OBSERVATION OF FOOD MYTHS AND FACTS: PERCEPTIONS AND BELIEFS AMONG EMPLOYEES OF DAFFODIL INTERNATIONAL UNIVERSITY, SAVAR, DHAKA

A PROJECT REPORT

BY

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Submitted to the Department of Nutrition and Food Engineering in the partial fulfillment of B.Sc. in Nutrition and Food Engineering

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APPROVAL

This Project titled "**Observation of Food Myths and Facts: Perceptions and Beliefs Among Employees of Daffodil International University, Savar, Dhaka**", submitted by **Jaima Jannat Shikha, ID: 201-34-285** to the Department of Nutrition and Food Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Nutrition and Food Engineering and approved as to its style and contents.

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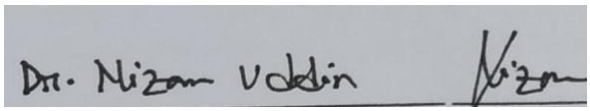
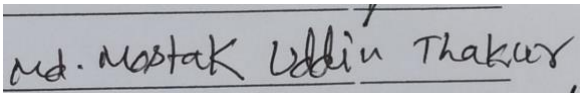
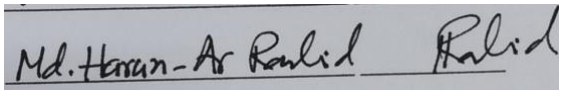
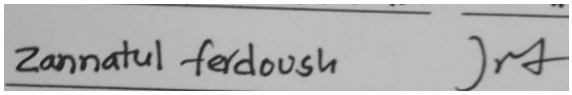
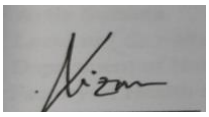
Chairman of the Board 

External Member 

Internal Member-1 

Internal Member-2 



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We hereby declare that, this project has been done by us under the supervision of **Harun-Ar Rashid, Assistant Professor, Department of Nutrition and Food Engineering, Daffodil International University**. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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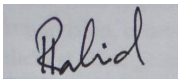

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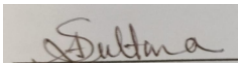

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I would like to thank my entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

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ABSTRACT

This study investigates the perceptions and beliefs surrounding food myths and facts among employees of Daffodil International University in Savar, Dhaka. In a world where dietary habits significantly impact health and well-being, understanding the myths and misconceptions about food is crucial for promoting better nutrition and preventing diet-related diseases. The research aims to identify common food myths prevalent among the university's staff and to compare these beliefs with scientifically established facts. Data was collected through structured questionnaires distributed to a diverse group of employees, encompassing various age groups, genders, and job roles. The findings reveal that many employees hold misconceptions about certain foods and their health impacts. For instance, a significant number of respondents believe in the myth that skipping meals can aid in weight loss, or that certain foods, like eggs or nuts, should be avoided due to high cholesterol content. These beliefs contrast sharply with nutritional science, which emphasizes balanced diets and the benefits of various nutrients found in these foods. The study also highlights the role of cultural and social influences in shaping these perceptions. Interestingly, it was found that educational background and access to reliable nutritional information play critical roles in dispelling food myths. Employees with higher education levels or those who had attended nutritional seminars were more likely to align their beliefs with scientific facts. This research underscores the importance of continuous nutritional education and the dissemination of accurate dietary information within institutional settings. By addressing and correcting these food myths, we can foster a healthier, more informed community at Daffodil International University. The study advocates for regular workshops, seminars, and accessible educational materials to help employees make informed dietary choices, ultimately contributing to their overall health and productivity. This approach not only benefits individual health outcomes but also enhances workplace efficiency and morale by promoting a culture of wellness and informed decision-making.

Keywords: Food Myths, Dietary Habits, Food Facts, Nutrition Knowledge, Cultural Beliefs, Nutritional Education, Food Perception.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

One of a person's essential needs, food has a critical role in both promoting health and wellbeing and preventing sickness (Tucker et. al., 2014). Nevertheless, although eating is primarily done to satiate hunger, a physiological necessity, additional variables as well as ascertain the meal choice, quantity, frequency, and motivation. A few of these variables have to do with social relationships, culture, cost, accessibility, emotions, and hunger (Verbanac et al., 2019 and Jiang et al., 2014).

Therefore, decisions on what to eat involve a number of disciplines, ranging from social policy and human behavior to exact sciences like nutrition. Based on the Food Choice Questionnaire, a study by Milošević et al. (2012) conducted in six Balkan nations allowed for the identification of eight elements underpinning food choice and five consumer categories based on their motivational profiles. As a result, the authors discovered that the individuals were split up into groups based on their socioeconomic status and pattern of food purchases.

Cunha et al. (2018) reviewed how the Food Choice Survey was used in several nations and came to the conclusion that, even when using the identical instruments, the outcomes may vary depending on the setting in which individuals respond.

Guiné et al. (2020) also looked at the reasons people eat in 16 different countries and discovered that these reasons were influenced by a variety of variables, including politics, the environment, society and culture, pricing and availability, emotions, marketing, and advertisements.

One of the numerous variables influencing eating habits is belief, which is a collection of ideas that a person accepts as true. Food myths are beliefs—that is, dietary theories that are accepted as true by the person yet are either not well supported by science or even contradict it (Verbanac et al., 2019 and Worsley et al., 2002).

The disinformation that is now in circulation is the source of many fallacies. Lack of reliable information and understanding about nutrition is the root cause of most ailments, including the syndrome of metabolic syndrome, diabetes, high blood pressure, atherosclerosis, and cardiovascular disorders (Verbanac et al., 2019).

However, can people's eating habits actually change as a consequence of nutritional information? Increasing nutritional awareness is the primary objective of many food education programs, since it helps individuals create and maintain a variety of healthy, balanced eating habits. The following are some of the consequences of nutritional knowledge for public health, as emphasized in a review by Worsley et al. (2002): provide more aggressive educational

initiatives, give adult and child education more weight, take into account people's individual dietary motives, and keep conducting research to better understand consumer trends and provide targeted solutions.

1.2 Research Objectives

1.2.1 General Objective

The primary objective of this study is to assess the food myths and facts: perceptions and beliefs among employees of Daffodil International University, Savar, Dhaka. Specifically, the study aims to:

- To identify common food myths among university employees.
- To analyze the root causes of these misconceptions.
- To assess the influence of food myths on dietary choices and health behaviors.
- To evaluate the effectiveness of current health education programs.
- To develop targeted campaigns to correct nutritional misinformation.
- To promote evidence-based nutritional practices among employees.
- To encourage healthier food choices through factual knowledge.
- To reduce the prevalence of diet-related health issues within the university.
- To support the creation of policies addressing nutritional misinformation.
- To enhance the integration of accurate nutritional information in employee wellness programs.

By achieving these objectives, the study aims to contribute valuable insights into addressing food myths and facts: perceptions and beliefs among employees of Daffodil International University, Savar, Dhaka.

1.2.2 Specific Objective

- To identify common food myths prevalent among university employees. Understand the root causes of these misconceptions. Assess how these myths influence dietary choices and health behaviors.
- To provide data to tailor health education programs. Develop targeted campaigns to correct misinformation. Enhance awareness about evidence-based nutritional practices.
- To encourage healthier food choices through factual knowledge. Reduce the prevalence of diet-related health issues. Foster a culture of informed eating within the university community.
- To assist in creating policies that address nutritional misinformation. Support the integration of accurate nutritional information into employee wellness programs. Inform decision-makers about the importance of combating food myths.
- To directly impact the well-being of university employees by promoting better dietary practices. Enhance productivity and reduce absenteeism related to poor diet and health. Foster a supportive work environment that prioritizes employee health.

CHAPTER 2

LITERATURE REVIEW

2.1 Literature Review

A different systematic study by Sprenk et al. (2014) found a small but positive correlation between nutritional knowledge and food consumption. For this reason, nutritional policies that aim to promote nutritional literacy should also be relevant to changing habits. Their own beliefs and inaccurate perception of the material at hand may be the cause of their ignorance about particular food products. Because of cognitive errors, food goods may be incorrectly thought to be healthy when they are not.

The opinions of Brazilian consumers on the advantages and disadvantages of various foods as well as the associated health impacts were assessed by (Marsola et al. 2021). They came to the conclusion that perceptions of health advantages outweigh dangers due to characteristics including money, education, and childlessness.

Furthermore, a lot of the time, inaccurate information sources are used to acquire nutritional understanding (Goodman et al., 2008). According to a Canadian research, food labels were the main sources of knowledge on nutrition and food between 2004 and 2008, followed by books, periodicals, and health care professionals.

Research by (Goodman et al. 2008) demonstrated that dietitians and medical experts possess a significantly higher level of confidence in assessing the credibility of information sources compared to individuals outside these professions. This increased confidence likely stems from their specialized training and expertise, which enables them to critically evaluate health-related content more effectively. Their ability to discern reliable information from questionable sources is particularly valuable, as they play a critical role in advising patients and the public on nutrition and health matters. This skill is essential in an era where misinformation is widespread, especially online, where both accurate and inaccurate health information are readily accessible. Therefore, the findings underscore the importance of training and expertise in fostering confidence and competence in evaluating the credibility of health information sources.

Understanding nutrition is crucial for combating false information and encouraging healthy eating habits. Nonetheless, dependable and trustworthy information sources are necessary, which is why health professionals play a crucial role in educating the public and keeping an eye on eating patterns in a nation, enabling the management of several chronic diseases impacted by lifestyle choices (Goodman et al., 2008).

The Global Burden of Disease report (Afshin et al., 2017) from 2017 states that poor eating habits are to blame for 11 million deaths annually, with diseases like cancer, heart disease, and type 2 diabetes being the leading causes of death due to these unbalanced eating habits.

The findings suggest that there may be an emerging global pandemic of chronic illnesses closely linked to dietary factors, as indicated by research from Afshin et al. (2017) and Downer et al.

(2020). Poor dietary habits have been identified as significant contributors to a range of chronic conditions, including obesity, diabetes, cardiovascular diseases, and certain cancers. These studies highlight the role of diet as a critical factor influencing the rise of chronic diseases worldwide, emphasizing the need for dietary interventions and public health strategies to address these preventable health issues. The growing prevalence of these diet-related illnesses underlines the urgency of promoting healthier eating patterns to curb this potential pandemic.

As a result, nutrition is essential to a balanced and healthy lifestyle and has become a key factor in the prevention, management, treatment, and even recurrence of a number of diseases that are influenced by dietary choices and behaviors (Downer et al., 2020; Lesser et al., 2015).

Research on the importance of food and nutritional literacy emphasizes its critical role in promoting better health outcomes. (Hemmer et al. 2021) highlight that a solid foundation in nutritional literacy enables individuals to make informed food choices, which can prevent diet-related diseases and improve overall well-being.

Similarly, (Palumbo et al. 2019) argue that food literacy is essential for empowering individuals to navigate complex food environments, enhancing their ability to distinguish between healthy and unhealthy choices.

Further support these claims by demonstrating that higher food literacy levels correlate with improved dietary habits and long-term health benefits, suggesting that food literacy education should be a priority in public health strategies (Vidgen et al. 2014).

To achieve food literacy, several methods have been proposed. (Perez et al. 2020) examine educational interventions that focus on hands-on learning experiences, such as cooking classes, which have proven effective in enhancing individuals' understanding of food and nutrition.

(Steils et al. 2020) also advocate for experiential learning but emphasize the role of community programs in promoting food literacy. According to their research, programs that engage participants in interactive, real-world food experiences contribute significantly to improving food literacy by providing practical skills and knowledge applicable in everyday life.

Furthermore, various elements have been identified as contributing to an increase in food literacy among the general public and specific groups. (Thomas et al. 2019) explore how socioeconomic factors influence food literacy, noting that communities with access to educational resources and affordable healthy food options show higher levels of food literacy.

(Gartaula et al. 2020) focus on rural populations and find that community-led initiatives can foster greater food literacy, particularly where access to formal education is limited.

(Hojer et al. 2021) examine food literacy in schools, advocating for incorporating nutrition education into curriculums to cultivate a food-literate generation. (Rhea et al. 2020) add that tailored programs for different demographics, such as children, adults, and the elderly, can address specific needs and foster food literacy effectively within each group.

Despite this growing body of research, there remains a gap in the scientific literature regarding misconceptions about human food intake. Few studies thoroughly investigate the myths and misunderstandings that individuals hold about diet and nutrition, which can impede food literacy efforts. Addressing this gap could enhance food literacy initiatives by providing clearer, evidence-based guidance to dispel common misconceptions and empower people to make healthier food choices.

Expanding study into people's sometimes incorrect beliefs about eating behavior, is therefore necessary. It is suggested in this context to help shed some light on the differences between food myths and realities that are backed by science. This study looked at a sample of Portuguese people's opinions and views about various food myths and realities, with the goal of assessing the participants' degree of knowledge. The primary information sources and the degree of trust associated with them were also examined.

CHAPTER 3

MATERILAS AND METHODS

3.1 Study Design

Throughout the duration at Daffodil International University, interactions were carried out with faculty and staff to evaluate their understanding of dietary information. A total of 205 individuals participated in surveys to provide insights into their health, dietary preferences, and concerns. Regular visits were made to monitor their daily intake and assess their diet records. It was mandatory for every surveyor to ensure that all faculty and staff members were included in the feedback process.

3.2 Work Processes

This research process at Daffodil International University, Savar, Dhaka can be summarized using the following steps:

- Making questionnaire
- Visiting faculties
- Visiting staffs

3.3 Sample Size Calculation

For this study, the sample size was calculated with below process:

Z is the 95% confidence level for Z score = 1.96.

P is the estimated attribute percentage,

Q = 1-P

E is the margin of error 5% or 0.05.

We assume that, 85% of the Peoples have no knowledge about Myths.

So,

P=0.85
Q=1-P
Q=1-0.85
Q=0.15

The following formula has adopted for sample size calculation-

$$n_0 = \frac{Z^2 PQ}{E^2}$$

$$= \frac{1.96^2 X 0.85 X 0.15}{(0.05)^2}$$

$$= 196$$

3.4 Interaction with Persons

During my visit to Daffodil International University, I went to meet the faculty families and had conversations with them to learn about their current health, dietary requirements, and any concerns. I then took note of that information. I talked to 205 individuals. Keep an eye on their dairy consumption as well. I visited the entire area every day as a habit. Every surveyor is required to visit every member of the faculty and staff.

3.5 Data Normalization

After collection of data from faculty and staffs, I had to normalized the data. The data was stored in excel to make visualize. The mistake data was sorted and corrected according the other behaviors. Normalization helps improve the accuracy and efficiency of data analysis.

3.6 Data Visualization

To effectively interpret the dietary and health data collected from faculty and staff, data visualization techniques are crucial. Using charts, graphs, and dashboards will help highlight trends in dietary awareness, health needs, and common issues among staff members. This visual approach simplifies complex data, making it easier to identify patterns and communicate findings effectively.

3.7 Statistical Analysis

For statistical analysis, I systematically reviewed and quantified the dietary habits, health statuses, and specific nutritional needs of the 205 faculty and staff surveyed. I analyzed daily dairy intake and other key dietary components to identify patterns and any notable nutritional deficiencies. This data enabled me to evaluate the overall health awareness and dietary behaviors within the faculty and staff community statistically.

CHAPTER 4

RESULTS AND DISCUSSION

Results and Discussion

In this segment, I have generated some visualization of graph with my collected data. I have noted the datapoints of every student and updated in database. I have used Microsoft Excel for generating easy graph and charts.

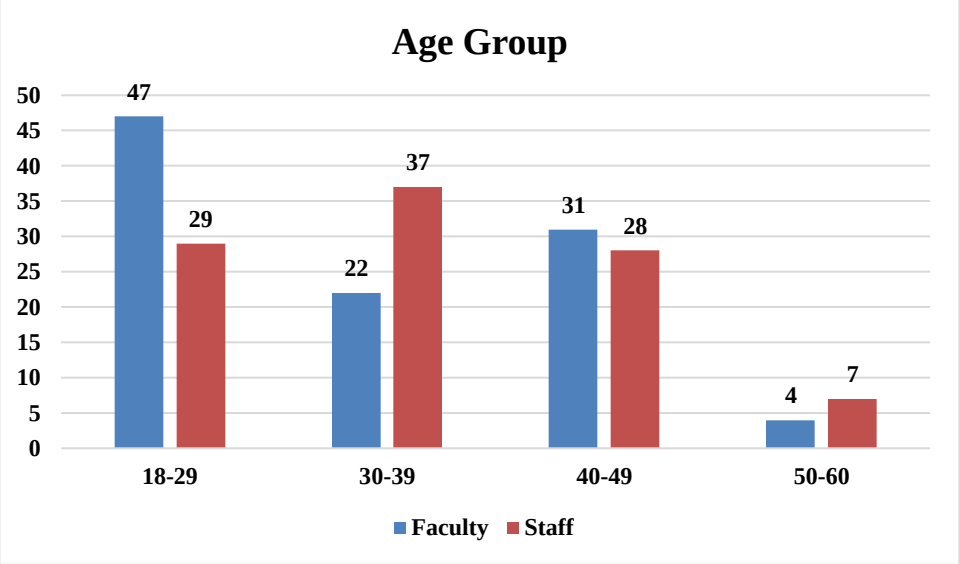

Figure 4.1: Distribution of Study Participants by Age

Figure 4.1 represents the count of employees participating in the study across different age groups for both faculty and staff at Daffodil International University, Savar, Dhaka. Age Group 18-29: Faculty 47 employees (44.8%), Staff 29 employees (25.4%), Age Group 30-39: Faculty 22 employees (21.0%), Staff 37 employees (32.5%), Age Group 40-49: Faculty 31 employees (29.5%), Staff 28 employees (24.6%), Age Group 50-60: Faculty 4 employees (3.8%), Staff 7 employees (6.1%). This breakdown provides insights into the distribution of age groups among faculty and staff participants, which is essential for understanding the demographic characteristics of the study cohort. By analyzing this data, we can better comprehend the potential differences in perceptions and beliefs about food myths and facts across various age groups within the university's workforce.

Figure 4.2 represents the count of employees participating in the study across different responses to the question "Gender". Female Faculty 55 employees, Female Staff 53 employees, Male Faculty 49 employees and Male Staff 48 employees. This breakdown provides insights into the distribution of responses among the participants, which is essential for understanding the gender composition of faculty and staff in the study cohort.

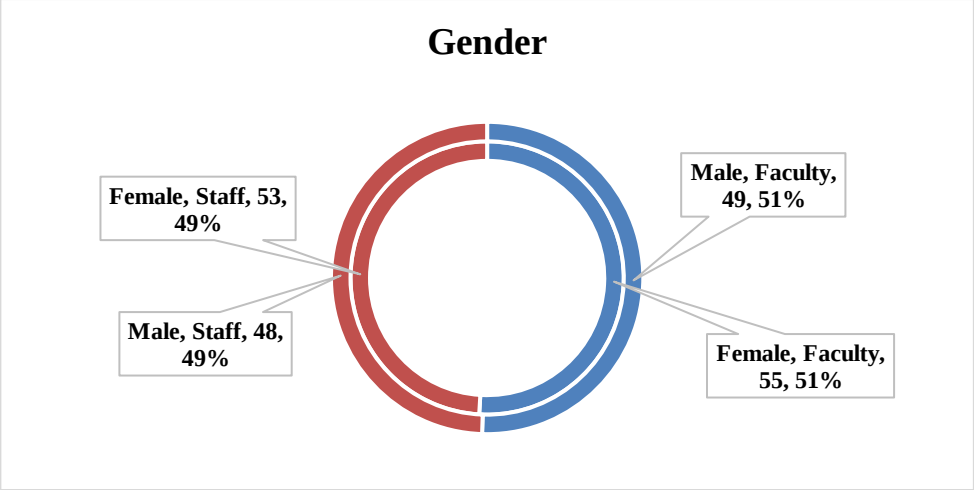

Figure 4.2: Gender Distributions in Study Participants

Figure 4.3 presents the distribution of responses among faculty and staff at Daffodil International University to the statement "Drinking water during meals causes weight gain". Faculty Agree 4, Disagree 100, Staff Agree: 94, Disagree 7. This breakdown sheds light on faculty and staff members' perspectives of the idea that consuming water during meals causes weight gain. Understanding these beliefs is crucial for addressing nutritional misconceptions within the university community.

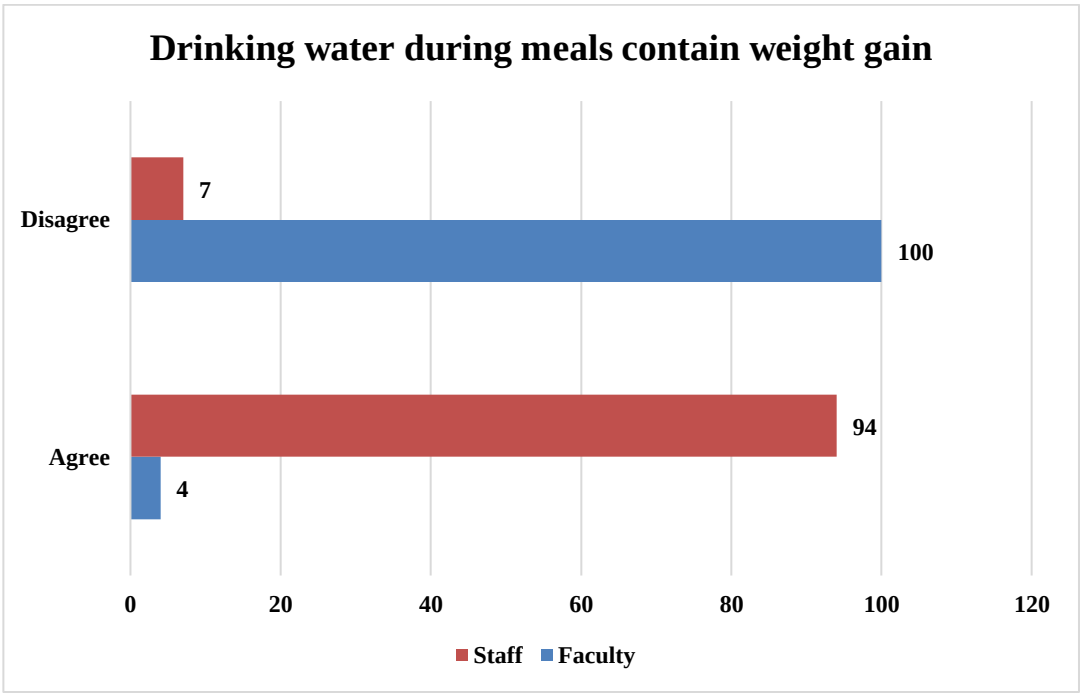

Figure 4.3. Drinking water during meals contain weight gain

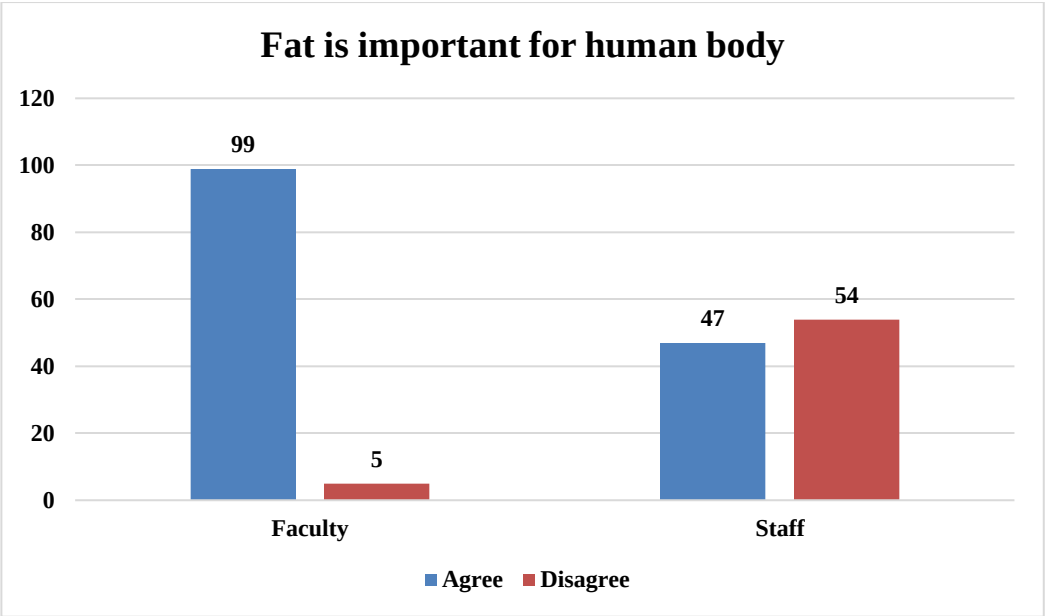

Figure 4.4. Fat is important for human body

Figure 4.4 illustrates the count of students participating in the study across different responses to the statement "Fat is important for the human body". Agree: Among faculty, 99 (approximately 95.19% of total faculty participants) agreed, while 47 staff members (approximately 88% of total staff participants) agreed. Disagree: Conversely, 6 faculty members (approximately 4.81% of total faculty participants) disagreed, and 54 staff members (approximately 10% of total staff participants) disagreed. This breakdown provides insights into the distribution of responses regarding the importance of fat for the human body among the participants, highlighting differing perspectives between faculty and staff on this nutritional belief.

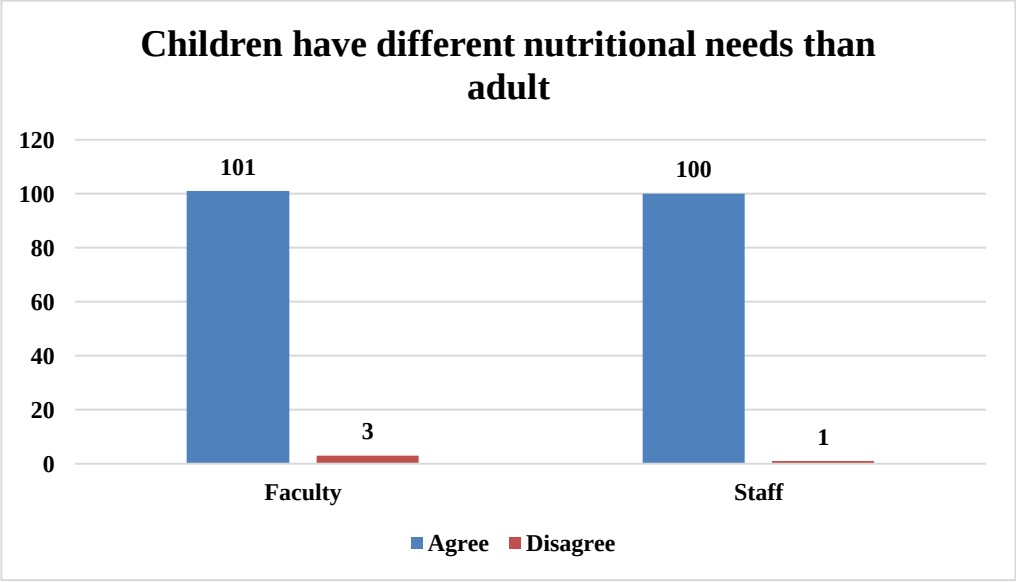

Figure 4.5: Children have different nutritional needs than adult

Figure 4.5 illustrates the distribution of responses among faculty and staff members of the study regarding the statement "Children have different nutritional needs than adults". Faculty: Agree 101 members, Disagree 3 members. Staff: Agree 100 members, Disagree 1 member. This breakdown provides insights into the perceptions among faculty and staff regarding children's nutritional needs compared to adults, highlighting differing viewpoints within the university community.

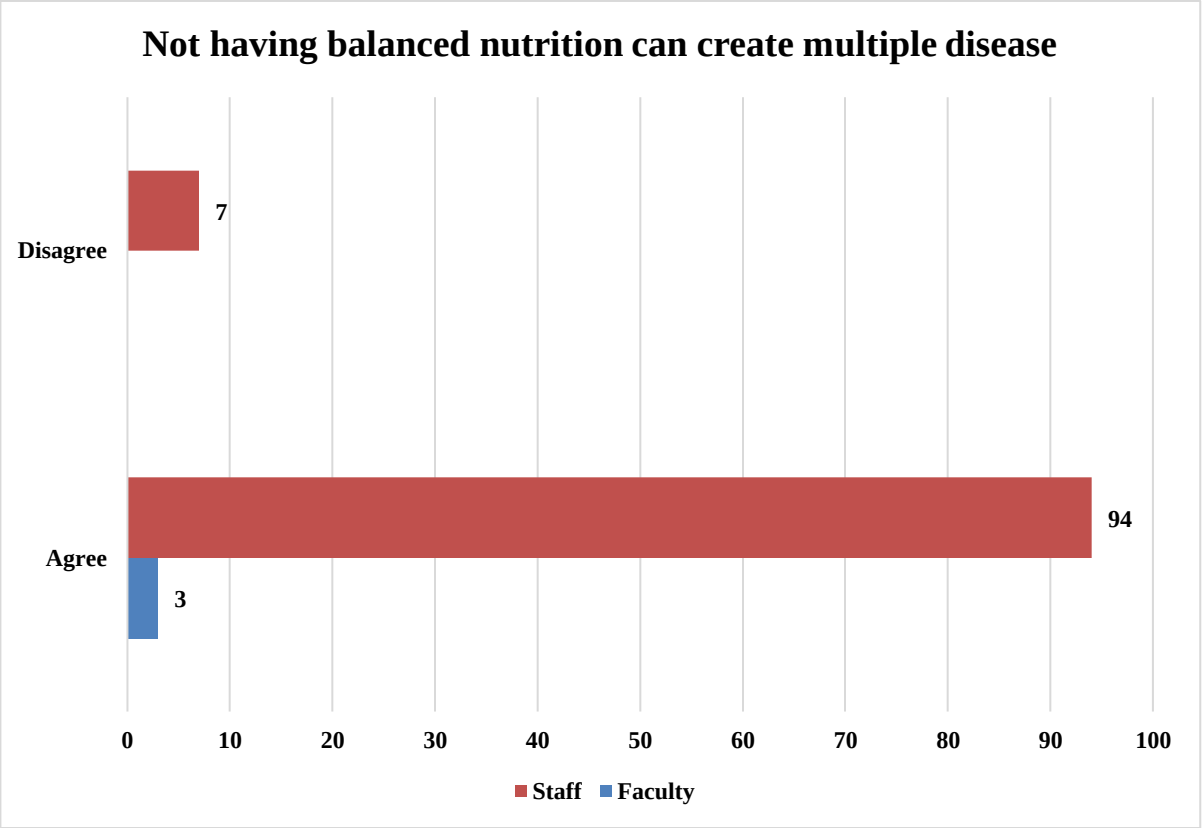

Figure 4.6: Not having balanced nutrition can create multiple disease

Figure 4.6 represents the count of students, faculty, and staff participating in the study across different responses related to the impact of not having a balanced diet on disease development. Faculty: Agree 101, accounting for approximately 97% of the total participation. Disagree 3, comprising around 3% of the total. Staff: Agree 94, accounting for approximately 93.1% of the total participation. Disagree 7, comprising around 6.9% of the total. This breakdown provides insights into the distribution of responses among faculty and staff regarding their perceptions of the relationship between diet balance and disease development, highlighting varying perspectives within the study cohort.

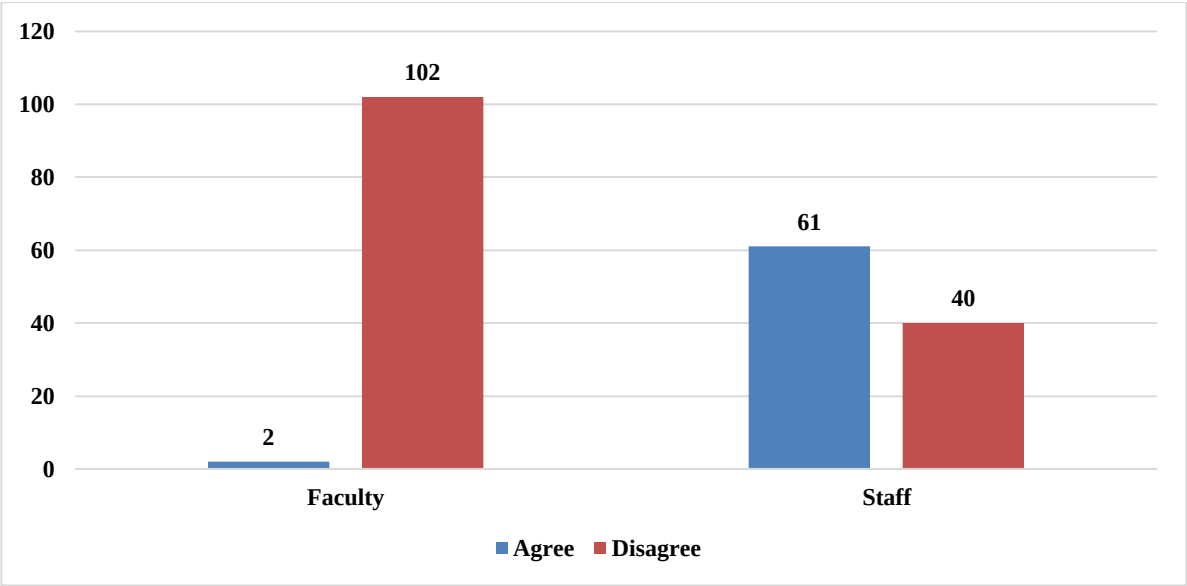

Figure 4.7: A person's diet should be tailored to their blood type

Figure 4.7 represents the count of faculty and staff participating in the study across different responses to the myth "Diet should be adapted to a persons blood group". Agree: 2 faculty and 61 staff members, accounting for approximately 2% and 60.40% of the total participation respectively. Disagree: 102 faculty and 40 staff members, representing about 98% and 39.60% of the total. This breakdown provides insights into the distribution of responses regarding the belief in adapting diet based on blood group among faculty and staff, highlighting varying perceptions within the study cohort.

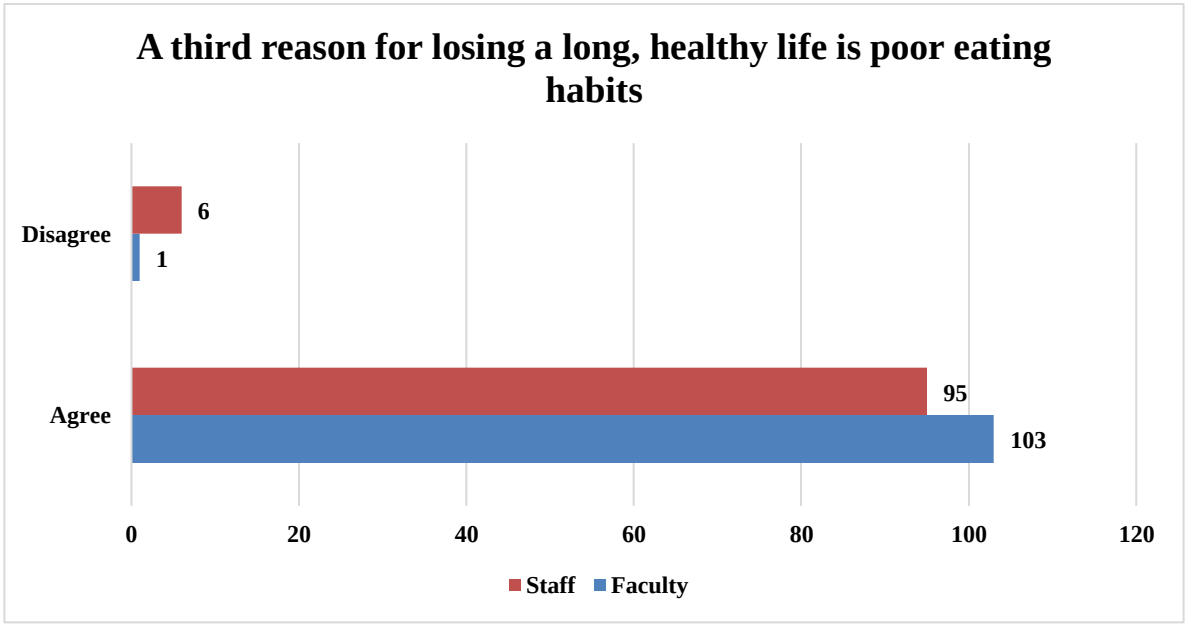

Figure 4.8: A third reason for losing a long, healthy life is poor eating habits

Figure 4.8 represents the count of students, faculty, and staff participating in the study across different responses related to The final danger factor for the demise of a long, healthy life is poor eating habits. Faculty: Agree 103, Disagree 1. Staff Agree 95, Disagree 6. This breakdown provides insights into the distribution of responses among participants, highlighting perceptions related to eating habits and their potential implications for overall health.

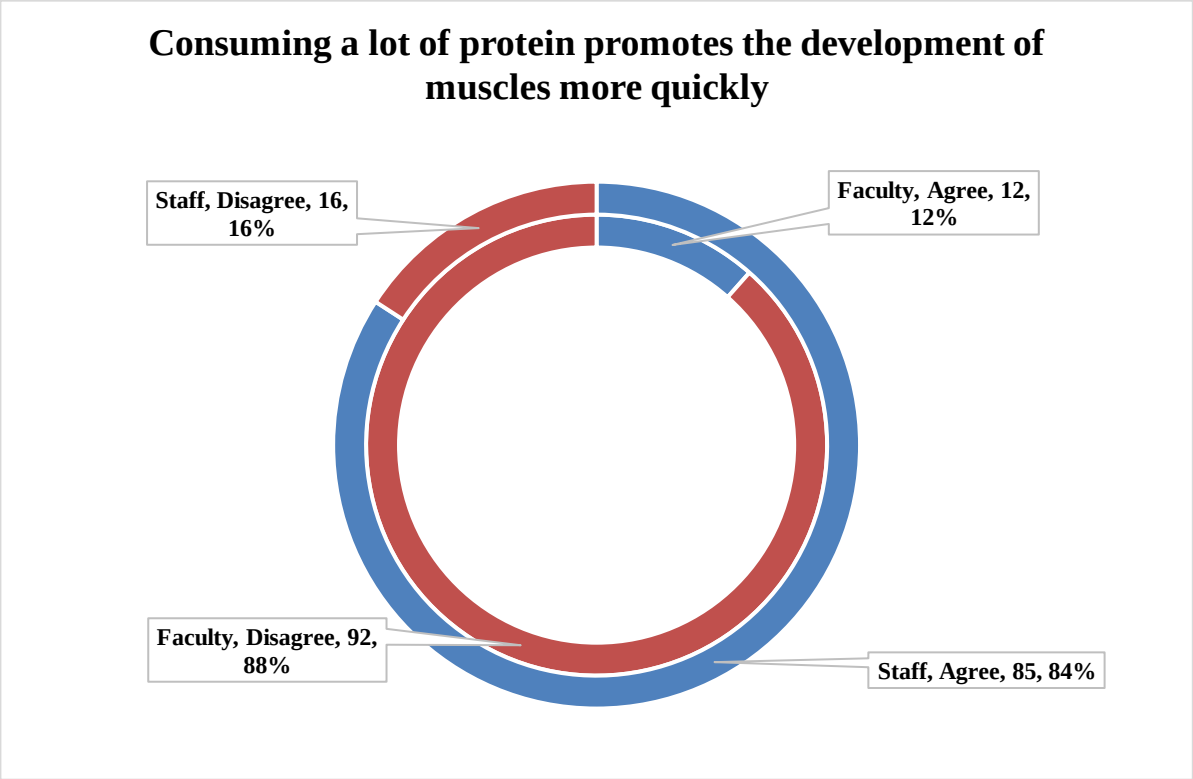

Figure 4.9. Consuming a lot of protein promotes the development of muscles more quickly

Figure 4.9 represents the distribution of responses among faculty and staff to the statement " Consuming a lot of protein promotes the development of muscles more quickly". Faculty: Agree 12 respondents, Disagree 92 respondents, Staff: Agree 85 respondents. Disagree 16 respondents. This breakdown provides insights into the perceptions of protein intake and muscle formation among the participants, highlighting the belief in the benefits of high protein consumption for muscle growth. Understanding these perceptions is crucial for addressing nutritional misconceptions and promoting evidence-based dietary habits within the university community.

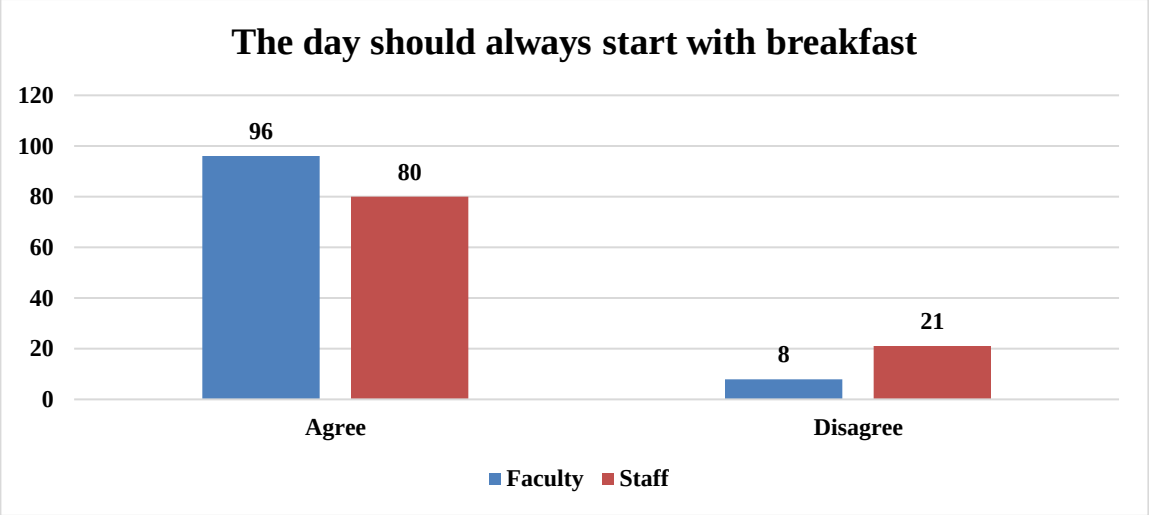

Figure 4.10: The day should always start with breakfast

Figure 4.10 represents the count of faculty and staff participating in the study across different responses to the statement "The day should always start with breakfast". Faculty: Agree 96 participants, Disagree 8 participants. Staff: Agree 80 participants, Disagree 21 participant. This breakdown provides insights into the beliefs about the importance of starting the day with breakfast among the participants, which is essential for understanding the prevalence of these beliefs and their potential implications on eating habits in the study cohort. The third risk associated with the loss of a long, healthy life is inadequate eating habits, underscoring the need of following appropriate meal routines, beginning with breakfast.

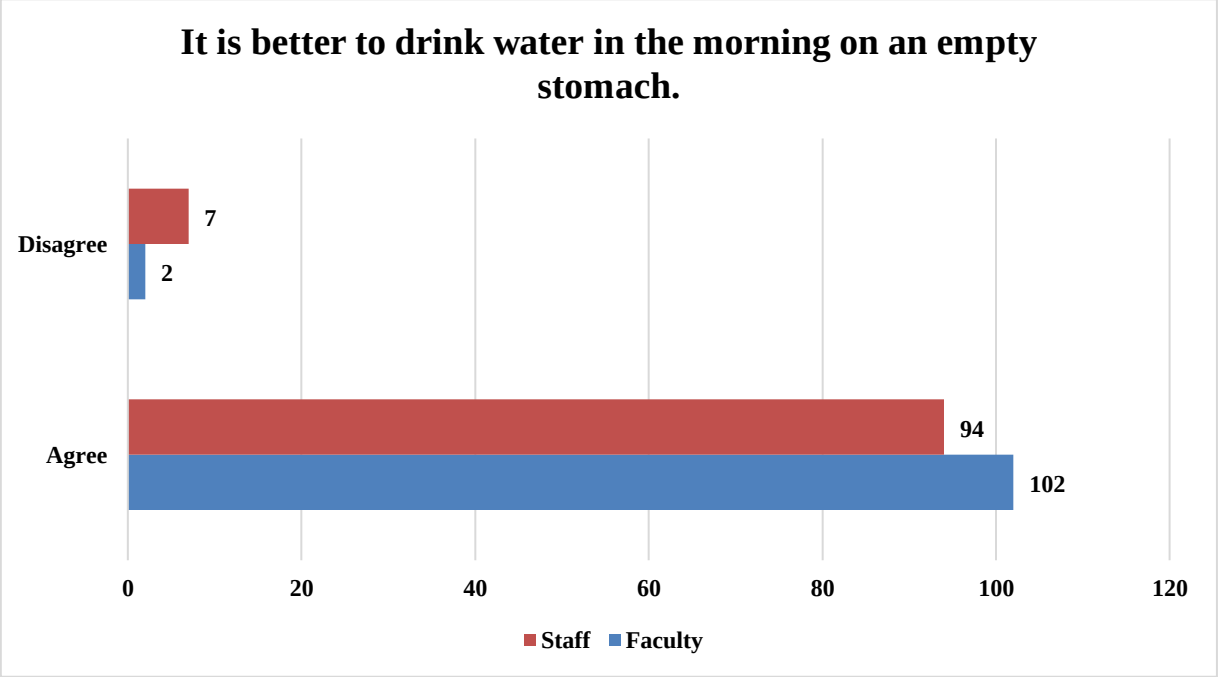

Figure 4.11: It is better to drink water in the morning on an empty stomach

The figure below illustrates the count of faculty and staff participating in the study regarding their perceptions of drinking water in the morning on an empty stomach. The data shows the distribution of responses to the statement: "It is better to drink water in the morning on an empty stomach". Agree: Faculty 102, Staff 94. Disagree: Faculty 7, Staff 2. This breakdown provides insights into the beliefs and habits related to morning hydration among the participants. Understanding these perceptions is essential for recognizing the importance of hydration practices and their potential implications for long-term health. The data underscores that inadequate eating habits, including hydration practices, are the third important risk factor for losing a healthy, long life.

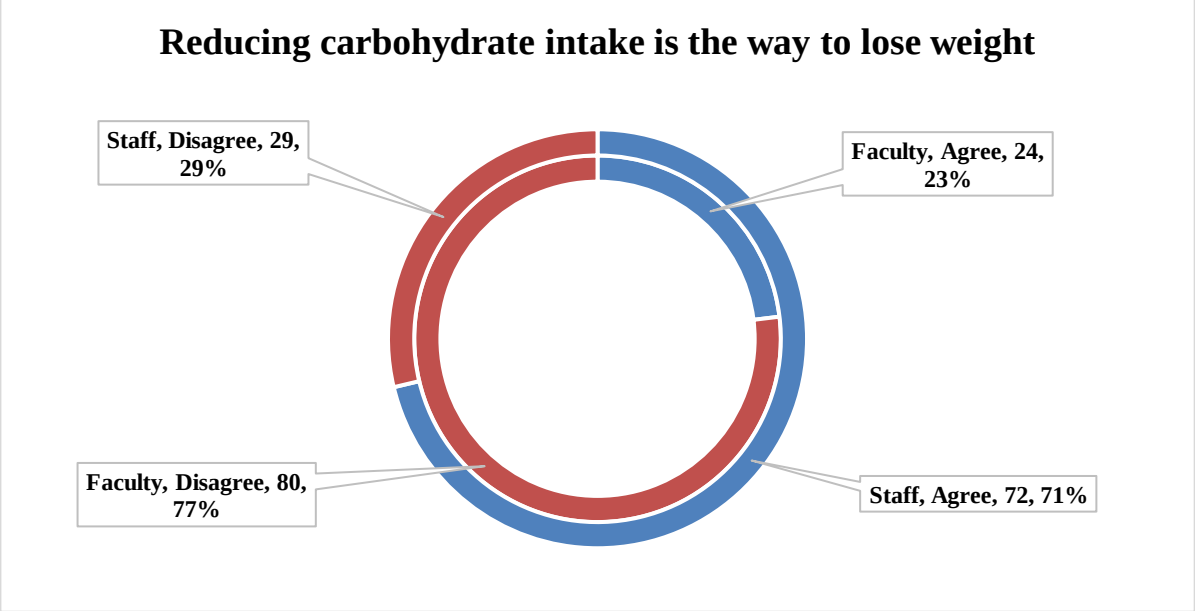

Figure 4.12: Reducing carbohydrate intake is the way to lose weight

Inadequate eating habits are the third risk factor for the loss of long-term healthy life. Reducing carbohydrate intake is often believed to be the way to lose weight. The study surveyed faculty and staff at Daffodil International University regarding their agreement with this belief. The results are as follows. Faculty: Agree 24, Disagree 80, Staff: Agree 72, Disagree 29. This breakdown provides insights into the distribution of opinions on reducing carbohydrate intake for weight loss among the participants, which is essential for understanding the prevalence and potential implications of such dietary beliefs in the study cohort.

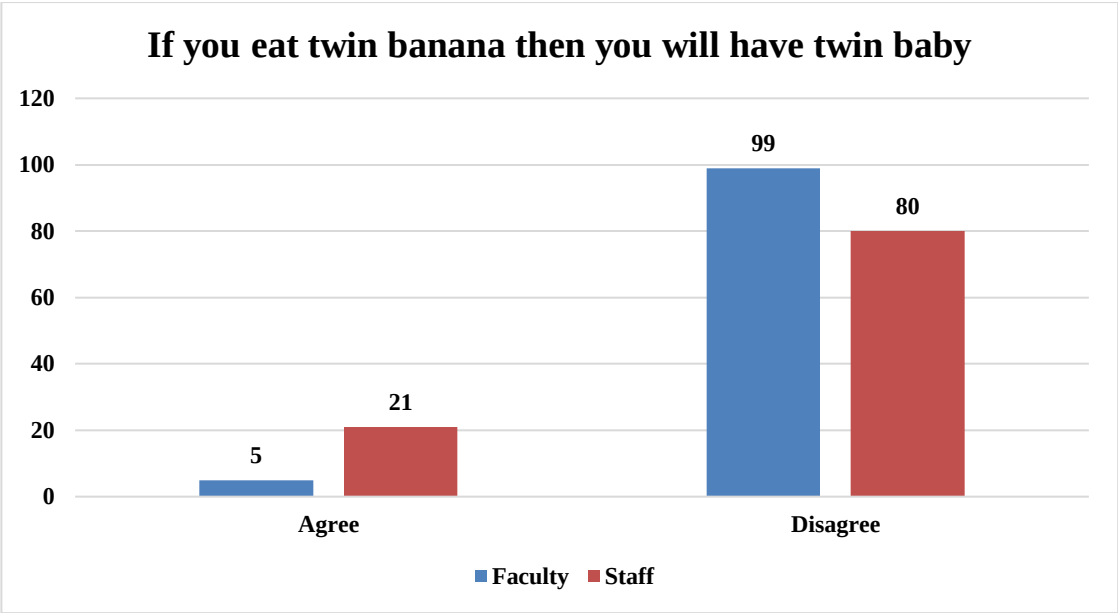

Figure 4.13: If you eat twin banana then you will have twin baby

Figure 4.13 represents the count of faculty and staff responses to the statement "If you eat twin banana then you will have twin baby". Faculty: Agree 5 faculty members, Disagree 99 faculty members. Staff: Agree 21 staff members, Disagree 80 staff members. This breakdown provides insights into the distribution of perceptions regarding the myth that eating twin bananas can result in having twin babies. Understanding these perceptions is crucial for addressing food myths and promoting accurate nutritional information among the employees of Daffodil International University. Additionally, the study highlights that the third main risk factor for losing a long, healthy life is poor eating habits., emphasizing the need for comprehensive nutritional education and intervention to improve dietary practices within the university community.

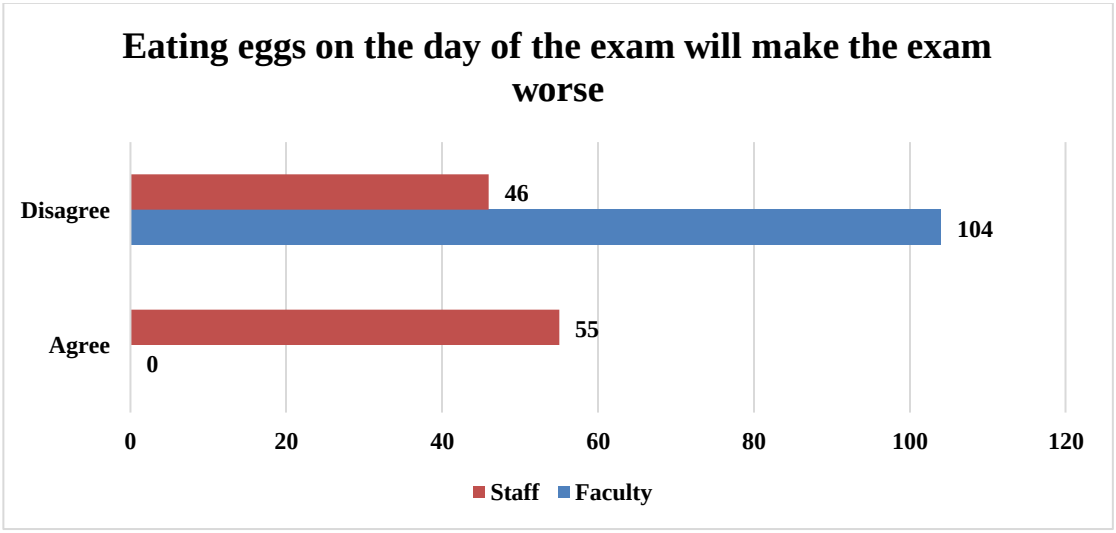

Figure 4.14: Eating eggs on the day of the exam will make the exam worse

To assess this, a survey was conducted among the faculty and staff of Daffodil International University regarding a common food myth: "Eating eggs on the day of the exam will make the exam worse". The survey results showed the following distribution of responses. Faculty: Agree 0, Disagree 104. Staff: Agree 55, Disagree 46. These findings provide insights into the prevalence of this particular food myth among the university's faculty and staff. Understanding such perceptions is essential for addressing and dispelling myths that could negatively impact dietary habits and overall health within the university community.

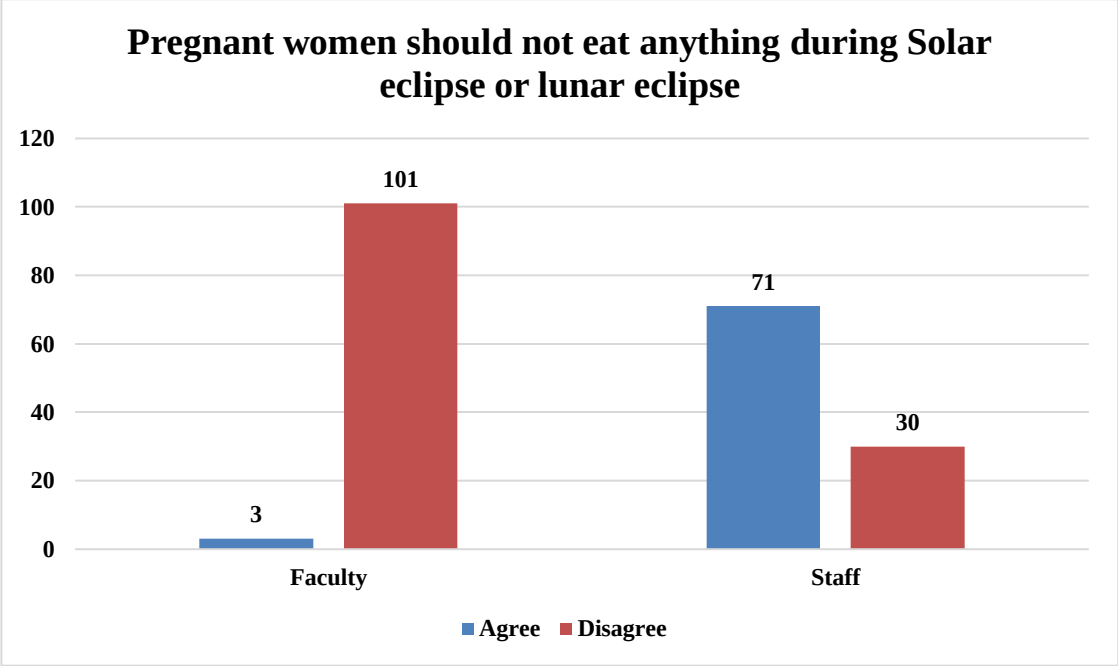

Figure 4.15: Pregnant women should not eat anything during Solar eclipse or lunar eclipse

Pregnant women should not eat anything during a solar eclipse or lunar eclipse.

Responses among faculty and staff to this belief are as follows. Faculty: Agree 3, Disagree 101. Staff: Agree 71, Disagree 30. This breakdown provides insights into the distribution of responses among faculty and staff regarding the belief about eating during eclipses, which is essential for understanding the prevalence and potential implications of such beliefs in the study cohort.

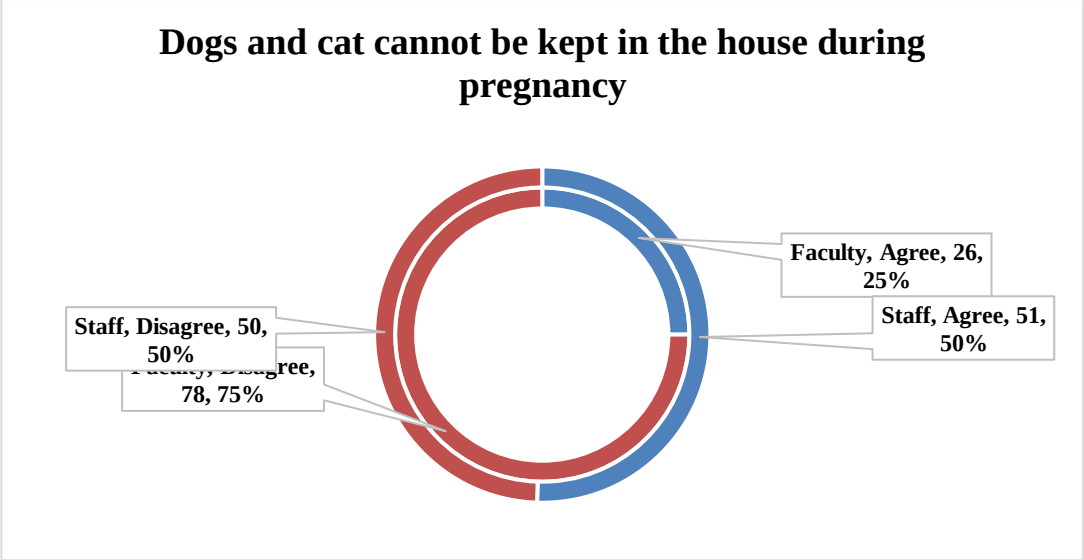

Figure 4.16: Dogs and cat cannot be kept in the house during pregnancy

Figure 4.16 represents the count of faculty and staff participating in the study across different responses to the statement "Dogs and cats cannot be kept in the house during pregnancy. Faculty who agree: 26, accounting for a smaller portion of the faculty responses. Staff who agree: 51, representing a minor percentage of the staff responses. Faculty who disagree: 78, comprising the majority of the faculty responses. Staff who disagree: 50, making up the larger part of the staff responses. This breakdown provides insights into the distribution of perceptions about keeping pets in the house during pregnancy among the participants, which is essential for understanding the beliefs and potential implications of such views within the study cohort.

CHAPTER 5

CONCLUSION

5.1 Conclusion

The study titled "Food Myths and Facts: Perceptions and Beliefs Among Employees of Daffodil International University, Savar, Dhaka" sheds light on a crucial issue within the university community: the widespread presence of nutritional misconceptions. These myths, which are deeply rooted in cultural practices, individual experiences, and a lack of access to reliable health information, significantly influence the dietary choices and overall health of the university's employees. The research delves into how these myths persist, affecting not only the physical health of individuals but also contributing to a range of psychological and social outcomes. For instance, employees may feel guilt or anxiety when making food choices based on incorrect assumptions about what constitutes a healthy diet. This can lead to restrictive eating habits or the exclusion of beneficial food groups, ultimately impacting their overall nutritional balance and health outcomes. The study further emphasizes that while many employees express an interest in improving their diet and adopting healthier eating practices, they are often hindered by the lack of accurate information and the overwhelming presence of myths perpetuated by media, family traditions, and social norms. One of the most significant findings of the research is the identification of specific myths that are prevalent among the employees. These myths include misconceptions about the benefits of certain "superfoods," the demonization of entire food groups such as carbohydrates or fats, and the belief that quick-fix diets or detox regimens are effective for long-term health. These false beliefs can not only hinder employees from achieving balanced nutrition but also lead to negative health consequences such as weight gain, nutrient deficiencies, or an increased risk of chronic diseases like diabetes and hypertension. The study highlights the urgent need for intervention, focusing on the dissemination of scientifically accurate nutritional information and the debunking of these myths. By targeting these misconceptions, the university can create a healthier, more informed workforce, which in turn has the potential to enhance both individual well-being and overall productivity.

5.2 Limitations

The study focused only on the employees of Daffodil International University, which may not fully represent the broader population. The results may not be generalizable to other regions, institutions, or demographic groups. The study's findings are based on self-reported information from participants regarding their dietary habits and beliefs, which may be subject to recall bias or social desirability bias, affecting the accuracy of the data. The study primarily identifies myths influenced by cultural practices and social norms within a specific community. However, it does not account for the diversity of external influences, such as media, socioeconomic status, and personal experiences, which could also impact nutritional perceptions and behaviors.

5.3 Recommendation

- Facilitate discussions among employees about common food myths, such as “Eating fat makes you fat” or “Microwaving food destroys nutrients,” to promote accurate knowledge.
- Suggest replacing unhealthy snacks like chips or candy with nutritious options such as nuts, seeds, and whole grains, complemented by informative myth-busting labels.
- Highlight employee success stories demonstrating improved health after debunking food myths (e.g., the fact that eating eggs daily is not harmful to cholesterol levels).
- Present visual displays that compare popular food myths with their factual explanations to educate employees effectively.
- Organize engaging myth-busting challenges, encouraging employees to uncover the truth behind common food misconceptions.
- Provide access to reliable resources, such as trusted links and books, to empower employees with accurate nutritional information.

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APPENDICES

Appendix 1: Synopsis

1. **Title: Observation of Food Myths and Facts: Perceptions and Beliefs Among Employees of Daffodil International University, Savar, Dhaka**
2. **Introduction**

One of a person's essential needs, food has a critical role in both promoting health and wellbeing and preventing sickness (Tucker et. al., 2014). Nevertheless, although eating is primarily done to satiate hunger, a physiological necessity, additional variables as well as ascertain the meal choice, quantity, frequency, and motivation. A few of these variables have to do with social relationships, culture, cost, accessibility, emotions, and hunger (Verbanac et al., 2019 and Jiang et al., 2014). Therefore, decisions on what to eat involve a number of disciplines, ranging from social policy and human behavior to exact sciences like nutrition. Based on the Food Choice Questionnaire, a study by Milošević et al. (2012) conducted in six Balkan nations allowed for the identification of eight elements underpinning food choice and five consumer categories based on their motivational profiles. As a result, the authors discovered that the individuals were split up into groups based on their socioeconomic status and pattern of food purchases. Cunha et al. (2018) conducted a review on the use of the Food Choice Questionnaire in several nations and came to the conclusion that, even when using the identical instruments, the outcomes may vary depending on the setting in which individuals respond. Guiné et al. (2020) also looked at the reasons people eat in 16 different countries and discovered that these reasons were influenced by a variety of variables, including politics, the environment, society and culture, pricing and availability, emotions, marketing, and advertisements. One of the numerous variables influencing eating habits is belief, which is a collection of ideas that a person accepts as true. Food myths are beliefs—that is, dietary theories that are accepted as true by the person yet are either not well supported by science or even contradict it (Verbanac et al., 2019 and Worsley et al., 2002).

3. **Objectives**

- To identify common food myths among university employees.
- To analyze the root causes of these misconceptions.
- To assess the influence of food myths on dietary choices and health behaviors

4. Methodology

I was employed here. In the outside area, I came across a large number of faculty and personnel. Taking into account that my focus is the staff members' and faculty members' awareness of dietary information. As a result, I mostly interacted with these staff members and faculty. I went to meet the faculty families and spoke with them during my visit with the staff and faculty at Daffodil International University to find out about their current health, dietary needs, and any issues. I then made a note of that data. I spoke with 205 people. Additionally, monitor their dairy intake. I made it a daily ritual to visit the entire region. It is mandatory for every surveyor to visit every faculty and staff member. As I moved across the neighborhood, I asked about their present state of health, dietary requirements, and problems. I took notes on all I learnt while chatting with the staff and faculty. Additionally, pay attention to the diet log they have on file.

This research process at Daffodil International University, Savar, Dhaka can be summarized using the following steps:

- Making questionnaire
- Visiting faculties
- Visiting staffs
- Interaction with persons
- Data collection
- Data Normalization
- Data Visualization
- Statistical Analysis

5. Sample Size Calculation

For this study, the sample size was calculated with below process:

Z is the Z score =1.96 at 95% confidence.

P is the estimate proportion of attribute,

Q = 1-P

E is the margin of error 5% or 0.05.

We assume that, 85% of the Peoples have no knowledge about Myths.

So,

P=0.85

Q=1-P

Q=1-0.85

Q=0.15

The following formula has adopted for sample size calculation-

$$n_0 = \frac{Z^2 PQ}{E^2}$$

$$= \frac{1.96^2 X 0.85 X 0.15}{(0.05)^2}$$

$$= 196$$

6. Research Timeline

The timeline of this research is showing in below chart.

Table 6.1 The time table of the project

SL	Activities	Months of the year															
		April 2024				May 2024				June 2024				July 2024			
Weeks		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Review of literature/Proposal writing																
2	Designing and Developing a questionnaire																
3	Recruitment of Field Investigator Training and field testing of the questionnaire																
4	Fieldwork/Data collection																
5	Data editing and data entry to Computer																

6	Data analysis															
7	Review of literature/Proposal writing															
8	Develop the study															

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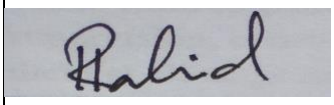
Signature of Supervisor and Student

 …… **Signature of Supervisor** Md. Harun-Ar Rashid Assistant Professor Department of Nutrition and Food Engineering Faculty of Health and Life Science Daffodil International University	 …… **Signature of Student** Jaima Jannat Shikha ID: 201-34-285 Department of Nutrition and Food Engineering Faculty of Health and Life Science Daffodil International University

Appendix 2: Questionnaire

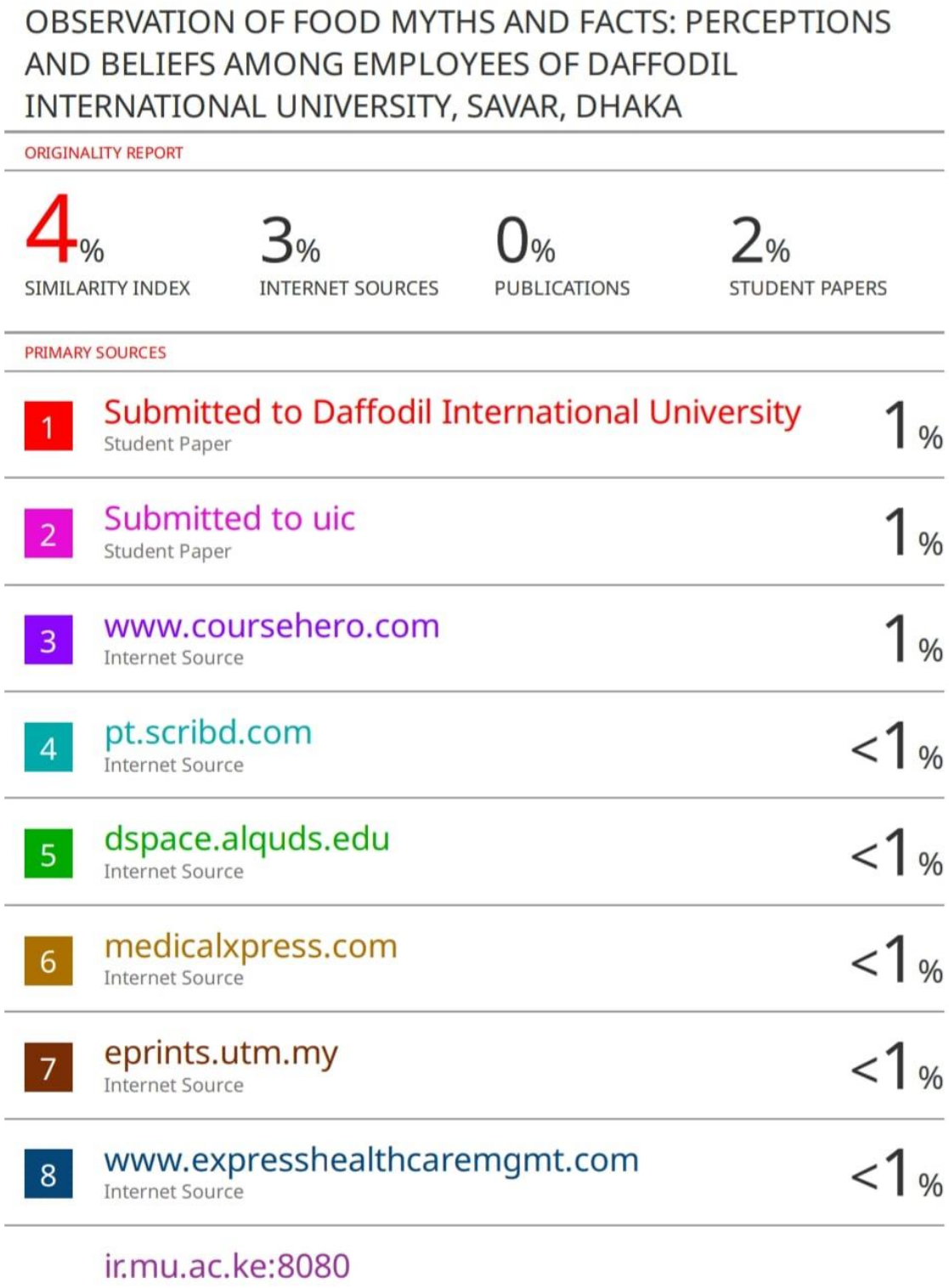
This research process at Daffodil International University, Savar, Dhaka Data collection sample is following:

Table 6.2 The format of data collection form

SL	Description	Data Type
1	Name-নাম	Text
2	Age-বয়স	Numeric
3	Gender-লিঙ্গ	Text
4	Occupation-পেশা	Text
5	Email-ই মেইল	Text
6	Drinking water during meals contain weight gain-খাবার খাওয়ার সময় পানি পান করলে ওজন বৃদ্ধি পায়।	Text
7	Fat is important for human body-চর্বি মানব শরীরের জন্য গুরুত্বপূর্ণ।	Text
8	Children have different nutritional needs than adult - প্রাপ্তবয়স্কদের তুলনায় শিশুদের পুষ্টির চাহিদা ভিন্ন।	Text
9	Not having balanced diet can lead to the development of multiple disease -সুষম খাদ্যাভ্যাস না থাকলে একাধিক রোগের বিকাশ ঘটতে পারে।	Text
10	Diet should be adapted to a persons blood group-খাদ্যাভ্যাস একজন ব্যক্তি রক্তের গ্রুপ অনুযায়ী হওয়া উচিত।	Text

11	Inadequate eating habit are the third risk factor for the loss of long term healthy life - অপর্যাপ্ত খাদ্যাভ্যাস দীর্ঘমেয়াদি স্বাস্থ্যসম্মত জীবন হারানোর ক্ষেত্রে তৃতীয় ঝুঁকির কারণ।	Text
12	Ingesting high amount of protein helps in faster formation of muscles - বেশি পরিমাণে প্রোটিন গ্রহণ পেশী দ্রুত গঠনে সহায়তা করে।	Text
13	The day should always start with breakfast - দিনটি সবসময় সকালের নাস্তা দিয়ে শুরু করা উচিত।	Text
14	It is better to drink water in the morning on an empty stomach. - সকালে খালি পেটে পানি পান করা ভালো।	Text
15	All food additives are harmful to health - সব খাদ্য সংযোজন(বিশেষ উদ্দেশ্যে অল্প পরিমাণে খাদ্যে সংযোজিত পদার্থ) স্বাস্থ্যের জন্য ক্ষতিকর।	Text
16	Reducing carbohydrate intake is the way to lose weight - শর্করা গ্রহন কমানো ওজন কমানোর উপায়।	Text
17	If you eat twin banana then you will have twin baby - জমজ কলা খেলে যমজ বাচ্চা হবে।	Text
18	Eating eggs on the day of the exam will make the exam worse-পরীক্ষার দিন ডিম খেলে পরীক্ষা খারাপ হবে।	Text
19	Pregnant women should not eat anything during Solar eclipse or lunar eclipse - গর্ভবতী মহিলাদের সূর্যগ্রহণ বা চন্দ্রগ্রহণের সময় কিছু খাওয়া উচিত নয়।	Text
20	Dogs and cat cannot be kept in the house during pregnancy - গর্ভাবস্থায় বাড়িতে কুকুর বিড়াল রাখা যাবে না।	Text

Appendix 3: Plagarism Report



OBSERVATION OF FOOD MYTHS AND FACTS: PERCEPTIONS AND BELIEFS AMONG EMPLOYEES OF DAFFODIL INTERNATIONAL UNIVERSITY, SAVAR, DHAKA

ORIGINALITY REPORT

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