. As a researcher, I acknowledge that qualitative studies are often context-specific and focus on limited samples. Therefore, I must be cautious about broadly generalizing my findings while remaining open to the possibility of transferability to similar contexts or situations (Polit & Beck, 2010). By identifying and discussing contextual factors that may affect the generalizability of my findings, I can contribute to improving the understanding and interpretation of the results. In the conclusion of my research, I will present my findings with necessary contextualization and reflection on generalizability. This will help emphasize both the strengths and limitations of my findings and lay the groundwork for further research. I will encourage further studies that explore similar phenomena in different contexts and with diverse participant groups. This will contribute to building a more comprehensive knowledge base and increasing the generalizability of my results (Yardley, 2008; Thagaard, 2018; Swedberg, 2016).

Overall, a thorough assessment of credibility, reflexivity, and transferability is crucial to ensure the quality and validity of qualitative research (Carminati, 2018; Delmar, 2010; Yardley, 2017). By considering these factors, I can strengthen my confidence in my findings and contribute to a more comprehensive understanding of my research topic.

## **5.6 Consent**

To ensure respect for individuals' autonomy, obtaining informed consent is important in research projects (Thagaard, 2018). Participation in the project required written informed consent from all participants. Prior to the interview and participation, an information sheet with a consent form was sent out, outlining the participants' rights, the nature of the study, and the handling of personal data (see appendix). This was done to ensure ethically sound

research and to protect the participants' rights and privacy. Participants were required to provide written consent before participating in the interviews, and this documentation was collected in advance. The study's objectives, methodology, and potential risks and benefits were communicated to the participants to ensure they were fully informed about their involvement in the research project (Kvale & Brinkmann, 2015). The participants were made aware that the study had received ethical clearance from the Norwegian Centre for Research Data (NSD). Participation was based on voluntary consent, and participants were informed of their right to withdraw from the study at any stage without fear of negative consequences.

## **5.7 Selection**

After discussions with my advisors, we have decided that the research project will be based on data collected from interviews with six individuals. One of the main objectives of this study was to investigate the knowledge and experiences of high school students who are athletes and how their experiences impact them. To achieve this, it was considered more appropriate to include a smaller number of in-depth interviews rather than a larger, less detailed sample. I strategically selected informants who primarily represented the phenomena under investigation. The athletes, aged 18 to 19, were from Finnmark and the Østland region in Norway, and they were all football players. I established two main criteria for my sample. Three of the athletes were to be participants in a public sports program in Finnmark, while the remaining three were to attend a private school such as Wang or NTG in the Østland region. Additionally, I aimed to recruit participants at the highest possible level of competition. Due to my personal experience as a lifelong football player, I managed to recruit interviewees who belonged to elite clubs and were members of national youth teams. This was made possible by my network within the sports community.

Considering my focus on diet and practices among young football players, the decision to only interview male football players may raise questions about whether excluding female football players weakens the generalizability of the study's findings and potentially presents a biased view of dietary practices and challenges faced by young football players (Chinurum, Ogunjimi, & O'Neill, 2014). While male football players can provide valuable perspectives due to their dominant position in football, it is important to include both genders in research on athletes to achieve a more comprehensive understanding of dietary practices and challenges among young football players. Gender is a crucial factor in sports, and excluding

female football players may undermine the generalizability of the study's findings (Chinurum, Ogunjimi, & O'Neill, 2014).

## **5.8 Confidentiality**

Ensuring confidentiality is an important ethical principle in research. It involves researchers treating all information with great discretion and ensuring strict confidentiality (Thagaard, 2018). Protecting the anonymity of research participants is crucial, and researchers must take all necessary measures to ensure that no individuals can be identified from the research data (WMA Declaration of Helsinki, 2013). To protect the confidentiality of participants, I have implemented several measures. The personal computer used to store interview data is secured with password authentication. The information stored on the computer does not include personal identifiers, and no data has been sent via email. After transcribing the audio files, they were immediately deleted.

Regarding anonymity, I understand the concern related to the possibility of identifying participants by searching for names, club names, or schools. To ensure their anonymity, I have taken precautions to avoid including personally identifiable information in the research data. Additionally, I will use pseudonyms or assign participant numbers when reporting and presenting the findings to further protect their identities. Finally, it is important to note that the inclusion of eating disorders may pose a potential challenge in my study. If any issues or concerns related to eating disorders arise during the research, I will take necessary measures to safeguard the well-being of the participants. This may include referring them to relevant support services or seeking guidance from experts in the field.



## **6 Chapter Presentation and analysis**

This section of the master's thesis presents and analyzes the findings from a study that explored diets and practices among young football players in Norway. The study aimed to investigate beliefs and practices related to nutrition among young football players and to determine if there are differences between those who participate in private sports programs in the eastern region and those who participate in a public sports program in Finnmark. To achieve this purpose, six semi-structured interviews were conducted with three participants from each region, all aged 18-19. The data was analyzed using an inductive-deductive thematic analysis method that involved six phases: becoming familiar with the data, generating initial codes, searching for themes, reviewing themes, defining, and naming themes, and preparing the report. The thematic categories were as follows, Understanding food, culture biography, and identity, Combining Food and Education, Lack of support and guidance, and The athlete as a product.

### **6.1 Who are these athletes?**

Petter, 18 years old, told me how he grew up in Finnmark. He described how hunting and fishing played a significant role in his life and influenced his dietary habits. Fish was a regular part of their meals, enjoyed 2-3 times a week, and they occasionally had game birds like grouse. Traditional Norwegian dishes, such as meatballs, vegetables, brown gravy, and potatoes, were also staples in their household. Due to his lactose intolerance, Petter ensured that everything he consumed was lactose-free. Despite having the opportunity to attend a sports school in Tromsø, he chose to stay closer to home for safety reasons while pursuing his passion for football and education. His football club supported him by adjusting his schedule to balance training and studies. For breakfast, Petter often had protein bread with ham, followed by fruit as a snack. Before training, he would have a meal consisting of meat and bread. After training, he enjoyed a well-rounded dinner containing a variety of proteins and carbohydrates.

Nils, 18 years old, told me how he grew up on the east side of Norway. He mentioned that his focus was on healthy meals and proper meal planning. In his family, tomato soup with chicken, rice, and vegetables was a common dish. However, he found that mashed potatoes didn't sit well in his stomach before training, describing them as a lump. Nils made the decision to move and attend the Norwegian Top Sports School (NTG) where he plays in

Eliteserien. He mentioned that his football club has a strong partnership with NTG, which ensures a good combination of soccer and education.

Due to his current contract with a team in Eliteserien, Nils no longer trains with NTG. However, he provided some details about the training schedule for the junior team, including two soccer training sessions and one strength training session on Mondays and Wednesdays. On Tuesdays, they had a two-hour-long soccer session, and on Thursdays, they had a medium-intensity soccer session. Fridays usually had lighter training, depending on the upcoming weekend game. Nils shared some insights about his eating habits. He mentioned having breakfast with his teammates before training, choosing between bread and oatmeal. His typical breakfast included two slices of bread, three eggs, and two to three glasses of juice. He mentioned various sandwich toppings like cheese, ham, and eggs. After each training session, the team had a warm lunch, often consisting of chicken with rice or pasta and vegetables. Nils noted that sauce intake was restricted based on the advice of a nutritionist. Once a week, the team enjoyed a different meal, like tacos, to avoid getting tired of eating the same chicken, rice, and pasta. Nils usually prepared his own dinner and evening snack, which commonly consisted of chicken, rice, pasta, and vegetables, with ketchup as a condiment. He mentioned cooking separately from his roommate, who had different dietary restrictions.

Ole, a 19-year-old, told me how he grew up in Finnmark, Norway, and shares his experiences with combining football and education. During his upbringing, his dietary intake primarily comprised rice porridge, fish, and dried fish, influenced by his family's engagement in fishing. He also hunted grouse frequently and occasionally gave them away to others. Ole chose to pursue football and education simultaneously to become a better football player and receive higher education for future opportunities. His typical training week includes three football sessions with the team, three strength training sessions alone, and four hours of top-level sports with the school. For his meals, he usually starts his day with two slices of bread with different toppings and occasionally drinks juice or water. For lunch, he often has two sandwiches or sometimes a baguette from the cafeteria. His dinners usually consist of fish gratin, pasta with chicken, or tacos, but sometimes he will make himself a cheese sandwich instead.

Frank, an 18-year-old, told me how he grew up in Finnmark. He mentioned living with his parents and being enrolled in a subject related to his passion for football. This choice allows him to effectively manage his training schedule alongside his academic responsibilities. Frank

engages in regular training sessions, often daily, with occasional breaks during weekends when matches are not scheduled. He also incorporates strength training into his routine when time permits. In terms of his eating habits, Frank follows a structured meal pattern, which includes breakfast, lunch, dinner, and evening snacks. Throughout the day, he also consumes small snacks. Frank noted that during his upbringing, he was accustomed to a diet consisting of meat, fish, vegetables, bread, cereal, and fruit. These early influences may have contributed to his current preferences and dietary choices.

Rolf, a 19-year-old, told me how he grew up in the east side of Norway and provided insights into his upbringing and current lifestyle. He lives with his parents and is a member of an OBOS league team. Rolf mentioned that during his childhood, he consumed dairy products like cheese and milk, often paired with bread. These items formed a significant part of his diet. For dinner, his family frequently enjoyed dishes such as pasta with chicken, lasagna, or fish, which continue to be part of his meals today. In terms of his education, Rolf opted to attend Wang, a school that aligns with his passion for sports and allows him to train alongside like-minded individuals. His training routine consists of one football session per week with Wang and several additional sessions with his club. These sessions encompass various activities, including strength training and core exercises. When it comes to his daily food intake, Rolf typically packs a sandwich for lunch and occasionally includes a protein bar as a snack. His dinner choices often revolve around familiar options like pasta with chicken, rice, or fish, which he has been accustomed to since his upbringing.

Stig, an 18-year-old, told me how he grew up in the east side of Norway and described his dietary habits as centered around fish, seafood, chicken, beef with rice, and a variety of vegetables. Stig attends Wang School, which has a close collaboration with his club, allowing him to incorporate training into his school hours. He engages in daily training sessions with his team, including frequent double sessions. Stig mentioned having personal training focused on strength and football skills. His daily meals consist of breakfast items like oatmeal and bread with eggs. After training, the club provides him with meals such as chicken and rice. Stig sometimes takes leftover food home and receives recovery drinks after matches and training sessions. Stig's conversation provided insights into his upbringing, dietary preferences, and the structure of his training routine.

This analysis is inspired by phenomenology as a methodological approach to explore participants' realities, independent of societal influences, social discourses, and narratives that

are present. By listening to their lifeworld's related to sports, football, school, and food, several elements are uncovered that represent different discourses and cultural baggage. In the interviews, the participants emerge as storytellers of their own stories, but through analysis of their narratives, patterns begin to emerge. It becomes possible to identify shared categories, similar practices, and thoughts about food, and potentially also bodily experiences related to food. These findings reveal values about culture and society, especially regarding the significance of food. This is where phenomenology comes into play. Additionally, the participants have shared their experiences of transitions and changes related to eating habits, which provides me with the main themes that I will now analyze and discuss.

## **6.2 Analyze**

### **6.3 Understanding food, culture biography, and identity**

Stambulova's "Athletic Career Transition Model" (2016) and Wylleman and Lavalle's "The Developmental Model on Transitions Faced by Athletes" (2004) allow us to analyze the dietary choices of young football players in a more comprehensive and holistic way. Stambulova's model focuses on the transitions athletes go through during their careers and how these transitions impact their well-being. It includes different phases such as the transition to elite sports, the transition from an athletic career to post-athletic life, and other significant transitional periods. By using this model, we can identify potential dietary-related transitions and challenges that young football players may encounter at different stages of their careers. For example, Petter's emphasis on regional dishes and family traditions reflects the influence of culture on his dietary choices. When he says, "I have grown up, we had fish at least 2-3 times a week, and we also enjoyed game birds like grouse. Traditional Norwegian dishes like meatballs, vegetables, brown sauce, and potatoes were always a part of our meals. This demonstrates that food is something we attribute identity to and that certain dishes are typical of Norwegian culture. Petter activates typical identity frames around food, and his statement illustrates his relationship with food and nutrition. My grandmother makes the best meatballs!", it aligns with the notion of transitioning to elite sports while maintaining a connection to his cultural background. Stambulova's model helps us understand how Petter's cultural identity and regional cuisine not only shape his dietary habits but also form integral parts of his identity. Furthermore, Petter activates typical identity frames around food, perhaps influenced by specific prompts or the way I phrased the questions during the interview. Nevertheless, he articulates this relationship with food and nutrition in the following manner.

Wylleman and Lavallo's model focuses on the development of athletes' identities and their adaptation to different roles and contexts. By applying this model to the study, we can shed light on how dietary perceptions and practices evolve throughout a young football player's career and how they adapt to new environments and challenges. Nils' statement, "I used to have mashed potatoes with meals, but they didn't sit well in my stomach before training. They felt like a lump. So, I avoid them now," for example, demonstrates the individual differences and preferences athletes may have when it comes to food tolerances. This can be understood in the context of identity development and the adaptation to specific dietary needs to support athletic performance, as emphasized in Wylleman and Lavallo's model. Furthermore, Ole's statement, "We had a lot of fish and dried fish, and I used to hunt grouse frequently," highlights the influence of family activities on dietary choices. Engagement in fishing and hunting, influenced by family traditions, showcases how family practices shape dietary preferences and can be analyzed through the lens of identity development and the formation of dietary preferences based on familial and cultural practices.

Frank's statement, "I grew up eating meat, fish, vegetables, bread, cereal, and fruit," indicates a diverse and nutritious diet during upbringing, reflecting exposure to healthy food and aligning with the notion of successful adaptation to different roles and contexts in Wylleman and Lavallo's model. Rolf's statement, "My dinners usually consist of pasta with chicken, lasagna, or fish," shows the persistence of including familiar foods in meals, highlighting the continuity in dietary choices influenced by family traditions. This can be understood in the context of identity development and the maintenance of a sense of cultural heritage.

Stig's statement, "My diet includes fish, seafood, chicken, beef with rice, and various vegetables," demonstrates his focus on a varied diet that meets the nutritional demands of intense physical activity, corresponding to the challenges and adaptations athletes face in dietary practices outlined in both theoretical frameworks. By including quotes from each participant, we can highlight the differences between them regarding their understanding of food and cultural background. This provides a more nuanced portrayal of how their individual backgrounds and experiences influence their dietary choices. These frameworks enable us to identify potential transitions and challenges related to diet, assess the influence of cultural background and family traditions, and explore how athletes adapt their dietary choices within different stages of their careers. To enhance readability, I will use abbreviations or refer to the authors and publication years after introducing the theoretical models for subsequent

references. For example, "Stambulova's model" or "Wylleman and Lavalle's model" will be used instead of repeating the full name each time they are mentioned.

In conclusion, the integration of Stambulova's "Athletic Career Transition Model" (2016) and Wylleman and Lavalle's "The Developmental Model on Transitions Faced by Athletes" (2004) provides valuable insights into the dietary perceptions and practices of young football players. These frameworks enable us to identify dietary-related transitions, cultural influences, and challenges athletes may encounter, while also highlighting the importance of adapting dietary choices to support athletic performance. By applying these models, we gain a comprehensive understanding of the interplay between athletes' identities, cultural backgrounds, and dietary practices throughout different stages of their careers, facilitating a holistic approach to studying their dietary choices.

#### **6.4 Combining Food and Education**

Petter emphasizes the ability to balance athletic ambitions with education. He highlights the importance of nutrition and shares his strategies for balancing dietary choices with academic commitments: "I am aware of the role nutrition plays in achieving my goals as an athlete. I have implemented strategies to balance my dietary choices in my daily life, allowing me to perform at my best while managing my schoolwork. It's important to have something to fall back on after a potential sports career," supported by the theory of managing the transition from a sports career to a post-sports life, as addressed in Stambulova's model (Stambulova, 2016).

Nils shares his ambitions to play at the highest level and acknowledges the significance of a good diet: "A good diet is crucial for me to perform at my best during training and matches." He also appreciates the support from his club: "The club does an excellent job accommodating my needs, allowing me to structure my daily life in the best possible way." These statements can be viewed in light of Wylleman and Lavalle's model (2004), which emphasizes the adaptation to different roles and contexts in athletes' lives. According to this model, athletes go through various transitions throughout their careers, such as the transition from youth sports to elite-level focus. These transitions require athletes to adapt to new environments, demands, challenges, and possibly new dietary habits to adjust to a new reality. By applying this model to the analysis, we can examine how young football players adapt their dietary perceptions and practices as they move from one phase to another in their careers. For instance, by exploring the quotes from the participants, we can observe how they

modify their dietary choices to meet specific needs in their training routines or performance goals, thereby demonstrating their ability to adapt their diet to the changing demands of their sports roles. Nils' quotes validate the significance of a proper diet in achieving peak performance and also illustrate how his club caters to his needs and helps him optimize his daily routine. These quotes thus shed light on how young football players adjust their dietary choices in different career phases. Nils' statements underscore his active adaptation of his diet to meet specific needs related to training and performance. This showcases his ability to respond to the evolving demands of his sports role and optimize his diet accordingly.

Rolf recognizes the importance of food to achieve his goals as a football player and emphasizes the support he receives from parents and teachers: "Food plays a vital role in achieving my goals as a football player. Combining football and school doesn't pose significant dietary challenges for me." This can be connected to the model of balancing diet through different career stages presented by Stambulova's model (Stambulova, 2016).

Stig discusses the significance of proper nutrition for optimal performance and injury prevention: "Good nutrition is important for optimal performance and injury prevention. The club provides me with meals, making it easier to balance football and school." This can be viewed in the context of the theory of managing transition-related challenges and support from important support systems (Stambulova, 2016).

Frank underscores the connection between nutrition and athletic performance. Furthermore, he expresses gratitude for the support and guidance he receives from his parents regarding making healthy dietary choices: "I believe that combining football and school is a great way to pursue my passion while getting an education. As an athlete, I understand the importance of nutrition in achieving optimal performance. I work to maintain a balanced diet that provides me with the necessary nutrients and energy to perform my best on the field. My parents support me, and they prepare homemade meals tailored to an active individual." This supports the theory of developing identity and adapting to different roles and contexts in Wylleman and Lavalle's model (Wylleman and Lavalle, 2004).

Ole points out the challenges of balancing football and school but also shares strategies to manage these challenges: "Balancing football and school can be challenging, especially when it comes to managing my diet. However, I have developed strategies to address these challenges to maintain a balanced diet." He acknowledges that it requires discipline and

organization but sees it as a necessary part of the journey as an athlete. This can be linked to both Stambulova's model of managing transitions and Wylleman and Lavalle's model of adapting to new environments and challenges (Stambulova, 2016; Wylleman and Lavalle, 2004).

Through these quotes from the athletes, it becomes clear that they are conscious of the importance of nutrition in their athletic journey. They emphasize the need for a balanced diet to support performance, recovery, and injury prevention. The athletes also appreciate the support they receive from parents, clubs, and schools in managing their nutrition effectively. By using the quotes from each individual, we gain a more vivid and authentic understanding of their attitudes and practices regarding diet.

## **6.5 Lack of support and guidance**

Petter emphasizes the importance of nutrition for his athletic performance and acknowledges the limited support he has received. He says, "I haven't received much support or guidance when it comes to nutrition." Despite the collaboration between his school and his club, Petter feels that more comprehensive guidance is needed. His school offers some resources, such as access to fruits and salads in the cafeteria and the opportunity to eat during classes, but these offerings are not sufficient. Petter recognizes the potential benefits of having a dedicated subject on nutrition and diet at school, stating, "It would be helpful to have a dedicated subject on nutrition and diet at school." This would enable students to gain knowledge about the importance of food choices and make informed decisions to support their athletic pursuits.

Ole's experience illustrates the consequences of lacking support and guidance when it comes to nutrition. During his transition from Alta to the city when he started middle school, Ole initially had a poor and monotonous diet. He constantly felt tired and sought medical help, discovering that he lacked essential vitamins due to an unhealthy and limited diet. Reflecting on this period, Ole admits, "I didn't have a healthy and varied diet." However, he took matters into his own hands and began making conscious efforts to improve his diet. He started taking vitamin supplements and consuming more fruits and vegetables, which led to an improvement in his energy levels and overall well-being.

The interviews highlight the urgent need for greater support and guidance regarding nutrition and diet. Both Petter and Ole have experienced a lack of support in their dietary choices, which has had a negative impact on their athletic performance and well-being. Petter's



suggestion of having a dedicated subject on nutrition in school is a valid idea. Such education would provide students like Petter with the opportunity to make informed food choices that positively affect their athletic endeavors.

Furthermore, Ole's experience emphasizes the importance of support during transition periods. When athletes undergo significant life changes, such as Ole's move to a new school and city, guidance and assistance are crucial in establishing healthy eating habits from the outset. Unfortunately, neither the school nor the sports club made any conscious efforts to provide this support to Ole, as he expresses, "Neither the school nor the sports club made any conscious efforts to help me." With sufficient support, Ole's diet would have improved earlier, and he could have possibly avoided both exhaustion and vitamin deficiencies.

Through the analysis of these interviews, it becomes evident that the absence of adequate support and guidance concerning nutrition and diet represents a significant concern. Petter's and Ole's experiences align with Stambulova's "Athletes' Career Transition Model" (2016) and Wylleman and Lavallee's "Developmental Model of Transitions Faced by Athletes" (2004). These theoretical frameworks can shed light on the detrimental effects of lacking support on athletes' dietary practices and overall development.

Stambulova's model focuses on the transitions athletes encounter throughout their careers, addressing phases such as the transition to elite sports and the transition from sports career to post-sports life. By applying this model to Petter's case, we can understand the potential nutrition-related transitions and challenges young soccer players face in various career stages. The lack of support and guidance regarding nutrition during these critical transitions can hinder athletes' well-being and performance.

Wylleman and Lavallee's model emphasizes athletes' identity development and adaptation to different roles and contexts. Ole's experience aligns with this model, as he faced challenges in maintaining a healthy diet during the transition from Alta to the city. Wylleman and Lavallee's model allows us to understand the significance of support during such transitions to ensure athletes can establish healthy eating habits in new environments. The lack of assistance in Ole's case resulted in a poor diet and subsequent health issues.

By integrating these theoretical frameworks into the analysis, we gain a more comprehensive understanding of the detrimental effects of the lack of support and guidance on athletes' dietary practices. Petter's and Ole's experiences align with Stambulova's "Athletes' Career

Transition Model" and Wylleman and Lavallee's "Developmental Model of Transitions Faced by Athletes," contributing to our understanding of the importance of support and guidance during transition periods and the establishment of healthy eating habits.

As a conclusion, the interviews with Petter and Ole demonstrate the concerning lack of support and guidance they have encountered regarding dietary practices. This lack of assistance has had significant consequences and a negative impact on their well-being and athletic performance. Integrating Stambulova's "Athletes' Career Transition Model" and Wylleman and Lavallee's "Developmental Model of Transitions Faced by Athletes" helps us better understand the importance of support and guidance during transition periods and the establishment of healthy dietary habits.

Moving forward, it is crucial for schools and sports clubs to recognize the importance of nutrition and diet in athletes' lives and provide adequate support and guidance. Implementing a dedicated subject on nutrition in schools, as suggested by Petter, would help increase awareness among students and empower them to make informed food choices to support their athletic pursuits. Additionally, proactive support is vital during transition periods, such as when athletes like Ole move to a new school and city. This would help establish healthy eating habits from the outset and potentially avoid health problems and reduced performance.

By addressing these issues and integrating theoretical frameworks, educational institutions, and sports clubs can play a crucial role in supporting athletes' overall well-being and performance. A holistic approach to nutrition education and support systems will provide individuals with the opportunity to make healthy choices, facilitate successful transitions, and promote their athletic development and long-term health. Through collaboration and increased focus on nutrition, athletes like Petter and Ole can receive the guidance they need to thrive in their athletic journeys.

## **6.6 The athlete as a product**

The concept of athletes as products in the sports industry encompasses various aspects, including athletes' physical abilities, performance, and marketability. An important factor that influences an athlete's marketability is their dietary beliefs and practices. This analysis explores the relationship between dietary choices among young athletes and the concept of athletes as products, based on relevant theories and interviews with young athletes.

Individual limitations: In the interview, Petter emphasized his lactose intolerance and stated, "Because of my lactose intolerance, I have to be careful with dairy products." This recognition of individual limitations aligns with the emphasis on considering personal characteristics and preferences when designing nutritional interventions, as suggested by Potgieter (2013). By considering individual limitations, tailored dietary plans can be developed to enhance Petter's marketability as a product and support his overall well-being. It is important to acknowledge that athletes like Petter have unique physiological needs, and by accommodating these needs, their performance and marketability can be optimized.

Home-cooked meals and nutritional knowledge: Nils expressed his belief in the importance of cooking and meal planning, stating, "I believe that cooking and meal planning are crucial for adapting my diet to my individual needs." This aligns with the concept of "top-up factors" proposed by Devlin et al. (2017), where athletes incorporate personal preferences and family structures into their dietary practices. Nils's engagement with home-cooked meals and nutritional knowledge demonstrates his proactive approach to optimizing his diet.

Encouraging young athletes like Nils to take responsibility for their own nutrition by providing them with nutritional education can enhance their marketability as products. This approach equips them with the tools to make informed dietary choices based on their specific needs and promotes a sense of autonomy and control over their bodies and careers.

Social influences: Ole reflected on the impact of social factors, particularly peer pressure and the desire to fit in with teammates. He said, "Sometimes, I feel pressured to eat the same as everyone else, even if it may not be the healthiest option." This aligns with the emphasis on social influences on athletes' behavior, as discussed by Thomas et al. (2016). Understanding and addressing these social dynamics are crucial for developing effective measures that support athletes like Ole in making informed dietary decisions and improving their marketability as products. Building a supportive and inclusive team culture that promotes healthy eating habits can help young athletes make choices that benefit their performance and overall well-being.

Unique perspectives: Frank, Rolf, and Stig also provided valuable perspectives on their dietary beliefs and practices as young athletes. Frank emphasized the importance of a balanced diet, stating, "I strive to maintain a balance of carbohydrates, proteins, and fats to nourish my performance." Rolf highlighted the significance of healthy food, saying, "I prioritize natural, unprocessed foods to ensure I get the necessary nutrients." Stig emphasized

the role of hydration, stating, "Keeping myself adequately hydrated is key to my performance and recovery." These perspectives add depth to the analysis and demonstrate the different approaches young athletes have towards dietary choices. By including their unique perspectives, a comprehensive understanding of the dietary choices of young athletes as products can be obtained.

Integration of perspectives and limitations: To gain a holistic understanding of the dietary choices of young athletes as products, it is necessary to integrate theoretical perspectives from Devlin et al. (2017), Thomas et al. (2016), and Potgieter (2013) with the insights derived from the interviews. This integration allows for a comprehensive view of young athletes, considering both "top-down factors" such as evidence-based nutritional knowledge and limitations, as well as "top-up factors" such as family structures, primary sources of nutrition, and proximity to nature for activities like hunting and fishing.

By incorporating a balanced approach that encompasses both "top-down factors and "top-up factors," interventions can be designed to meet the unique needs and preferences of young athletes. By incorporating evidence-based knowledge, athletes are provided with essential information regarding diet and nutrition. At the same time, recognizing "top-up factors" that influence dietary choices, such as the influence of family structures and cultural practices related to food, acknowledges the importance of holistic well-being and the connection between an athlete's personal life and their dietary choices.

By providing young athletes with nutritional education and promoting their culinary skills, they are equipped with the tools to make informed dietary choices based on evidence-based knowledge. Furthermore, it is essential not to overlook the social influences on young athletes' dietary beliefs and practices. Ole mentioned feeling influenced by his teammates' eating habits, highlighting the significance of the team environment and dietary choices. By building a supportive and inclusive team culture that promotes healthy eating habits, the negative effects of peer pressure can be mitigated, creating an environment that encourages healthy choices and contributes to overall well-being.

The interviews with Petter, Nils, Ole, Frank, Rolf, and Stig reinforce the need for a comprehensive approach to understanding the dietary choices of young athletes as products. Each athlete brings unique perspectives, considering their nutrition influenced by individual limitations, knowledge acquisition, and social dynamics. By acknowledging and integrating

these different perspectives, interventions can be tailored to the specific needs of young athletes, optimizing their marketability, and supporting their overall development.

## **6.7 Discussion**

In this chapter, I will discuss my research topic, which focuses on the dietary habits and beliefs of young football players. I have investigated whether there are differences between those who participate in private sports programs in Eastern Norway and those who participate in public sports programs in Finnmark. To answer this question, I have analyzed the results from my qualitative interviews with six young football players aged 18-19 and compared their knowledge and practices regarding nutrition. I have also considered geographical and resource factors that may influence the differences between the two groups. Furthermore, I discuss the importance of collaboration between schools, parents, and football clubs to support young athletes in maintaining healthy eating habits and achieving their athletic goals.

It is noteworthy that young football players today seem to be highly aware of the importance of nutrition to achieve optimal performance on the field. This supports Stambulova's "Athletic Career Transition Model" (2016) and Wylleman and Lavalle's "The Developmental Model on Transitions Faced by Athletes" (2004), which suggest that young athletes may have a mindset similar to that of a 24-hour athlete. They seem to understand the significance of focusing on diet, sleep, training, and recovery to achieve success in their sport. An example of this is when Stig mentions that proper nutrition is important for optimal performance and injury prevention.

An interesting observation that emerges from the analysis is the clear difference between private and public sports programs regarding the support and control over the dietary habits of young football players. Private sports programs appear to offer more specialized and tailored nutrition support, which is in line with the findings of Devlin et al. (2017) and Thomas et al. (2016). These studies emphasize the importance of individually tailored nutrition support in the sports environment. An example of this is when Nils mentions that when he moved away from home and started at the National Elite Sports School, people from the school and club would visit their homes to check what they had in the refrigerator. He also mentioned that new students had the opportunity to participate in nutrition and cooking courses. On the other hand, Ole mentions that he received no assistance whatsoever from either the school or the club, which led him to visit a doctor due to feeling constantly fatigued. The doctor diagnosed him with a deficiency in certain vitamins, which could be attributed to poor and limited diet.

Therefore, it is worth noting that private programs may have resources to engage nutrition experts and customize the diet for each individual athlete. This gives them a significant advantage in ensuring that young athletes receive the necessary nutrition support to achieve optimal results. This approach can be highly effective as it considers individual needs and goals. On the other hand, the analysis shows that the collaboration between the club and school in public sports programs may be less comprehensive. This could be due to challenges related to different coaches and responsibilities within the club and school. When there is not clear communication and collaboration between these two environments, it can become more difficult to influence the athletes' dietary choices and ensure a holistic and tailored approach.

An example of this is Frank, who attends a public school and shares his experience with the collaboration between the school and club regarding the focus on food. He mentions that he does not have much experience with this collaboration, and most of his dietary guidance comes from the coaches in the club and family members. This could be because he does not have the same coach at school and in the club. One approach to address this challenge and ensure that young football players receive the necessary support and guidance regarding nutrition is to establish a close collaboration between parents, clubs, and schools. Potgieter (2013) emphasizes the importance of a holistic and collaborative environment to promote healthy dietary habits among young athletes.

By involving parents in nutrition education and guidance, it is possible to ensure that athletes receive necessary support both at home and in the sports environment. Parents play a crucial role as supporters and promoters of creating a nutrition-conscious culture around the athletes. Clubs and coaches can collaborate with parents to share information about healthy eating habits and offer guidance regarding nutrition choices.

Schools also have a significant role to play in promoting healthy nutrition among young football players. Skuland and Ånestad (2013) and Karpinski and Rosenbloom (2017) have highlighted the potential of schools to increase awareness and knowledge about nutrition among adolescents. By including nutrition education in school curriculum and facilitating social meal experiences, schools can contribute to shaping healthy eating habits among athletes.

An interesting approach to influencing dietary choices among young football players is to create a social environment around meals that promotes camaraderie and well-being. By

encouraging communal meals where athletes can share experiences and support each other in establishing good eating habits, a positive and supportive atmosphere around nutrition can be fostered. This is in line with theoretical frameworks such as Stambulova's "Athletic Career Transition Model" (2016) and Wylleman and Lavalle's "The Developmental Model on Transitions Faced by Athletes" (2004), which emphasize the importance of social support and collaboration in the sports environment.

On the other hand, there are potential weaknesses in the analysis due to its reliance on self-reported data through quotes from the athletes. While this provides insights into their own perceptions, it can lead to subjectivity and selectivity in the presentation of results. It is also important to note that the quotes only represent the athletes' own perceptions and cannot be generalized to the entire population of young football players. Additionally, the study focused solely on young football players in Norway, which may limit the applicability of the findings to other countries and sports. Furthermore, the study relied solely on qualitative data, which limits the ability to make quantitative comparisons between the two groups. To address this, future research could consider incorporating additional quantitative methods such as dietary diaries or observations to supplement the self-reported data. It is also important to include both genders to examine similarities and differences between boys and girls, to provide a broader picture of dietary practices among young football players. Another weakness of the method used to analyze the interviews is that they may be difficult to replicate or explain to others, which can reduce the transparency of the analysis.

## **6.8 Discussion and the way forward**

In this study, I have examined the dietary habits and beliefs among young football players in private sports programs in Eastern Norway and public sports programs in Finnmark. By conducting qualitative interviews with six football players aged 18-19, the research has analyzed and compared their knowledge and practices related to nutrition. The study has also considered geographical and resource factors that may influence the differences between the two groups. The uncovered geographical differences manifest through varying upbringing conditions among the young athletes. Football players from Finnmark have a cultural influence from hunting and fishing, which in turn has impacted their dietary habits. On the other hand, football players from Eastern Norway have not had the same cultural influence from hunting and fishing, which is reflected in their dietary habits.

Resource factors have also been found to play a role in the differences between the groups. The finances of the club and school, as well as the offerings provided to young athletes in terms of meals, nutritional information, and nutrition support, play a crucial role. These factors can vary between private and public sports programs and have implications for the youths' knowledge and practices related to nutrition. Overall, this study demonstrates that geographical and resource factors influence the dietary habits and beliefs among young football players. Understanding these differences can contribute to developing more tailored and effective nutrition programs for young athletes, regardless of their geographical location or resource constraints.

Furthermore, the research has discussed the importance of collaboration between schools, parents, and football clubs in supporting young athletes to maintain healthy eating habits and achieve their athletic goals. The study's findings conclude that young football players today are highly aware of the importance of nutrition for optimal performance on the field. There is a clear difference observed between private and public sports programs regarding support and control over the youths' dietary habits. Private sports programs appear to offer more specialized and customized nutrition support, providing athletes with a significant advantage in ensuring necessary nutritional support for optimal results. On the other hand, the analysis reveals that the collaboration between the club and school in public sports programs may be less extensive. Lack of clear communication and collaboration between these two environments can make it more challenging to influence athletes' dietary choices and ensure a holistic and tailored approach.

While this study provides valuable insights into the dietary habits and beliefs among young football players in private and public sports programs, there are several areas that can be further explored to enhance knowledge in this field. Firstly, it is recommended to include a broader range of participants to gain a more representative understanding of young football players' dietary practices. It is also important to include both male and female athletes to examine any gender differences. Furthermore, a combination of qualitative and quantitative methods can strengthen the research. This may involve supplementing the qualitative interviews with questionnaires or dietary records to obtain more detailed and quantitative information. By implementing Stambulova's "Athletic Career Transition Model" (2016) and Wylleman and Lavallee's "The Developmental Model on Transitions Faced by Athletes" (2004), we can gain a broader perspective on the challenges and opportunities young football players face regarding diet and nutrition. This will provide us with a deeper insight into the



contexts and differences between various groups of football players. Further research can contribute to improving support and approaches to nutrition in sports programs and lay the foundation for healthy dietary habits and optimal performance among young athletes.

## References

- Abbott, Brett, A., Brownlee, T. E., Hammond, K. M., Harper, L. D., Naughton, R. J., Anderson, L., Munson, E. H., Sharkey, J. V., Randell, R. K., & Clifford, T. (2021). The prevalence of disordered eating in elite male and female soccer players. *Eating and Weight Disorders*, 26(2), 491–498.  
<https://doi.org/10.1007/s40519-020-00872-0>
- Alaunyte, Perry, J. L., & Aubrey, T. (2015). Nutritional knowledge and eating habits of professional rugby league players: does knowledge translate into practice? *Journal of the International Society of Sports Nutrition*, 12(1), 18–18.  
<https://doi.org/10.1186/s12970-015-0082-y>
- Alkerwi, Sauvageot, N., Malan, L., Shivappa, N., & Hebert, J. R. (2015). Association between Nutritional Awareness and Diet Quality: Evidence from the Observation of Cardiovascular Risk Factors in Luxembourg (ORISCAV-LUX) Study. *Nutrients*, 7(4), 2823–2838. <https://doi.org/10.3390/nu7042823>
- Alvesson. (2011). Interpreting interviews. In *Interpreting Interviews* (p. viii 163–viii 163). SAGE.  
<https://doi.org/10.4135/9781446268353>
- Arenas-Jal, Suñé-Negre, J. M., Pérez-Lozano, P., & García-Montoya, E. (2020). Trends in the food and sports nutrition industry: A review. *Critical Reviews in Food Science and Nutrition*, 60(14), 2405–2421.  
<https://doi.org/10.1080/10408398.2019.1643287>
- Astrup. (2018). Goodbye to the egg-white omelet—welcome back to the whole-egg omelet. *The American Journal of Clinical Nutrition*, 107(6), 853–854.  
<https://doi.org/10.1093/ajcn/nqy106>
- Battistini, Meroni, E., & Erba, D. (2020). Food education project for young footballers in the federal center of Verano Brianza: evaluation of adherence to the Mediterranean diet and nutrition knowledge. *Nutrition, Metabolism, and Cardiovascular Diseases*, 30(3), 534–535. <https://doi.org/10.1016/j.numecd.2019.12.016>
- Belton, Brien, W. O., Meegan, S., Woods, C., & Issartel, J. (2014). Youth-Physical Activity Towards Health: evidence and background to the development of the Y-PATH physical activity intervention for adolescents. *BMC Public Health*, 14(1), 122–122.  
<https://doi.org/10.1186/1471-2458-14-122>
- Bergamo, Páscoa, M. A., Hespanhol, J. E., de Moraes, A. M., & Guerra-Júnior, G. (2023). Positive association of lean mass and negative association of protein intake on bone

- mass and bone geometry of adolescent soccer players. *Nutrition (Burbank, Los Angeles County, Calif.)*, 105, 111857–111857.  
<https://doi.org/10.1016/j.nut.2022.111857>
- Booker, Skew, A. J., Kelly, Y. J., & Sacker, A. (2015). Media Use, Sports Participation, and Well-Being in Adolescence: Cross-Sectional Findings From the UK Household Longitudinal Study. *American Journal of Public Health (1971)*, 105(1), 173–179.  
<https://doi.org/10.2105/AJPH.2013.301783>
- Braun, & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, & Clarke, V. (2013). *Successful qualitative research : a practical guide for beginners*. Sage.
- Braun, V., Clarke, V., & Terry, G. (2015). Thematic Analysis. In P. Rohleder & A. Lyons (Eds.), *Qualitative research in clinical and health psychology* (pp. 95-113). Palgrave Macmillan.
- Braun, & Clarke, V. (2022). *Thematic analysis : a practical guide*. SAGE.
- Braun, Clarke, V., Hayfield, N., Moller, N., & Tischner, I. (2019). Qualitative Story Completion: A Method with Exciting Promise. In *Handbook of Research Methods in Health Social Sciences* (pp. 1479–1496). Springer Singapore.  
[https://doi.org/10.1007/978-981-10-5251-4\\_14](https://doi.org/10.1007/978-981-10-5251-4_14)
- Briggs, Harper, L. D., McNamee, G., Cockburn, E., Rumbold, P. L. S., Stevenson, E. J., & Russell, M. (2017). The effects of an increased calorie breakfast consumed prior to simulated match-play in Academy soccer players. *European Journal of Sport Science*, 17(7), 858–866. <https://doi.org/10.1080/17461391.2017.1301560>
- Brinkmann, & Kvale, S. (2015). *InterViews : learning the craft of qualitative research interviewing* (3rd ed., pp. XVIII, 405). Sage.
- Brinkmann, Tanggaard, L., & Hansen, W. (2012). *Kvalitative metoder : empiri og teoriutvikling* (p. 224). Gyldendal akademisk.
- Brown, B., & Williams, L. (2015). Exploring the relationship between food and young athletes: A scoping review. *International Journal of Sport Nutrition and Exercise Metabolism*, 25(3), 239-249. <https://doi.org/10.1123/ijsnem.2014-0129>

- Bruusgaard, D. (2015). Forskningsetikk – et evig diskusjonstema. *Tidsskrift for den Norske Lægeforening*, 135(8), 732–732. <https://doi.org/10.4045/tidsskr.15.0362>
- Burke, Castell, L. M., Casa, D. J., Close, G. L., Costa, R. J. S., Desbrow, B., Halson, S. L., Lis, D. M., Melin, A. K., Peeling, P., Saunders, P. U., Slater, G. J., Sygo, J., Witard, O. C., Bermon, S., & Stellingwerff, T. (2019). International Association of Athletics Federations Consensus Statement 2019. *International Journal of Sport Nutrition and Exercise Metabolism*, 29(2), 73. <https://doi.org/10.1123/ijsnem.2019-0065>
- Burke, Deakin, V., & Minehan, M. (2021). *Clinical Sports Nutrition* (Sixth ed.). McGraw-Hill Education LLC.
- Busanich, McGannon, K. R., & Schinke, R. J. (2014). Comparing elite male and female distance runner's experiences of disordered eating through narrative analysis. *Psychology of Sport and Exercise*, 15(6), 705–712. <https://doi.org/10.1016/j.psychsport.2013.10.002>
- Bush, Barnes, C., Archer, D. T., Hogg, B., & Bradley, P. S. (2015). Evolution of match performance parameters for various playing positions in the English Premier League. *Human Movement Science*, 39, 1–11. <https://doi.org/10.1016/j.humov.2014.10.003>
- Byrne, & McLean, N. (2002). Elite athletes: Effects of the pressure to be thin. *Journal of Science and Medicine in Sport*, 5(2), 80–94. [https://doi.org/10.1016/S1440-2440\(02\)80029-9](https://doi.org/10.1016/S1440-2440(02)80029-9)
- Carminati. (2018). Generalizability in Qualitative Research: A Tale of Two Traditions. *Qualitative Health Research*, 28(13), 2094–2101. <https://doi.org/10.1177/1049732318788379>
- Carter, & Little, M. (2007). Justifying Knowledge, Justifying Method, Taking Action: Epistemologies, Methodologies, and Methods in Qualitative Research. *Qualitative Health Research*, 17(10), 1316–1328. <https://doi.org/10.1177/1049732307306927>
- Case, P. (2016). Nutrition Through the Life Cycle. *Journal of Nutrition Education and Behavior*, 48(1), 84-e1. <https://doi.org/10.1016/j.jneb.2015.08.002>
- Castellini, & Graffigna, G. (2022). "Food is more than just a source of nutrients": A qualitative phenomenological study on Food Involvement. *Appetite*, 178, 106179–106179. <https://doi.org/10.1016/j.appet.2022.106179>

- Chau, Burgermaster, M., & Mamykina, L. (2018). The use of social media in nutrition interventions for adolescents and young adults—A systematic review. *International Journal of Medical Informatics (Shannon, Ireland)*, 120, 77–91.  
<https://doi.org/10.1016/j.ijmedinf.2018.10.001>
- Chaudhary, Sudzina, F., & Mikkelsen, B. E. (2020). Promoting Healthy Eating among Young People-A Review of the Evidence of the Impact of School-Based Interventions. *Nutrients*, 12(9), 2894. <https://doi.org/10.3390/nu12092894>
- Chinurum, Ogunjimi, L. O., & O'Neill, C. B. (2014). Gender and Sports in Contemporary Society. *Journal of Educational and Social Research*.  
<https://doi.org/10.5901/jesr.2014.v4n7p25>
- Cintineo, Arent, M. A., Antonio, J., & Arent, S. M. (2018). Effects of Protein Supplementation on Performance and Recovery in Resistance and Endurance Training. *Frontiers in Nutrition (Lausanne)*, 5, 83–83.  
<https://doi.org/10.3389/fnut.2018.00083>
- Clark, Foster, L., Sloan, L., & Bryman, A. (2021). *Bryman's social research methods* (Sixth edition.). Oxford University Press.
- Cohen, Manion, L., & Morrison, K. (2018). *Research Methods in Education* (8th ed., Vol. 1). Routledge. <https://doi.org/10.4324/9781315456539>
- Collins, Maughan, R. J., Gleeson, M., Bilborough, J., Jeukendrup, A., Morton, J. P., Phillips, S. M., Armstrong, L., Burke, L. M., Close, G. L., Duffield, R., Larson-Meyer, E., Louis, J., Medina, D., Meyer, F., Rollo, I., Sundgot-Borgen, J., Wall, B. T., Boullosa, B., ... McCall, A. (2021). UEFA expert group statement on nutrition in elite football. Current evidence to inform practical recommendations and guide future research. *British Journal of Sports Medicine*, 55(8), 416–416.  
<https://doi.org/10.1136/bjsports-2019-101961>
- Creswell. (2013). *Qualitative inquiry & research design : choosing among five approaches* (3rd ed., pp. XXI, 448). Sage.
- Cridland E.K., Jones S.C., Caputi P. & Magee C.A. (2015) Qualitative research with families living with autism spectrum disorder: recommendations for conducting semistructured interviews. *Journal of Intellectual & Developmental Disability* 40(1), 78–91.  
doi:[10.3109/13668250.2014.964191](https://doi.org/10.3109/13668250.2014.964191)

- Cupisti, A., D'Alessandro, C., Castrogiovanni, S., Barale, A., & Morelli, E. (2002). Nutrition knowledge and dietary composition in Italian adolescent female athletes and non-athletes. *International journal of sport nutrition and exercise metabolism*, 12(2), 207-219. <https://doi.org/10.1123/ijsnem.12.2.207>
- Davey, Malone, S., & Egan, B. (2021). Case Study: Transition to a Vegan Diet in an Elite Male Gaelic Football Player. *Sports (Basel)*, 9(1), 6. <https://doi.org/10.3390/sports9010006>
- Devlin, B. L., Leveritt, M. D., Kingsley, M., & Belski, R. (2017). Dietary intake, body composition, and nutrition knowledge of Australian football and soccer players: implications for sports nutrition professionals in practice. *International journal of sport nutrition and exercise metabolism*, 27(2), 130-138. <https://doi.org/10.1123/ijsnem.2016-0191>
- Dehghani, Saf, A. D., Vosoughi, A., Tebbenouri, G., & Zarnagh, H. G. (2018). Effectiveness of the mindfulness-acceptance-commitment-based approach on athletic performance and sports competition anxiety: a randomized clinical trial. *Electronic Physician*, 10(5), 6749–6755. <https://doi.org/10.19082/6749>
- Delmar, C. (2010). "Generalizability" as recognition: reflections on a foundational problem in qualitative research. *Qualitative studies*, 1(2), 115-128.
- De Souza, Nattiv, A., Joy, E., Misra, M., Williams, N. I., Mallinson, R. J., Gibbs, J. C., Olmsted, M., Goolsby, M., & Matheson, G. (2014). 2014 Female Athlete Triad Coalition Consensus Statement on Treatment and Return to Play of the Female Athlete Triad: 1st International Conference held in San Francisco, California, May 2012 and 2nd International Conference held in Indianapolis, Indiana, May 2013. *British Journal of Sports Medicine*, 48(4), 289–289. <https://doi.org/10.1136/bjsports-2013-093218>
- DiCicco-Bloom, & Crabtree, B. F. (2006). The qualitative research interview. *Medical Education*, 40(4), 314–321. <https://doi.org/10.1111/j.1365-2929.2006.02418.x>
- Eck, & Byrd-Bredbenner, C. (2021). Food Choice Decisions of Collegiate Division I Athletes: A Qualitative Exploratory Study. *Nutrients*, 13(7), 2322. <https://doi.org/10.3390/nu13072322>
- Ericsson, Krampe, R. T., & Tesch-Römer, C. (1993). The Role of Deliberate Practice in the Acquisition of Expert Performance. *Psychological Review*, 100(3), 363–406. <https://doi.org/10.1037/0033-295X.100.3.363>
- Fineberg, & Allison, D. B. (2020). The Use and Misuse of Transparency in Research: Science and Rulemaking at the Environmental Protection Agency. *JAMA : the Journal of the*

- American Medical Association*, 323(7), 605–606.  
<https://doi.org/10.1001/jama.2019.22026>
- Fiskerstrand, & Rimeslåttén, E. (2008). *Veien til toppidrett* (Bokmål[utg.]. ed., p. 163). Gyldendal undervisning.
- Fitzgerald, A., Heary, C., Nixon, E., & Kelly, C. (2010). Factors influencing the food choices of Irish children and adolescents: a qualitative investigation. *Health Promotion International*, 25(3), 289–298. <https://doi.org/10.1093/heapro/daq021>
- Folasire, Akomolafe, A. A., & Sanusi, R. A. (2015). Does Nutrition Knowledge and Practice of Athletes Translate to Enhanced Athletic Performance? Cross-Sectional Study Amongst Nigerian Undergraduate Athletes. *Global Journal of Health Science*, 7(5), 215–225. <https://doi.org/10.5539/gjhs.v7n5p215>
- Godoy Izquierdo, Diaz Ceballos, I., Ramirez Molina, M. J., Navarron Vallejo, E., & Dosil Diaz, J. (2019). Risk for eating disorders in "high"- and "low"-risk sports and football (soccer): A profile analysis with clustering techniques. *Revista de Psicología Del Deporte*, 28(2), 117–126.
- Gómez-Pinilla. (2008). Brain foods: the effects of nutrients on brain function. *Nature Reviews. Neuroscience*, 9(7), 568–578. <https://doi.org/10.1038/nrn2421>
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 2(163-194), 105.
- Halson. (2014). Monitoring Training Load to Understand Fatigue in Athletes. *Sports Medicine (Auckland)*, 44(Suppl 2), 139–147 <https://doi.org/10.1007/s40279-014-0253-z>
- Hargreaves, Mates, E., Menon, P., Alderman, H., Devakumar, D., Fawzi, W., Greenfield, G., Hammoudeh, W., He, S., Lahiri, A., Liu, Z., Nguyen, P. H., Sethi, V., Wang, H., Neufeld, L. M., & Patton, G. C. (2022). Strategies and interventions for healthy adolescent growth, nutrition, and development. *The Lancet (British Edition)*, 399(10320), 198–210. [https://doi.org/10.1016/S0140-6736\(21\)01593-2](https://doi.org/10.1016/S0140-6736(21)01593-2)
- Harty, Stratton, M. T., Escalante, G., Rodriguez, C., Dellinger, J. R., Williams, A. D., White, S. J., Smith, R. W., Johnson, B. A., Sanders, M. B., & Tinsley, G. M. (2020). Correction to: Effects of Bang® Keto Coffee Energy Drink on Metabolism and

- Exercise Performance in Resistance-Trained Adults: A Randomized, Double-blind, Placebo-controlled, Crossover Study. *Journal of the International Society of Sports Nutrition*, 17(1), 48–48. <https://doi.org/10.1186/s12970-020-00378-1>
- Hays, & Brown, C. H. (2004). *You're on!: Consulting for peak performance*. American Psychological Association. <https://doi.org/10.1037/10675-000>
- Hays, & McKibben, W. B. (2021). Promoting Rigorous Research: Generalizability and Qualitative Research. *Journal of Counseling and Development*, 99(2), 178–188. <https://doi.org/10.1002/jcad.12365>
- Heiman, & Olenik-Shemesh, D. (2019). Perceived Body Appearance and Eating Habits: The Voice of Young and Adult Students Attending Higher Education. *International Journal of Environmental Research and Public Health*, 16(3), 451. <https://doi.org/10.3390/ijerph16030451>
- Hespel, Maughan, R. J., & Greenhaff, P. L. (2006). Dietary supplements for football. *Journal of Sports Sciences*, 24(7), 749–761. <https://doi.org/10.1080/02640410500482974>
- Hiller, J. (2016). Epistemological foundations of objectivist and interpretivist research.
- Homayounnia, Sheykh, M., & Homayouni, A. (2012). P-549 - Relationship between emotional intelligence and eating disorder among athletes wrestling and football. *European Psychiatry*, 27, 1–1 [https://doi.org/10.1016/S0924-9338\(12\)74716-8](https://doi.org/10.1016/S0924-9338(12)74716-8)
- Hoon. (2013). Meta-Synthesis of Qualitative Case Studies. *Organizational Research Methods*, 16(4), 522–556. <https://doi.org/10.1177/1094428113484969>
- Järvinen, & Mik-Meyer, N. (2017). *Kvalitativ analyse : syv traditioner* (p. 418). Hans Reitzel.
- Jensen, & Lindseth, I. A. (2021). Manglende kvalitetssikring av kostholdsrådene. *Tidsskrift for den Norske Lægeforening*. <https://doi.org/10.4045/tidsskr.21.0214>
- Jensen. (2020). En god start på dagen for alle? *Tidsskrift for velferdsforskning*, 23(4), 249–267. <https://doi.org/10.18261/issn.0809-2052-2020-04-03>
- Jeukendrup, A., & Cronin, L. (2011). Nutrition and elite young athletes. *The elite young athlete*, 56, 47-58. <https://doi.org/10.1159/000320630>
- Jezewska-Zychowicz, & Plichta, M. (2022). Diet Quality, Dieting, Attitudes and Nutrition Knowledge: Their Relationship in Polish Young Adults-A Cross-Sectional



- Johannessen, Christoffersen, L., & Tufte, P. A. (2016). *Introduksjon til samfunnsvitenskapelig metode* (5. utg.). Abstrakt.
- Jonvik, Paulussen, K. J. ., Danen, S. ., Ceelen, I. J. ., Horstman, A. ., Wardenaar, F. ., Loon, L. J. C. van, & Dijk, J. W. van. (2019). Protein Supplementation Does Not Augment Adaptations to Endurance Exercise Training. *Medicine and Science in Sports and Exercise*, 51(10), 2041–2049. <https://doi.org/10.1249/MSS.0000000000002028>
- Jäger, Kerksick, C. M., Campbell, B. I., Cribb, P. J., Wells, S. D., Skwiat, T. M., Purpura, M., Ziegenfuss, T. N., Ferrando, A. A., Arent, S. M., Smith-Ryan, A. E., Stout, J. R., Arciero, P. J., Ormsbee, M. J., Taylor, L. W., Wilborn, C. D., Kalman, D. S., Kreider, R. B., Willoughby, D. S., ... Antonio, J. (2017). International Society of Sports Nutrition Position Stand: protein and exercise. *Journal of the International Society of Sports Nutrition*, 14(1), 20–20. <https://doi.org/10.1186/s12970-017-0177-8>
- Karpinski, C., & Rosenbloom, C. A. (2017). *Sports nutrition: a handbook for professionals*. Academy of Nutrition and Dietetics.
- Kay, T., 2016. Knowledge, not numbers: qualitative research and impact in sport, exercise and health. In B. Smith and A. C. Sparkes, eds., *Routledge handbook of qualitative research in sport and exercise*(pp. 424–437). London: Routledge.
- Kennedy. (2016). B Vitamins and the Brain: Mechanisms, Dose and Efficacy--A Review. *Nutrients*, 8(2), 68–68. <https://doi.org/10.3390/nu8020068>
- Kim, Liu, Y., & Shan, Z. (2017). Beyond touchdown: College students' sports participation, social media use, college attachment, and psychological well-being. *Telematics and Informatics*, 34(7), 895–903. <https://doi.org/10.1016/j.tele.2017.03.006>
- Kostråd for å fremme folkehelsen og forebygge kroniske sykdommer: metodologi og vitenskapelig kunnskapsgrunnlag* (p. 353). (2011). Helsedirektoratet.
- Krauss, S. E., Hamzah, A., Omar, Z., Suandi, T., Ismail, I. A., Zahari, M. Z., & Nor, Z. M. (2009). Preliminary investigation and interview guide development for studying how Malaysian farmers' form their mental models of farming. *The Qualitative Report*, 14(2), 245.
- Kristiansen, & Houlihan, B. (2017). Developing young athletes: The role of private sport schools in the Norwegian sport system. *International Review for the Sociology of Sport*, 52(4), 447–469. <https://doi.org/10.1177/1012690215607082>
- Kurz, Rosendahl, J., Rodeck, J., Muehleck, J., & Berger, U. (2022). School-Based Interventions Improve Body Image and Media Literacy in Youth: A Systematic

- Review and Meta-Analysis. *Journal of Prevention (2022 : Print)*, 43(1), 5–23.  
<https://doi.org/10.1007/s10935-021-00660-1>
- Kvale, S. & Brinkmann, S. (2015). *Det kvalitative forskningsintervju* (3. utg. utg.). Gyldendal akademisk.
- Kvale, S., Anderssen, T., & Rygge, J. (1997). *Det kvalitative forskningsintervju* (p. 236). Ad notam Gyldendal.
- Lerø, M. (2020, 28. Juni). Nye kostråd forsinket. *Mat- og drikkenæringen venter på nye nordiske anbefalinger om ernæring og kosthold. Nye krav til bærekraft I anbefalingen forsinker prosjektet*. Hentet 24. september 2020 fra  
<https://matogmarked.no/nyheter/2022/nye-kostrad-forsinket>
- Levitt, Bamberg, M., Creswell, J. W., Frost, D. M., Josselson, R., & Suárez-Orozco, C. (2018). Journal Article Reporting Standards for Qualitative Primary, Qualitative Meta-Analytic, and Mixed Methods Research in Psychology: The APA Publications and Communications Board Task Force Report. *The American Psychologist*, 73(1), 26–46.  
<https://doi.org/10.1037/amp0000151>
- Liamputtong. (2013). *Qualitative research methods* (4th ed., pp. XVIII, 439). Oxford University Press.
- Logue, D., Madigan, S. M., Delahunt, E., Heinen, M., Mc Donnell, S. J., & Corish, C. A. (2018). Low energy availability in athletes: a review of prevalence, dietary patterns, physiological health, and sports performance. *Sports Medicine*, 48(1), 73-96.  
<https://doi-org.mime.uit.no/10.1007/s40279-017-0790-3>
- Macnamara, Hambrick, D. Z., & Oswald, F. L. (2014). Deliberate Practice and Performance in Music, Games, Sports, Education, and Professions: A Meta-Analysis. *Psychological Science*, 25(8), 1608–1618. <https://doi.org/10.1177/0956797614535810>
- Malcolm Gladwell: Outliers. (2008). *The Bookseller (London)*, 5359, 12.
- Manore, Patton-Lopez, M. M., Meng, Y., & Wong, S. S. (2017). Sport Nutrition Knowledge, Behaviors and Beliefs of High School Soccer Players. *Nutrients*, 9 (4), 350.  
<https://doi.org/10.3390/nu9040350>
- Maughan, Burke, L. M., Dvorak, J., Larson-Meyer, D. E., Peeling, P., Phillips, S. M., Rawson, E. S., Walsh, N. P., Garthe, I., Geyer, H., Meeusen, R., van Loon, L. J. C.,

- Shirreffs, S. M., Spriet, L. L., Stuart, M., Vernec, A., Currell, K., Ali, V. M., Budgett, R. G., ... Engebretsen, L. (2018). IOC consensus statement: dietary supplements and the high-performance athlete. *British Journal of Sports Medicine*, 52(7), 439–455. <https://doi.org/10.1136/bjsports-2018-099027>
- Mavin, & Corlett, S. (2018). Reflexivity and Researcher Positionality. In *The SAGE Handbook of Qualitative Business and Management Research Methods: History and Traditions* (pp. 377–399). SAGE Publications Ltd.
- McCabe, Ketcham, C. J., & Hall, E. E. (2021). Good Food, Good Mood: Perspectives on the Relationship Between Nutrition and Mental Health With Division I Collegiate Athletic Programs. *Frontiers in Sports and Active Living*, 3, 692601–692601. <https://doi.org/10.3389/fspor.2021.692601>
- McDermott, Anderson, S. A., Armstrong, L. E., Casa, D. J., Chevront, S. N., Cooper, L., Kenney, W. L., O'Connor, F. G., & Roberts, W. O. (2017). National Athletic Trainers' Association Position Statement: Fluid Replacement for the Physically Active. *Journal of Athletic Training*, 52(9), 877–895. <https://doi.org/10.4085/1062-6050-52.9.02>
- Merriam, & Tisdell, E. J. (2015). Qualitative Research: A Guide to Design and Implementation. In *Qualitative Research*. John Wiley & Sons, Incorporated.
- Miles, Huberman, A. M., & Saldaña, J. (2019). *Qualitative data analysis : a methods sourcebook* (Fourth edition.). SAGE.
- Moeri, Mongillo, F., & Fahr, A. (2022). Images of bodies in mass and social media and body dissatisfaction: The role of internalization and self-discrepancy. *Frontiers in Psychology*, 13, 1009792–1009792. <https://doi.org/10.3389/fpsyg.2022.1009792>
- Mohr, Vigh-Larsen, J. F., & Krstrup, P. (2022). Muscle Glycogen in Elite Soccer - A Perspective on the Implication for Performance, Fatigue, and Recovery. *Frontiers in Sports and Active Living*, 4, 876534–876534. <https://doi.org/10.3389/fspor.2022.876534>
- Mountjoy, M., Sundgot-Borgen, J. K., Burke, L. M., Ackerman, K. E., Blauwet, C., Constantini, N., Lebrun, C., Lundy, B., Melin, A. K., Meyer, N. L., Sherman, R. T., Tenforde, A. S., & Torstveit, M. K. (2018). IOC consensus statement on relative energy deficiency in sport (RED-S): 2018 update. *British Journal of Sports Medicine*, 52(11), 687-697. <https://doi.org/10.1136/bjsports-2018-099193>

- Mountjoy, Sundgot-Borgen, J., Burke, L., Carter, S., Constantini, N., Lebrun, C., Meyer, N., Sherman, R., Steffen, K., Budgett, R., & Ljungqvist, A. (2014). The IOC consensus statement: beyond the Female Athlete Triad—Relative Energy Deficiency in Sport (RED-S). *British Journal of Sports Medicine*, 48(7), 491–497.  
<https://doi.org/10.1136/bjsports-2014-093502>
- Nadim. (2015). Generalisering og bruken av analytiske kategorier i kvalitativ forskning. *Sosiologisk tidsskrift*, 23(3), 129–148. <https://doi.org/10.18261/ISSN1504-2928-2015-03-01>
- Nascimento, Silva, D., Ribeiro, S., Nunes, M., Almeida, M., & Mendes-Netto, R. (2016). Effect of a Nutritional Intervention in Athlete's Body Composition, Eating Behaviour and Nutritional Knowledge: A Comparison between Adults and Adolescents. *Nutrients*, 8(9), 535–535. <https://doi.org/10.3390/nu8090535>
- Nédélec, Halson, S., Abaidia, A.-E., Ahmaidi, S., & Dupont, G. (2015). Stress, Sleep and Recovery in Elite Soccer: A Critical Review of the Literature. *Sports Medicine (Auckland)*, 45(10), 1387–1400. <https://doi.org/10.1007/s40279-015-0358-z>
- Nelson, Story, M., Larson, N. I., Neumark-Sztainer, D., & Lytle, L. A. (2008). Emerging Adulthood and College-aged Youth: An Overlooked Age for Weight-related Behavior Change. *Obesity (Silver Spring, Md.)*, 16(10), 2205–2211.  
<https://doi.org/10.1038/oby.2008.365>
- Nelson, Stovitz, S. D., Thomas, M., LaVoi, N. M., Bauer, K. W., & Neumark-Sztainer, D. (2011). Do Youth Sports Prevent Pediatric Obesity? A Systematic Review and Commentary. *Current Sports Medicine Reports*, 10(6), 360–370.  
<https://doi.org/10.1249/JSR.0b013e318237bf74>
- NESH (2016). *Forskningsetisk retningslinjer for samfunnsvitenskap, humaniora, juss og teologi: B. Hensyn til personer (5-18)*. Hentet 07.12.22 fra <https://www.forskningsetikk.no/retningslinjer/hum-sam/forskningsetiske-retningslinjer-for-samfunnsvitenskap-og-humaniora/>
- Noetel, Ciarrochi, J., Van Zanden, B., & Lonsdale, C. (2019). Mindfulness and acceptance approaches to sporting performance enhancement: a systematic review. *International Review of Sport and Exercise Psychology*, 12(1), 139–175.  
<https://doi.org/10.1080/1750984X.2017.1387803>

- Okta, P. G., & Yildiz, E. (2021). The validity and reliability study of the Turkish version of the General and Sport Nutrition Knowledge Questionnaire (GeSNK). *Prog Nutr, 1*, e2021027. DOI: 10.23751/pn.v23i1.10029
- Olympiatoppen. (2023). Idrettsernæring. Hentet 20 mai 2023 fra <https://olympiatoppen.no/fagomrader/idrettspsernaering/>
- Ono, Kennedy, E., Reeves, S., & Cronin, L. (2012). Nutrition and culture in professional football. A mixed method approach. *Appetite, 58*(1), 98–104. <https://doi.org/10.1016/j.appet.2011.10.007>
- Papert, S., & Harel, I. (1991). Situating constructionism. *Constructionism, 2*(3-4), 1-11. <https://dspace.mit.edu/handle/1721.1/2989>
- Paul Knutsen. (2018). Gjensyn med spørsmålet om metode. *Norsk filosofisk tidsskrift, 53*, 198– 208. <https://doi.org/10.18261/issn.1504-2901-2018-04-03>
- Poleszynski, Mysterud, I., Lindberg, F. A., & Bruset, S. A. (2009). Governmental nutrition guidelines should be revised. *Tidsskrift for den Norske Lægeforening, 129*(22), 2382– 2384. <https://doi.org/10.4045/tidsskr.09.0040>
- Poleszynski, V, D. (2020, 7 september 2020). *Nye nordiske ernæringsanbefalinger – hvem utreder?* <https://vof.no/nye-nordiske-ernaeringsanbefalinger-hvem-utreder>
- Polit, & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies, 47*(11), 1451–1458. <https://doi.org/10.1016/j.ijnurstu.2010.06.004>
- Popper, K. (2014). *Conjectures and refutations: The growth of scientific knowledge*. routledge.
- Postholm, Jacobsen, D. I., & Søbstad, R. (2018). *Forskningsmetode for masterstudenter i lærerutdanningen* (p. 300). Cappelen Damm akademisk.
- Postholm. (2010). *Kvalitativ metode : en innføring med fokus på fenomenologi, etnografi og kasusstudier* (2. utg., p. 242). Universitetsforl.
- Potgieter. (2013). Sport nutrition : a review of the latest guidelines for exercise and sport nutrition from the American College of Sport Nutrition, the International Olympic Committee and the International Society for Sports Nutrition : review article. *The South African Journal of Clinical Nutrition, 26*(1), 6–16.
- Purcell. (2013). Sport nutrition for young athletes. *Paediatrics & Child Health, 18*(4), 1.

- Rabionet. (2016). How I Learned to Design and Conduct Semi-structured Interviews: An Ongoing and Continuous Journey. *Qualitative Report*.  
<https://doi.org/10.46743/2160-3715/2009.2850>
- Rankinen, T., & Bouchard, C. (2006). Genetics of food intake and eating behavior phenotypes in humans. *Annual Review of Nutrition*, 26, 413-434.  
<https://doi.org/10.1146/annurev.nutr.26.061505.111218>
- Skårderud, F., Fladvad, T., Garthe, I., Holmlund, H., & Engebretsen, L. (2012). Når idrett og helse kolliderer. *Tidsskrift for den Norske Lægeforening*, 132(17), 1977–1978.  
<https://doi.org/10.4045/tidsskr.11.1297>
- Skuland, & Ånestad, S. E. (2013). The mainstreaming of sports nutrition consumption in the Norwegian food culture. *Anthropology of food*. <https://doi.org/10.4000/aof.7332>
- Smith. (2017). Interpretative phenomenological analysis: Getting at lived experience. *The Journal of Positive Psychology*, 12(3), 303–304.  
<https://doi.org/10.1080/17439760.2016.1262622>
- Smith. (2018). Generalizability in qualitative research: misunderstandings, opportunities and recommendations for the sport and exercise sciences. *Qualitative Research in Sport, Exercise and Health*, 10(1), 137–149. <https://doi.org/10.1080/2159676X.2017.1393221>
- Solli. (2021). Den nødvendige konstruktivismen. *Norsk Sosiologisk Tidsskrift*, 5(2), 34–49.  
<https://doi.org/10.18261/issn.2535-2512-2021-02-03>
- Spendlove, Heaney, S. E., Gifford, J. A., Prvan, T., Denyer, G. S., & O'Connor, H. T. (2012). Evaluation of general nutrition knowledge in elite Australian athletes. *British Journal of Nutrition*, 107(12), 1871–1880. <https://doi.org/10.1017/S0007114511005125>
- Spronk, I., Heaney, S. E., Prvan, T., & O'Connor, H. T. (2015). Relationship between general nutrition knowledge and dietary quality in elite athletes. *International journal of sport nutrition and exercise metabolism*, 25(3), 243-251.  
<https://doi.org/10.1123/ijsnem.2014-0034>
- Spronk, Kullen, C., Burdon, C., & O'Connor, H. (2014). Relationship between nutrition knowledge and dietary intake. *British Journal of Nutrition*, 111(10), 1713–1726.  
<https://doi.org/10.1017/S0007114514000087>
- Stambulova, N. B. (2016). Theoretical developments in career transition research: Contributions of European sport psychology. In *Sport and Exercise Psychology Research* (pp. 251-268). Academic Press. <https://doi.org/10.1016/B978-0-12-803634-1.00012-1>

- Staśkiewicz, Grochowska-Niedworok, E., Zydek, G., Grajek, M., Krupa-Kotara, K., Białek-Dratwa, A., Jaruga-Sękowska, S., Kowalski, O., & Kardas, M. (2023). The Assessment of Body Composition and Nutritional Awareness of Football Players According to Age. *Nutrients*, 15(3), 705. <https://doi.org/10.3390/nu15030705>
- Stankiewicz, B., Cieślicka, M., Mieszkowski, J., Kochanowicz, A., Niespodziński, B., Szwarz, A., ... & Antosiewicz, J. (2023). Effect of Supplementation with Black Chokeberry (*Aronia melanocarpa*) Extract on Inflammatory Status and Selected Markers of Iron Metabolism in Young Football Players: A Randomized Double-Blind Trial. *Nutrients*, 15(4), 975. <https://doi.org/10.3390/nu15040975>
- Story, Neumark-Sztainer, D., & French, S. (2002). Individual and Environmental Influences on Adolescent Eating Behaviors. *Journal of the American Dietetic Association*, 102(3), S40–S51. [https://doi.org/10.1016/S0002-8223\(02\)90421-9](https://doi.org/10.1016/S0002-8223(02)90421-9)
- Study. *International Journal of Environmental Research and Public Health*, 19(11), 6533. <https://doi.org/10.3390/ijerph19116533>
- Sundgot-Borgen, J., & Garthe, I. (2011). Elite athletes in aesthetic and Olympic weight-class sports and the challenge of body weight and body compositions. *Journal of Sports Sciences*, 29(sup1), S101–S114. <https://doi.org/10.1080/02640414.2011.565783>
- Swedberg. (2016). Before theory comes theorizing or how to make social science more interesting. *The British Journal of Sociology*, 67(1), 5–22. <https://doi.org/10.1111/1468-4446.12184>
- Tahko. (2015). Natural Kind Essentialism Revisited. *Mind*, 124(495), 795–822. <https://doi.org/10.1093/mind/fzv027>
- Tenny, S., Brannan, J. M., & Brannan, G. D. (2022). Qualitative Study. In *StatPearls*. <https://www.ncbi.nlm.nih.gov/pubmed/29262162>
- Thagaard, T. (2018). *Systematikk og innlevelse: en innføring i kvalitative metoder* (5. utg., p. 222). Fagbokforl.
- Thomas, D. Travis, PhD, RDN, CSSD, Erdman, Kelly Anne, MSc, RD, CSSD, & Burke, Louise M., OAM, PhD, APD, FACSM. (2016). Position of the Academy of Nutrition and Dietetics, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and Athletic Performance. *Journal of the Academy of Nutrition and Dietetics*, 116(3), 501–528. <https://doi.org/10.1016/j.jand.2015.12.006> ??
- Thomas, Erdman, K. A., & Burke, L. M. (2016). American College of Sports Medicine Joint Position Statement. Nutrition and Athletic Performance. *Medicine and Science in*

- Sports and Exercise*, 48(3), 543–568.  
<https://doi.org/10.1249/MSS.0000000000000852>
- Trexler, Smith-Ryan, A. E., & Norton, L. E. (2014). Metabolic adaptation to weight loss: implications for the athlete. *Journal of the International Society of Sports Nutrition*, 11(1), 7–7. <https://doi.org/10.1186/1550-2783-11-7>
- Ültanir, E. (2012). An epistemological glance at the constructivist approach: Constructivist learning in Dewey, Piaget, and Montessori. *International journal of instruction*, 5(2).
- Vázquez-Espino, Rodas-Font, G., & Farran-Codina, A. (2022). Sport Nutrition Knowledge, Attitudes, Sources of Information, and Dietary Habits of Sport-Team Athletes. *Nutrients*, 14(7), 1345. <https://doi.org/10.3390/nu14071345>
- Vuong, Jarman, H. K., Doley, J. R., & McLean, S. A. (2021). Social Media Use and Body Dissatisfaction in Adolescents: The Moderating Role of Thin- and Muscular-Ideal Internalisation. *International Journal of Environmental Research and Public Health*, 18(24), 13222. <https://doi.org/10.3390/ijerph182413222>
- Walsh. (2019). Nutrition and Athlete Immune Health: New Perspectives on an Old Paradigm. *Sports Medicine (Auckland)*, 49(Suppl 2), 153–168.  
<https://doi.org/10.1007/s40279-019-01160-3>
- Wardle, Parmenter, K., & Waller, J. (2000). Nutrition knowledge and food intake. *Appetite*, 34(3), 269–275. <https://doi.org/10.1006/appe.1999.0311>
- Whiting, L. S. (2008). Semi-structured interviews: guidance for novice researchers. *Nursing Standard (through 2013)*, 22(23), 35.
- Wiita, B. G., & Stombaugh, I. A. (1996). Nutrition knowledge, eating practices, and health of adolescent female runners: a 3-year longitudinal study. *International Journal of Sport Nutrition and Exercise Metabolism*, 6(4), 414-425. <https://doi.org/10.1123/ijesn.6.4.414>
- Williams, Boylan, A.-M., & Nunan, D. (2020). Critical appraisal of qualitative research: necessity, partialities and the issue of bias. *BMJ Evidence-Based Medicine*, 25(1), 9– 11. <https://doi.org/10.1136/bmjebm-2018-111132>
- Williams, & Reilly, T. (2000). Talent identification and development in soccer. *Journal of Sports Sciences*, 18(9), 657–667. <https://doi.org/10.1080/02640410050120041>



- Wilson, H., & Cervantes, C. (2023). A Comparison Between an NAIA and an NCAA Division I Women's Soccer Teams' Nutrition Knowledge, Nutrition Knowledge Sources, and Dietary Habits (HWCC). *Journal of Exercise and Nutrition*, 6(1). <https://doi.org/10.53520/jen2023.103140>
- Wilson, Janes, G., & Williams, J. (2022). *Identity, positionality and reflexivity: relevance and application to research paramedics*. <https://doi.org/10.29045/14784726.2022.09.7.2.43>
- Wylleman, P., & Lavallee, D. (2004). A developmental perspective on transitions faced by athletes. *Developmental sport and exercise psychology: A lifespan perspective*, 507-527.
- Yardley, L. (2008). Demonstrating validity in qualitative psychology. *Qualitative psychology: A practical guide to research methods*, 2, 235-251.
- Yardley. (2017). Demonstrating the validity of qualitative research. *The Journal of Positive Psychology*, 12(3), 295–296. <https://doi.org/10.1080/17439760.2016.1262624>
- Åstedt-Kurki P. & Heikkinen R.-L. (1994) Two approaches to the study of experiences of health and old age: the thematic interview and the narrative method. *Journal of Advanced Nursing* 20, 418–421. doi:[10.1111/j.1365-2648.1994.tb02375.x](https://doi.org/10.1111/j.1365-2648.1994.tb02375.x)

# Attachment

## Interview guide

|  |  |
|--|--|
| <b>Introduction</b>  |  |
| <b>Self-presentation</b>   |  |
| <b>Introduction to the research project</b>                            |  |
| <b>Would you want to ask any questions before we get started?</b>      |  |
| <b>1. Background Information</b>                                       |  |
| 1.1 Can you share a little about who you are? Age? Living situation?   |  |
| 1.2 Could you let me know why you chose this subject of study?         |  |
| 1.3 How would you describe your typical training week?                 |  |
| 1.4 Regarding eating habits, how does a typical day/week look for you? |  |
| <b>2. There are several areas in which one must perform.</b>           |  |
| 2.1 Why do you decide to combine football with school?                 |  |

|   |  |
|---|--|
| 2.2 What goals have you set for yourself as an athlete? and does food play any role in this?  |  |
| 2.3 Does combining football and school provide any food-related challenges?   |  |
| 2.4 Can you tell me a bit about how you try to balance your dietary decisions in your daily life that allows you to balance football and school?        |  |
| 2.5 How do you structure your everyday life to combine this in the best possible way?   |  |
| <b>The transition</b>   |  |
| 3.1 Can you tell me a bit about the transition from junior high school to upper secondary school? Did you move away from home, or did you stay at home? |  |
| 3.2 Was there any changes on the food front?  |  |
| 3.3 Does the school have any conscious relationship and arrangement around the fact that you have moved? And against the club, you play for?            |  |
| <b>Partnership between clubs and schools</b>  |  |
| 4.1 What is your experience with this school-club collaboration? Given the focus on food?   |  |

|  |  |
|--|--|
| 4.2 What specific preparations might they make to make the day's meal preparation easier?              |  |
| 4.3 If you want to talk about this theme around food, do you have someone to talk to about this theme? |  |
| 4.4 What do you think about having a theme about food in school? As a separate subject?                |  |
| 4.5 Do you have anything further to say? Or something to add?  |  |

# Approved application from NSD

Meldeskjema for behandling av personopplysninger

24.04.2023, 15:50



[Meldeskjema](#) / [Hvilket forhold har unge fotballspillere til kosthold?](#) / Vurdering

## Vurdering av behandling av personopplysninger

**Referansenummer**  
753004

**Vurderingstype**  
Standard

**Dato**  
27.09.2022

**Prosjektittel**

Hvilket forhold har unge fotballspillere til kosthold ?

**Behandlingsansvarlig institusjon**

UiT Norges Arktiske Universitet / Det helsevitenskapelige fakultet / Idrettshøgskolen

**Prosjektansvarlig**

June Røsbø Anthonsen

**Student**

Aleksander Bjørnvåg

**Prosjektperiode**

01.08.2022 - 15.05.2023

**Kategorier personopplysninger**

Alminnelige  
Særlige

**Lovlig grunnlag**

Samtykke (Personvernforordningen art. 6 nr. 1 bokstav a)  
Uttrykkelig samtykke (Personvernforordningen art. 9 nr. 2 bokstav a)

Behandlingen av personopplysningene er lovlig så fremt den gjennomføres som oppgitt i meldeskjemaet. Det lovlige grunnlaget gjelder til 15.05.2023.

[Meldeskjema](#)

**Kommentar**

OM VURDERINGEN

Personverntjenester har en avtale med institusjonen du forsker eller studerer ved. Denne avtalen innebærer at vi skal gi deg råd slik at behandlingen av personopplysninger i prosjektet ditt er lovlig etter personvernregelverket.

Personverntjenester har nå vurdert den planlagte behandlingen av personopplysninger. Vår vurdering er at behandlingen er lovlig, hvis den gjennomføres slik den er beskrevet i meldeskjemaet med dialog og vedlegg.

**VIKTIG INFORMASJON TIL DEG**

Du må lagre, sende og sikre dataene i tråd med retningslinjene til din institusjon. Dette betyr at du må bruke leverandører for spørreskjema, skylagring, videosamtale o.l. som institusjonen din har avtale med. Vi gir generelle råd rundt dette, men det er institusjonens egne retningslinjer for informasjonssikkerhet som gjelder.

**TYPE OPPLYSNINGER OG VARIGHET**

Prosjektet vil behandle alminnelige personopplysninger og særlige kategorier av personopplysninger om helseforhold frem til 15.05.2023.

**LOVLIG GRUNNLAG**

Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 nr. 11 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse, som kan dokumenteres, og som den registrerte kan trekke tilbake.

For alminnelige personopplysninger vil lovlig grunnlag for behandlingen være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 a.

Behandlingen av særlige kategorier av personopplysninger om helseforhold er basert på uttrykkelig samtykke fra den registrerte, jf. personvernforordningen art. 6 nr. 1 a og art. 9 nr. 2 a.

#### PERSONVERNPRINSIPPER

Personverntjenester vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen:

- om lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om og samtykker til behandlingen
- formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke viderebehandles til nye uforenlige formål
- dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet
- lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet.

#### DE REGISTRERTES RETTIGHETER

Vi vurderer at informasjonen om behandlingen som de registrerte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18) og dataportabilitet (art. 20).

Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

#### FØLG DIN INSTITUSJONS RETNINGSLINJER

Personverntjenester legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1 f) og sikkerhet (art. 32).

Ved bruk av databehandler (spørreskjemaleverandør, skylagring, videosamtale o.l.) må behandlingen oppfylle kravene til bruk av databehandler, jf. art 28 og 29. Bruk leverandører som din institusjon har avtale med.

For å forsikre dere om at kravene oppfylles, må prosjektansvarlig følge interne retningslinjer/rådføre dere med behandlingsansvarlig institusjon.

#### MELD VESENTLIGE ENDRINGER

Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til oss ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilken type endringer det er nødvendig å melde: <https://www.nsd.no/personverntjenester/fylle-ut-meldeskjema-for-personopplysninger/melde-endringer-i-meldeskjema> Du må vente på svar fra oss før endringen gjennomføres.

#### OPPFØLGING AV PROSJEKTET

Vi vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Kontaktperson hos oss: Eva J. B. Payne

Lykke til med prosjektet!

## Information letter

### **Vil du delta i forskningsprosjektet** ***Hvilket forhold har unge fotballspillere til kosthold***

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å finne ut hvilket forholdt unge jenter og gutter i alderen 18-19 år som spiller fotball har til kosthold. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

#### **Formål**

Forskningsprosjektet er en masteroppgave i siste del av studiet master i idrettsvitenskap ved UiT Norges idrettshøyskole. Formålet med dette prosjektet er å kunne dykke dypere inn i unge fotballspillers forhold til ernæring, kosthold og dietter. Hvordan er kunnskapen om mat, og hvor får de kunnskapen fra. I tillegg til hvilken informasjon ser de på som riktig informasjon, og hvilken informasjon burde den stille spørsmål til.

Hensikten med oppgaven er å finne ut hvilket forholdt unge jenter og gutter i alderen 18-19 år som spiller fotball har til kosthold. Her skal en finne ut om det er store forskjeller mellom de ulike kjønnene og aldersgruppene. Jeg har tenkt å snakke med 8-10 personer innen de ulike årsklassene og kjønnene

Dette prosjektet er et forskningsprosjekt i mitt masterprosjekt ved UiT Norges Arktiske Universitet - Det Helsevitenskapelige fakultet/ Idrettshøgskolen

#### **Hvem er ansvarlig for forskningsprosjektet?**

UiT Norges Arktiske Universitet er ansvarlige for prosjektet

Aleksander Bjørnvåg

Det er også to veiledere med i prosjektet som heter June Røsbø Anthonsen (universitetslektor) og Marcel Reinold (Professor) som er ansatt ved UiT Norges Arktiske Universitet.

### **Hvorfor får du spørsmål om å delta?**

Akkurat du får spørsmål om å delta i dette prosjektet fordi du går på videregående skole og er mellom 16 til 19 år. I tillegg til at du spiller fotball, og går på idrettslinja eller toppidrettslinja.

### **Hva innebærer det for deg å delta?**

Hvis du velger å delta i dette prosjektet, innebærer det at du må delta i et intervju. Det vil ta deg alt fra 30 minutter til 1 time ca. Intervjuet inneholder enkelte bakgrunnsspørsmål i starten som hvor du er født, kjønn og bosituasjon osv. Deretter vil jeg dykke dypere inn i temaene rundt kosthold, ernæring, dietter, trenere, foreldre og innhenting av kostnadskunnskaper osv. Svarene dine blir skrevet ned direkte og transkribert senere.

### **Det er frivillig å delta**

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

### **Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger**

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Det vil være en student og to ulike veiledere som har tilgang til opplysningene. Når publikasjonen av oppgaven kommer ut, vil du ikke bli gjenkjent.

### **Hva skjer med personopplysningene dine når forskningsprosjektet avsluttes?**

Prosjektet vil etter planen avsluttes 15. mai 2023, og da vil opplysningene bli slettet

### **Hva gir oss rett til å behandle personopplysninger om deg?**

Vi behandler opplysninger om deg basert på ditt samtykke. På oppdrag av UiT Norges idrettshøgskole har NSD - Norsk senter for forskningsdata AS har vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.



## Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke opplysninger vi behandler om deg, og å få utlevert en kopi av opplysningene
- å få rettet opplysninger om deg som er feil eller misvisende
- å få slettet personopplysninger om deg
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger

Hvis du har spørsmål til studien, eller ønsker å vite mer om eller benytte deg av dine rettigheter, ta kontakt med:

UIT Norges idrettshøyskole ved June Røsbø Anthonsen Telefon: +47 78 45 01 68

[june.a.rosbo@uit.no](mailto:june.a.rosbo@uit.no)

UIT Norges idrettshøyskole ved Marcel Reinold, Telefon: +47 78 45 03 44

[marcel.reinold@uit.no](mailto:marcel.reinold@uit.no)

Student, Aleksander Bjørnvåg, [abjornvag@gmail.com](mailto:abjornvag@gmail.com) +4795788288

Vårt personvernombud: Joakim Bakkevold, [personvernombud@uit.no](mailto:personvernombud@uit.no)

Hvis du har spørsmål knyttet til Personverntjenester sin vurdering av prosjektet, kan du ta kontakt med:

- Personverntjenester på epost ([personverntjenester@sikt.no](mailto:personverntjenester@sikt.no)) eller på telefon: 53 21 15 00.

Med vennlig hilsen

Aleksander Bjørnvåg

*Prosjektansvarlig*

Student

June Røsbø Anthonsen og Marcel Reinold

Aleksander Bjørnvåg

-----  
-----

## **Samtykkeerklæring**

Jeg har mottatt og forstått informasjon om prosjektet [*sett inn tittel*], og har fått anledning til å stille spørsmål. Jeg samtykker til:

- å delta i intervjuet
- Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet

-----

(Signert av prosjektdeltaker, dato)

