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Türk Gemiadamlarının Beslenmesi Üzerine Nitel Bir Araştırma

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Öz

Diğer meslek gruplarına göre gemi adamlarının çalışma şartları daha ağırdır. Özellikle 7/24 ve belirli periyotlarda (genellikle 3/6/10 ay) gemi üzerinde çalışan ve yaşayan gemi adamlarının temel gereksinimlerinin (barınma ve beslenme şartları) karşılanması önem arz eder. Doğru beslenme adına yapılması gereken her şey sırasıyla belirtilmiş, sağlıklı olmak ve sağlıklı yaşamak için önerilerde bulunulmuştur. Bu sebepten Dünya Sağlık Örgütü (WHO) tarafından Gemiadamlarının Sağlık Rehberi yayınlanmıştır. Bu araştırmanın amacı Türk Gemiadamlarının gemide beslenme alışkanlıklarının belirlenmesidir. Böylece uluslararası standartlara uygun olup-olmadığı ve gemide beslenme şartlarının iyileştirilmesi hedeflenmiştir. Bu hedefleri gerçekleştirmek üzere anket hazırlanmış ve gemide farklı görev yapan 60 Türk Gemiadamına uygulanmıştır. Anket araştırmasına göre elde edilen sonuçlar incelendiğinde genel olarak Türk Gemiadamlarının sağlıklı beslendikleri yiyecek ve içeceklerine dikkat ettikleri saptanmıştır. Verilerden elde edilen bulgulara göre kendilerine zararlı olabileceklerini düşündükleri yiyecek ve içeceklerden uzak durdukları veya olabildiğince uzak durmaya çalıştıkları görülmüştür.

Anahtar Kelimeler: *Gemide Sağlıklı Beslenme, Türk Gemiadamı, Türk Gemiadamlarının Yeme Alışkanlıkları, Sağlıklı Beslenme*

A Qualitative Study on Nutrition of Turkish Seafarers

Abstract

There is no doubt that Seafarers working conditions are much more difficult than any other occupation. Especially 7/24 in certain periods (usually 3/6/10 months) the basic needs of seafarers working and living on board (housing and feeding conditions) are a crucial matter to be met. The things in terms of right dieting, and suggestions are mentioned to be healthy and to live healthy. For this reason, World Health Organization (WHO) publishes Seamen Health Guide. The purpose of this research is to determine the dietary habits of the Turkish Seafarers on board. So whether it is in accordance with international standards and how nutritional conditions can be improved on board has been considered. To carry out these objectives a questionnaire survey has been prepared and applied to 60 Turkish Seafarers who work in different tasks. Considering the results obtained by the survey,

generally, it was found that Turkish Seafarers pay attention to the food and drink they eat in order to be healthy, and stay healthy. The data obtained demonstrates that they are trying to stay away from harmful foods and drinks as much as they can.

Keywords: *Nutrition On-Board, Turkish Seafarers, Eating Habits of Turkish Seafarers, Healthy Eating*

1. Introduction

Nutrition is the right use of nutrients for sustaining health, growth and protecting the health. Nutrients are met with food; the appropriate selection of food, preparation, cooking, storage and consumption in accordance with certain rules to bring harmful products to healthy status, and to provide protection and reduce the cost are some of the other objectives. Diet for these purposes in short are defined as; balanced, healthy and economical nutrition [1].

Nutrition is a science which affects both physic and behaviour beginning before birth and affecting life until death. For healthy life individuals' primary concern should be gaining the habit of eating adequately and following a balanced diet [2]. Eating habit is acquired early in life through various socio-economic, cultural and educational events [3]. Eating habits include behavioural services such as; a person's diet, main meals and snacks in the types and amounts of foods consumed, food purchasing, food preparation, and cooking [4].

As it is obvious to anyone, the working conditions are not easy for seafarers [5], and while they are on board they experience so many difficulties that may result in serious health problems. A fit body is more likely to stay in a better condition than a body that is not fit and toned. However, being aware of these and doing everything to avoid these, and knowing when and how to eat on board can immensely improve the way people look, feel and think. There is no doubt that all seamen would like to know the tips of nutrition and dieting for their health.

Obesity is one of the most encountered illnesses on board. Obesity reveals the unhealthy eating habits of living individuals. In this inactive life the excessive energy taken are stored under the skin or in the internal organs as fat. To find out more about the obesity of seafarers one study has been found related to the topic. Hansel et al. [6] has carried out a study, at the University of Southern Denmark on Danish sailors. Approximately in the merchant marine fleet 70.8% of male seafarers, 73.8% of the fishing BMI (Body Mass Index) reference is identified as overweight [6]. Nevertheless, 52% of male sailors were identified as overweight [6]. However, when obesity of sailors in Turkey is examined not much has been found [7][9]. Despite this there is a requested medical report that the crew has to submit to the Turkey Border General Directorate of Coastal Health regarding the values of their weight and height in every two years [7]. Obesity rate of Turkish candidate officers is increasing during maritime education process [10]. In this study, height and body weight of 328 students of Dokuz Eylul University Faculty of Maritime were measured in 2012 for defining their BMI. Furthermore, a study was carried out to investigate the statistical distribution of obesity and overweight among Turkish seafarers by using 143,341 medical examination reports (2009-2012) for calculating BMI values and compared with Turkish and Danish seafarers [8]. The results presented that BMI values of Turkish seafarers boomed over the years.

"Scurvy" which was a dangerous illness for sailors in the past, was caused by the deficiency of vitamin C (ascorbic acid). Feeling weak, easy bleeding and receding of the gums, bruising of the skin, tumbling hair, and pain in the joints were the symptoms of this disease. When the vitamin C deficiency continued for a long time; weakness, decrease in the appetite, delay in the healing of the wound, drying and cracking skin, mist in the joints, and decrease in the

body resistance were observed and these symptoms resulted in death in the long run. In March 1741 HMS Centurion (British Warship), who lost his way, had become desperate after going around for 3 months in the big ocean and out of 521 sailors 237 of them his sailors died due to the same illness [11]. The spread of cholera pandemics in the 19th century was thought to be linked to trade routes and facilitated by merchant shipping. Efforts to control the movement of human disease on ships can be traced back to the Middle Ages, when, in 1377, Venice and Rhodes denied access to ships carrying passengers infected with the plague, giving rise to the term "quarantine". On arrival, travellers were detained in isolation for 40 days before they were allowed to proceed to their final destination. Overcrowding on ships, filth and lack of personal hygiene were often associated with epidemics of rickettsia typhus fever. Preventive measures, such as quarantine, delousing and maintaining personal cleanliness by use of soap, were gradually adopted, and the incidence of typhus decreased. More than 100 outbreaks of infectious diseases (the majority was on cruise ships among the passengers) associated with ships were reported between 1970 and 2003 [12].

In recent years, not just nutrition and health conditions of seafarers are being considered. There are many other problems in the life of seamen such as; payments, workload, poor working and living conditions [6]. All these conditions also include food in terms of what to eat, how to accommodate, and where to stay. All these change from ship to ship and from company to company, and these standards are not known for sure before the recruitment. SIRC (Seafarers International Research Center) ships registered under the national flag of Turkey may have the worst record for maintaining acceptable standards of food and accommodation.

In this study, how seamen should carry on board an application for the determination of diet and nutrition and menu planning is being searched. The decline in the yield of a seafarer affects the others. In this respect, this issue is becoming more important and seeking ways of living a healthier life is becoming more compelling. The amount of energy and nutrients to be taken, the type of work, providing sufficient energy and nutrients, will improved the efficiency of the business [13].

2. Literature Review

Nutrition helps to the growth by sustaining nutrients to protect the life and health. Nutrition is what body needs to provide the initial amount of energy, protein, carbohydrate, vitamins and minerals. Types of nutrition a person needs to survive are divided into 6 groups in terms of 50 different nutrients, their chemical structure, and how they work in the body. These are; a) Protein b) Carbohydrates c) Fats d) Vitamins e) Minerals and f) Water [14].

The amount of nutrition and energy that should need to be taken daily, changes depending on the type of the job done and these when done correctly improves the efficiency of the job. As medical treatment facilities are limited on ships, seamen must take extra precautions to keep their health and well-being. Therefore, eating what is right is important. As part of their job, seamen spend a long time on board at the sea, they can catch any disease and illness while visiting other regions and lands. Not having enough nutrition, too much smoking, drinking, and not having enough sleep and exercise can effect seamen's health at a greater level. Therefore, a seaman should avoid eating junk food, and every other thing that can affect his health and eat as much fresh and healthy food as possible such as; fruit, vegetables, and balanced of grains, carbohydrates and protein. Menu management in the ship usually remains totally to the head chef. All operators should consider the amount of food that should be consumed in daily by individuals. Also, according to the international rules

and regulations the number of individuals who are becoming more conscious and more concerned with products that contain energy and nutrients need to be taken daily are increasing, and people now choose these products appropriately to have a healthier life. A balanced menu's energy should consist of 55-60% from carbonhydrates, 12-20% from protein, it is recommended to provide 25-30% of the oil [15].

The body's increased fluid requirements should be considered for workers, and for those who work under heavy physical activities as a result of working in a very warm atmosphere. What is more, without waiting to be thirsty, first clean and safe drinking water consumption should be made 1 liter liquid for per 1000 calories for every individual [16]. Nutrients are also increased according to the energy intake that needed to be taken by heavy workers and depending on the type of job they do, 600-1000 calories are added. The amount of proteins, vitamins and minerals required for every 1000 calories [14]. Generally, 3.500 calories to fulfil the daily energy requirement are needed for a worker working 8 hours by standing. This amount of energy should be supplied by using at least one kind of food from each food group and 3 or 4-course meal plus bread must be eaten. Protein ratio due to dining energy must meet the vitamins and minerals [17].

2.1 Carbohydrate

There are three types of carbohydrate in food and these are; starches (also known as complex carbohydrates), sugars, and fibre. The types of carbohydrates that are being consumed are important in the diet. Whole grain products are much better to be eaten than highly refined bread, which has more calories in it, and French fries, pasta and rice frequently. Therefore, for a healthy seaman it is important to choose food with healthy carbohydrates to eat, and avoid eating too much of the unhealthy ones that would put weight on their body. For a seaman it is not advisable to consume milk products that are high in fat before they involve in sports that requires a lot of energy.

2.2 Proteins

Protein is what body needs. Proteins are mistaken when it is thought that it can only be found in the meat we eat. All proteins that a body needs to have contains amino acids. Our bodies need 20 different amino acids that can be found naturally for body functions to operate successfully. They help the immune system by giving energy to eat. From these 20 different amino acids, the body itself creates more than half, but the body cannot create 8 of them. The eight essential amino acids that human needs to have but bodies cannot produce are: leucine, isoleucine, valine, threonine, methionine, phenylalanine, tryptophan, and lysine. For children, histidine is also considered to be an essential amino acid.

2.3 Fats

As known generally, fat has the most calories among all the other nutrients. However, in a healthy diet, 25-30% of total daily calories should come from fat [15]. Moreover, according to the same information presented on the Internet, this means eating "about 50 to 80 grams of fat each day. Fat gives energy to the body but the body changes only approximately 10% of fat into glucose. By itself, fat doesn't have much impact on blood sugar. Nonetheless when you eat fat along with a carbohydrate, it can slow the rise in blood sugar. Since fat also slows down digestion, once your blood sugar does rise, it can keep your blood sugar levels higher for a longer period of time.

2.4 Vitamins and Minerals

The most important thing at all times is to keep in mind that a balanced diet is what is needed to keep the body healthy and functioning well. Therefore, giving importance to vegetables is an important step to take in a lifetime. It is known that a high take of vegetables into the body can give sufficient amount of carbohydrate,

protein and calcium into the body. There is another advantage of high amount of vegetable intake; it does not affect the health of the person negatively, and it keeps his/her weight under control. Like ordinary people, if a seaman eats healthy food and follows a balanced diet he does not need to take vitamins as a supplement. However, taking extra vitamin can avoid and prevent other illnesses and diseases such as; cancer, heart disease and other types of diseases.

Medical condition of the seafarer is very important. If they are not fit, they can experience illnesses that can affect their works and this may result with serious problems in their lives. Working at sea is a challenging and demanding process that one needs to learn how to deal with. It is physically challenging, and also mentally challenging because a seafarer needs to cope with too many problems as well as high level of stress that they need to go through on board. To be able to deal with all these, a seafarer must be healthy both physically and mentally. If they lose one, the other one is likely to vanish. The fact that a seafarer becomes ill and experiences some health problems and becomes unable to perform his job adequately may cause absenteeism from the vessel for a long time. It is also important to be aware that any illness and lack of concentration as well as tiredness and communication problems can affect the performance of the tasks on board. All crewmembers on board should look after their bodies carefully to avoid health problems, to reduce the illnesses and to promote safety on board. All crewmembers should be taught and trained on healthy eating habits and on the healthy nutrition of themselves. Furthermore, apart from the protein, carbohydrate, vitamins and minerals; a seafarer needs water, which is another important source of health and life that one cannot live without. Water helps to remove the toxins from the body, and helps to the oxygen flow around the body by providing the necessary minerals. The impact of diet on performance and health is stated in the Medical Centres article published on the internet [18].

3. Nutrition of Workers

No one can expect to eat the same amount of food as they eat at home and especially, when you are at the sea it is obvious that you will eat differently and in different amounts. Most of the seafarers come home after months missing the taste of the food cooked at home by their partners or mothers. So, sometimes when they come to the shore they put on weight until they go back, and sometimes they lose weight while they are on board. The relationship between the production rate and nutrition has been demonstrated by scientific research in many parts of the world. Daily nutritional requirements are taken in three courses. If the worker's daily energy requirement is being considered as 3,500 calories, 1750 calories need to be taken at work. Therefore, menu planning should be done accordingly [19].

3.1 Menu Planning

When planning the menu on board, equipment that the staff will work with should be carefully chosen. In the research [20], food combinations and the compatibility of menu items' score points were examined and analysed, preference for food and food components or complete menus and overall acceptability of the individual components were examined and compared, and it was determined that the number is limited.

In the study on the nutritional status of workers in a textile factory; it was found that workers mostly consume products that are rich in carbohydrate for breakfast, lunch and dinner, protein the least and vitamins and mineral substances [21]. For businesses located on land and for workers standing on their body 8 hours daily energy requirement is considered as 3,500 calories, half of it (1750 calories) will be covered with food given in the workplace where it has been calculated.

Menu planning is the basis for the work done in catering [22]. Menu planning is a complicated process as it is done considering many factors, and it is a time consuming process. One of the most important factors affecting the productivity of workers is sufficient and balanced nutrition. If the numbers of workers are high, there should be food service in the workplace and about half of the nutritional needs of the workers should be provided. Workers; age, gender and weight, depending on their work, energy and nutrient needs should be calculated and based on these calculations, the diet plan should be prepared by a dietician [23]. Individuals', families' and communities' knowledge is among the factors influencing the eating habits of nutrition [24]. Sometimes survey should be administered to the workers on the food provided in their workplace. The kitchen staff should be trained and supervised. Training on nutrition should be given to workers.

3.2 Mass Feeding System

Nutrition is using the nutrients for the protection of health and growth to sustain a good life. Mass Nutrition is defined outside people's homes and food by the organizations providing such services, and service providing companies are called "Mass Nutrition Institutional Organizations" (MNIO) or "Mass Nutrition Systems" (MNS). Today, catering system is becoming an important sector in the number of service beneficiaries and any negative result that could lead to disruptions that may occur at any point in the service level (food poisoning, deaths, economic losses, customer dissatisfaction) plays an important role. When developed countries are being considered, it can be seen that all the quality and safety precautions in terms of the catering system are taken and this is leading to social and economic liability issues as a public health issue on the grounds is approached strongly. Hygiene can be defined as something that can protect us from the environment that can damage the health, and all applications that are received to measure hygiene [24].

3.3 Healthy Eating Index

Recently in developed and developing countries, in the perspective of over-nutrition and over the outcome of some nutrients and nutrient deficiency as well as in the identification of over-nutrition diet quality comprehensive approach has occurred. Generally, traditional nutritional epidemiological studies examine the relationship between diet and the risk of chronic diseases, and focuses on one food or food group. However, this approach remains inadequate because of the complex nature of the diet and it should not be considered that to be consumed in the form of completely isolated from any food [25].

World Health Organization (WHO) developed a group of universal principles that regulate nutrient intake for the prevention of diseases linked to diet (Table 1). In these principles, total fat, saturated fatty acids, polyunsaturated fatty acids, protein, total carbohydrates, complex carbohydrates and refined lower for the main nutrients including sugars and upper limits are determined. In these proposals expressed as a percentage of total energy intake; lower limit, nutrient deficiency diseases that will create a minimum purchase amount represents the maximum amount of the upper limit of intake should not be exceeded in the prevention of chronic diseases.

3.4 Purchasing and Storing Food

Purchasing food from safe places create food safety and economic benefits when they are bought from safe places in accordance with the principles. Preserving the natural structure of food and maintaining their natural conditions by using suitable materials and techniques through this process is called storage. After the purchase of food, if the food is not stored properly loss of nutrients may occur

Table 1. *WHO's Recommendations on Nutrient Intake Levels [26]*

	Lower Limit	Upper Limit
Total Fat	15% of the Energy	30% of the Energy
Saturated Fat	0% of the Energy	10% of the Energy
Polyunsaturated Fatty Acids	6% of the Energy	10% of the Energy
Dietary cholesterol	0 mg / day	300 mg / day
Total Carbohydrates	55% of the Energy	75% of the Energy
Complex carbohydrates	50% of the Energy	70% of the Energy
Diet pulp (as non-starch polissakkarit)	16 gr/day	24 gr/day
Total diet as pulp	27 gr/day	40 gr/day
Refined sugars	0% of the Energy	10% of the Energy
Protein	0% of the Energy	15% of the Energy
Salt		5gr/day
Vegetables and Fruits		400gr/day

and foods health may become disruptive. When food storage is inappropriate; physical changes, bacteria may become disrupted due to changes caused by moulds and enzyme. Nutrients should be stored in appropriate containers, packaging, time and temperature. In this way, these nutrients that are stored and consumed at the right time retain both the nutritional value and the hygienic quality. Dry Storage is storage for foods that are not potentially hazardous. There should be very good ventilation in dry storage. For maximum shelf fresh food should be stored in 10°C [6]. Therefore, humidity for dry storage should be around 60-70% and should be done with humidity control and hygrometer. To ensure insect and rodent control and to avoid cross-contamination; crumbs in food storage, garbage, debris should not be left like ruins, if anything is spilled, and it should be cleaned immediately. Food should not touch the floor of the warehouse, and must be placed at least 15 cm above the ground. Racks should be placed at 5 cm from the wall. Chemical materials such as cleaning tools and detergent should definitely not take part in the storage area. Such materials should be stored in a remote location of the food labelling area. Cold storage is keeping the temperature of the cold storage below 4°C. This temperature is suitable for fresh meat poultry, meat, fish, seafood, milk, dairy products, many fresh vegetables, fruits, and chilled food. The shelf life of many of these products, which are among perishable foods, can increase by cold storage because the cold slows or stops the growth of bacteria. If the food is in the cold environment, it means that food is trustable. Containers that are used in the stores must be made of non-absorbent material, must have a lid and must be clean. Due to odour absorbing properties of dairy products; onions, fish and other seafood should be stored separately. In order to prevent cross-contamination, food should be stored separately. Animal meat, fish or other meat must not come into contact with dripping water.

4. Questionnaire Survey

The research data were collected through a questionnaire using face-to-face interview and Internet by sending questions survey to ships and companies. The questions were prepared in such a way that would help Turkish seafarers see if they are eating healthy and their style of choosing food. After obtaining the necessary permissions to perform the survey by questionnaire, the questionnaire were collected one by one, and returned from shipping companies and ships.

The questionnaire included multiple aspects of seafarer's nutrition and status of the stores and it consisted of; the demographic items (such as age, sea and experience, education level, what people eat, the frequency of what they eat, and etc.), the assessment of variables to cause healthy life. It was also finalised by comments, remarks and thanks to the participants.

Seafarers should evaluate all variables related to their tasks based on affecting to increase their health and healthy living style by using A, B, C, and D. "(1) Never" through to "(5) Always". Herein, it is assumed that when the questionnaire score increased, the effect on health is increased. The questionnaire was analysed by using SPSS v.18.0.

Reliability of the questionnaire items was tested by Cronbach's Alpha. In the reliability analysis, "Cronbach's Alpha if item deleted" was used to determine items' effects and also to increase the reliability of the questionnaire. It was determined that all items had a powerful internal consistency, due to none of the items' alpha value was higher than total scale of the questionnaire. The questionnaire reliability was determined as $\alpha = .872$ and a few items in the questionnaire correlated with the total scale to a low degree (less than 0.30). The result of F Test (ANOVA) also revealed the questionnaire scale was significant [$\chi 2(70) = 12.57$, $p = .00$].

4.1 Findings of Survey

When the age distribution of 60 seafarers are examined, it can be understood that 33.3% are in the 19-29 age range, 21.7% are in the range of 30-39, and 45% those are above 40. According to these, the cumulative result of participants is under the age of below 50 (60%).

Duty; the participants were also asked to mark their duty on board, 33.3% marked their duty as others, 26.7% of the participants were Captain, 11.7% were officer which was equal to the percentage of 1st Officer.

The educational status of the participants were high because 56.7% of the participants were university graduates, 16.7% of them were university graduates with a master degree, 11.7% were secondary school graduates, 10% were high school graduates, and only 3.3% of the participants were primary school graduates.

According to the frequency of the participants drinking alcohol; out of 60 participants only 54 answered this question. Two of them replied sometimes and had the highest percentage equal to 48.3% in terms of the frequency of not drinking alcohol and the given answer was "No" (28.3%).

Considering the responses given by the participants to the question "How much water do you drink every day?" only 18.3% of the participants were found to drink 15 cups of water a day, whereas 13.3% were drinking 10 cups a day, and 11.7% were drinking 8 cups a day, and this amount was decreasing for the other participants.

According to the results of the frequency of fast food consumption that 38.3% of the participants were choosing to eat fast food once a week, 26.7% of them once a month, 10.0% once in 2 months, 8.3% 2-3 times a week, and 6.7% of them 4-5 times a week.

A very high percentage of people which is 68.3% of the participants pay attention to expiration date on labels, 11.7% of the participants said they don't pay attention to anything, and 10% of them indicated all which meant they look at the necessary permissions, expiration date, ingredients, and to the amount of energy and nutrients.

When the answers given by the participants are examined 55% of them gave the answer "No" for the diet products, whereas 41.7% of them said "Yes", and only 1.7% of them did not say anything at all.

71.7% of the participants are having snacks, 5% have snack once, 11.7% of the participants have snack twice, and 11.7% of the participants consume snacks three times or more a day.

The results show that 35% of the

participants did not skip any meals in between, %40 stated as sometimes, and 25% never skipped any meals. With a percentage of 35% the generally skipped meal is at lunchtime, 25% in the morning, and the results showed that no meals were skipped in the evening. With a percentage of 31.7% the main reason for skipping meal was stated as lack of time. Moreover, the other reasons were the other reasons were "not feeling like eating/anorexia" (31.7%), "waking up late" (3.3%), "not being ready on time" (3.3%), "lacking as a habit" (8.3%).

According to the results on the frequency of diet products usage; 40% of the participants' answers were "No", 31.7% of the participants said "sometimes", 8% often, and 5% of them said "everyday".

38.3% of the participants gave the answer "yes" which meant they do exercise, and same percentage of people (25%) answered this as "no" and "sometimes" which showed they were not really engaging in it.

25% of the participants were highly doing walking, 13.3% of them were running, 6.7% of them were engaging in the activity of swimming, and the same percentage of participants (3.3%) were using a treadmill and other type of activities.

The results show that 21.7% of the participants do activity once a week, 16.7% of them do activity 3 times a week, 8.3% of the participants do activity 2 times a week, and the same percentage of people said every day (Out of 60 participants 51 participants replied to this question).

According to the duration of action performed by participants every time they engage in any activity; 30% of them do an hour exercise, 13.3% of them do 45 minutes exercise, 8.3% of them engage in 30 minutes exercise, 6.7% of them do 1.5 hours exercise, 5% do for 2 hours, and 1.7% of them do exercise for 3 hours or even more. Moreover, these people also listed the number of days, months, and years they have been doing sports. Amazingly, although some of them said that they have been doing it for years, according to the results, most of them had newly started and it wasn't that long since they engaged in any type of sport.

According to the amount of milk drank by the participants and the frequencies; 26.7% of the participants are drinking milk every day, 18.3% of them do not drink milk, 16.7% of them drink milk 1-2 times a week, 8.3% once in 15 days, and 5% stated as 3-4 times a week.

28.3% of the participants stated that they eat yogurt at least 1-2 times a week, 23.3% of the participants said every day, 20% at least 3-4 times a week, 18.3% once in every two days, 1.7% once in 15 days, 5.0% said they don't eat yogurt, and 3.3% of them pointed out as once a month.

A very high percentage of participants (71.1%) consume cheese every day. 8.3% of the participants gave the answer 1-2 times a week, and every other day, 5% 3-4 times a week, and 3.3% of them are seen that they do not consume cheese, or the same percentage of them said once a month.

35% of people consume red meat at least 3-4 times a week, 31.7% of them 1-2 times a week, 21.7% every other day, 6.7% every day, and 5% once in 15 days.

According to the frequency of fish consumption consumed by participants; 41.7% of the participants can be seen consuming fish 1-2 times a week, 30% once in 15 days, 8.3% every other day, 3.3% 3-4 times a week, and 1.7% of them said they don't eat fish.

40% of the participants consume unhealthy meat products 1-2 times a day, same percentage of people (16.7%) answered as they do not eat unhealthy meat products, and once in 15 days. 6.7% of them stated as every other day, and every day. 5% of them said 3-4 times a week.

According to the frequency of consuming egg; 46.7% have stated that they consume egg 1-2 times a week, 18.3% of the participants consume egg every other day, 11.7% of them 3-4 times a week, 6.7% said once in 15 days, and 3.3% of them have said

they don't consume or they consume once in a month.

43.3% of the participants consume legumes once or twice a week, 21.7% consume 3-4 times a week, 10% every other day, 8.3% every day, and 1.7% consume once a month.

78.3% of the participants have stated that they consume bread every day, 6.7% of the participants have said every other day, and same percentage of them said they don't eat bread.

Almost 50% of the participants consume vegetables every day. About 23% of them consume 3-4 times a week, 15% 1-2 times a week, 12% every other day, and 2% of them have said once a month or they don't. Besides consuming vegetables, participants were also asked to give the frequency of their fruit consumption, and 51.7% of the participants have stated that they eat fruit every day, 16.7% 1-2 times a week, 10% 3-4 times a week, 8.3% once in 15 days, 3.3% once in a month, and 1.7% have said that they don't eat fruit at all.

Chocolate, Waffles, Confectionery consumption; 25% of the participants do not eat at all, 21.7% consume these once in 15 days, 15% every day, 13.3% 3-4 times a week, 11.7% 1-2 times a week, and 5% consume once a month.

Desserts (dairy desserts, pastry); according to the given responses 35% of them consume desserts 1-2 times a week, 26.7% consume once in 15 days, 16.7% once in a month, 10% of them do not consume desserts, 8.3% every other day, and 1.7% of them said they consume every day and 3-4 times a day.

33.3% of the participants eat pastry, cakes and cookies 1-2 times a week, 25% eat once in 15 days, 16.7% once a month, 10% do not eat these, 6.7% eat 3-4 times a week, 5% every day, and 3.3% eat every other day.

Fast food (hamburger, and etc.); 28.3% of the participants eat 1-2 times a week, 26.7% once in 15 days, 25% of the participants eat every day, 8.3% stated their views by saying they don't eat these, 6.7% of them said they eat 3-4 times a week, and 5% eat every other day.

30% of the participants said they don't drink any of acidy drinks (coke, and soda). 21.7% said they drink 1-2 times a week, 15% drink once in 15 days, 13.3% drink once a month, 8.3% drink every day, 6.7% of the participants drink 3-4 times a week, 5% of them drink one every other day.

56.7% of the participants do not consume energy drink, 20% consume these types of drinks once in 15 days, and 16.7% drink once a month.

Other participants who participated in the survey gave their responses to reflect their views of the satisfaction they had for breakfast on board. 53.3% of the participants were happy about the breakfast they received on board, 18.3% of them strongly agreed and stated that they were happy, 11.3% were uncommitted, 5% of them said strongly disagreed and found breakfast unpleasant. The results reflect that regarding their lunch 64.3% of them were satisfied and they agreed that the given lunch was pleasing, 19.6% of them strongly agreed, 8.9% did not state their views, 5.4% disagree about the given lunch as they probably did not find it satisfying, and 1.8% of them strongly disagreed about the given food. 53.6% of the participants were happy with the dinner, 28.6% strongly agreed that the dinner given was satisfying, 12.5% did not state an answer, 3.6% of them did not agree with this, and 1.7% of them strongly disagreed.

51.7% of the participants were found to be happy with the planning and the supply of the stores, and only 3.3% of them were displeased and the others were in between agreeing and disagreeing in different percentages.

More than 50% of the participants replied to the question; "Are you pleased with the food products you get on holidays or at weekends?" by saying "Yes", and only about 3% of them have said "they don't agree with it". Moreover, they were mostly

happy with the food they were given on special days, and mostly they were happy about the variety of food products given to them.

5. Results and Discussion

According to the questionnaire and the responses given by the participants, it seems that in general, Turkish Seafarers are living a healthy life on board. They are trying to keep themselves away from the unhealthy meals and drinks. Despite the fact that the questionnaires were mostly filled in by participants who were 50 and above, their education status was high, and mostly married, they were having 3 courses of meal a day. Due to some reasons such as; not having enough time, waking up late, not having an appetite, and not being ready they were missing some part of the courses either in the morning or in the lunch, but surprisingly not in the evening according to the general responses given. However, among these; losing weight and economic factors were not among the reasons as to why they missed some courses during the day. The good thing among their answers was in general, they stated that they don't get up late at night time to eat anything, only a low percentage of them have said they do and this is only sometimes. Nearly half of the participants were smoking a cigarette and less than the half wasn't, and a low percentage has stated that they used to but they gave it up. Despite the fact the participants were smoking mostly, they weren't consuming alcohol, which was something good for their health. The most amount of water they drank a day was 20 cups, but a lot of people have stated 15 and some said that they do not even drink water. Nearly all of the participants have stated that they drink tea, and mostly they said they drink black tea, not green tea that is even healthier. They also stated that they drink Turkish coffee as much as normal coffee. Fast food was also among their preferences and the frequency they eat shows they tend to like it. Moreover, the given responses show they don't prefer diet products and they are trying to stay away from salt. About 45% of the participants said they are taking part in the physical activities such as; running, walking, swimming, and etc. However, the frequency of how often they do was not very pleasing, as they should have been doing more frequently to be healthy and to live a healthy life. Milk, yoghurt, and cheese were mostly eaten daily by most of the participants, as well as turkey, chicken, red meat, and fish. However, they didn't mostly prefer sausages and bacons. In general, they were trying to keep themselves away from desserts, chocolates, waffles, pastries, cakes, fast food, acidy drinks, and alcohol, and they were trying to consume more fruit, vegetables, and other healthy products instead of the unhealthy ones.

6. Conclusions

It is the first attempt to understand Turkish Seafarer's feeding style. For this reason, question survey, which has a high reliability, was created and sent to the ship. With this in mind, some information has been obtained to help them gain better eating habits. In order to do this, how they are fed and whether they are fed in accordance to international rules has been understood, and they have been advised to do fitness regularly as part of their health requirement. As part of healthy life this study shows us anyone who is willing to live healthy on board should start first by gaining the habit of eating adequately which means; right nutrition, at the right time, and in the right amount. However, the working conditions and the fact that they are on board and may not have the right type of food to eat have not been denied, and all the suggestions have been made accordingly, by thinking all these difficulties as well. As a result of the studies done, it was also determined that eating habits are affected by genetic, gender, social, cultural, religious, ethnic, economic, emotional and psychological factors. So, it is believed that

if a person has a good guide and knows what and when to eat this can enable them choose the right type of food. The question in this study aims to find is what is needed to eat on the ship and what would be the best dieting? Since we live in the world in which day by day individuals are becoming more aware and conscious of what is needed to be done for a balanced diet and are becoming more interested in products that contain energy and nutrients as well as lifestyle products for appropriate health that should be taken daily. Seamen must take extra precautions to keep their health and well-being.

Therefore, healthy seamen should choose a balanced menu, which consists of right amount of protein, carbohydrates, and oil, instead of eating unhealthy ones such as; alcohol, pastries, cakes, sausages, cigarette, drinks with too much caffeine in it, and etc. that would make them put weight on their body. Besides, choosing the right meal they should also take all vitamins necessary for their bodies.

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