



Mira Marianna Järvenpää

# Healthy Lunch Option for the Restaurant Martin Ravintola

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VAASAN AMMATTIKORKEAKOULU  
UNIVERSITY OF APPLIED SCIENCES  
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## ABSTRACT

Author	Mira Järvenpää
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The purpose of this thesis was to find out if the customers of Martin Ravintola are interested in healthy eating habits, as my research problem was if a healthy lunch could have an effect on weight problems. For this research I planned five healthy lunch options with their nutritional values.

The theoretical part of the study consists of building healthy eating habits. Healthy eating habits were defined by the Finnish nutrition recommendations. The recommendations concern carbohydrates, protein and fat as well as vitamins and minerals. The food pyramid and plate model also were used to define a healthy lunch. In the thesis was explained what affects energy consumption and how a healthy lifestyle can be built. Information on typical national diseases was given because without a healthy lifestyle, many of these diseases may develop. The empirical part was a customer survey. The survey was conducted with a combination of quantitative and qualitative methods. To reach the goals of this thesis, the customers of Martin Ravintola answered a questionnaire concerning their eating habits and lifestyle.

The results of the thesis were that the majority of the customers were interested in healthy eating habits. Most customers were interested in eating healthy and also thought that they eat healthy. The customers had a good physical activity; majority of them exercised regularly and practiced functional exercise too. The research problem was solved with the theory of this thesis, and the received results were that lunch can have an impact on weight.

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Keywords     health, lunch, energy consumption, plate model, food pyramid

## TIIVISTELMÄ

Tekijä	Mira Järvenpää
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Tämän opinnäytetyön tarkoitus oli selvittää ovatko Martin Ravintolan asiakkaat kiinnostuneita terveellisistä elintavoista. Tutkimusongelmani oli, että voiko terveellisellä lounaalla olla vaikutusta paino-ongelmiin. Suunnittelin tätä työtä varten viisi terveellistä lounasvaihtoehtoa ravintoarvoineen.

Teoreettinen osuus koostuu terveellisten ruokailutapojen rakentamisesta. Terveelliset elämäntavat määriteltiin ravitsemussuositusten mukaan. Suositukset koskevat hiilihydraatteja, proteiineja ja rasvaa, sekä vitamiineja ja mineraaleja. Ruokapyramidia ja lautasmallia käytettiin määrittelemään terveellinen lounas. Tässä opinnäytetyössä kerrotaan mikä vaikuttaa energian kulutukseen ja kuinka voidaan rakentaa terveelliset elintavat. Tyypillisistä kansansairauksista kerrotaan myös, koska ellei eletä terveellisesti, moni näistä sairauksista voi kehittyä. Empiirinen osuus oli asiakaskysely. Kyselyssä oli käytetty kvantitatiivista sekä kvalitatiivista tutkimusmetodia. Saavuttaakseni tämän opinnäytetyön tavoitteet Martin Ravintolan asiakkaat vastasivat kyselyyn, jossa oli kyse heidän ruokailu- ja elintavoistaan.

Tämän opinnäytetyön tuloksena oli, että suurin osa asiakkaista oli kiinnostunut elämään terveellisesti. Monet asiakkaista olivat kiinnostuneita syömään terveellisesti sekä ajattelivat jo syövänsä terveellisesti. Asiakkailla oli hyvä fyysinen aktiivisuus, suurin osa heistä liikkui säännöllisesti, ja harrasti myös hyötyliikuntaa. Tutkimusongelma ratkaistiin opinnäytetyön teorian avulla, ja tuloksena oli, että lounaalla voi olla vaikutusta painoon.

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# 1 INTRODUCTION

## 1.1 Background Information

As thesis topic I planned healthy lunch options for restaurant Martin Ravintola. The restaurant serves lunch from Monday to Friday, and I planned one healthy lunch option for each of these days. In addition, I wanted to find out if there are people among the customer group who would be interested in eating healthy, and in an healthy lifestyle. My target group is the customers of restaurant Martin Ravintola.

According to Raija Kivinen, journalist at the magazine Kunto Plus, only every tenth person exercises this day the minimum amount recommended. She also wonders why Finnish people, who live in beautiful nature and near of the forests, have become increasingly indoor people. Every second person in Finland is already overweight. (Kivinen 2011; Helakorpi, Paavola. Prättälä & Uutela 2008: 9)

Overweight has become increasingly common among children too. When I was little I used to run and play outside and nowadays children see other kids online instead of playing outside. Adults are not much better; they also spend plenty of their time on the Internet. (Laatikainen 2010; Tilastokeskus 2011)

For me this subject is interesting, I am very interested in healthy lifestyle and curious about other people's eating habits. I like to cook and eat food, and food is not only a fuel for me, it is also a way to enjoy life. When energy is lost through exercising we can eat more. I try to eat healthily and exercise plenty. Through a healthy lifestyle many national diseases can be prevented, and it also helps to keep up vitality. It is stated that with a healthy lifestyle people live longer (CDC 2011). When thinking of my occupation, this thesis can help me in the future to plan lunch and à la carte menus as well as give information about the customers' needs and wants to the restaurant.

In the year 2010, I made a customer satisfaction survey for restaurant Martin Ravintola. The results were that most customers were satisfied with the lunch portions, and the food was complimented. On the other hand, there were people who

wanted a more versatile menu, and some thought that the relationship of the portion size and the price was not good. From the customer satisfaction survey I got an idea to plan new and healthy lunch portions for five days. Although the customers of one restaurant are just a small percentage of all working adults in Finland my research will give me and for restaurant interesting results of eating habits.

The main reasons for choosing this subject as a research topic was my own interest in eating and living healthy. I have been working with Martin Ravintola for a few years during my studies and done my practical training there. I have also taken part in planning menus for the restaurant. Most of the restaurant's customers are mainly regular customers.

## **1.2 Company Introduction**

Martin Ravintola is a small Central European restaurant; it could also be described as a Bistro. It was known before by the name Martin baari. The location of the restaurant is in the center of Vaasa, close to the railway and bus station. The owner, Martti Niemelä established the place in 2001.

Because of its size, the restaurant functions as a small family business. The owner works with two other workers, and the place also takes trainees. There are seats for 40 people, nine tables and a couple of bar chairs. During lunch, the customer number is from 30 to 40 people, in summertime there are fewer customers due to summer holidays. The restaurant is open from Monday to Saturday. From Monday to Friday lunch begins at 11 in the morning and lasts till two in the afternoon. The restaurant has an à la carte list in the evenings. The à la carte list is available from Tuesday to Thursday till 10 o'clock in the evening and on Friday and Saturday till midnight. On Saturday the place is open from four o'clock to midnight. The restaurant can also be reserved for private occasions and ceremonies.

For lunch there are now four lunch options to choose from, usually there is a soup, a stew, chicken or pork fillet and a steak or fish fillet. The à la carte menu has lighter dishes like chicken sandwich and traditional dishes like pork loins and des-

serts. Lunch includes a starter salad, and whole grain bread that can be considered healthy. The main courses are usually served with cream potatoes, and creamy sauces which are very greasy and heavy. In the normal lunch portions the amount of side vegetables is very low. One of the most popular dishes is chicken bread from the à la carte menu, it can be also considered as healthy. The main ingredients of it are a big salad, a slice of toasted bread and sliced chicken breast.

### **1.3 Previous Research**

Many research have been made about healthy food among children and young people, it has been also stated that school lunch would not be healthy. Concerns about health among children and young people may be due to the increasing weight among 12-18 year olds. Low exercising is doubted to be the reason for weight gaining. (Sari Stigman 2006)

Overweight among working adults has also increased, and there are many news about the population in Finland being overweight. I found a research from the year 2009 which stated that smoking has been reduced, eating healthy has increased but being overweight has become more usual. In the year 2008, 56 percent of the men and 44 percent of the women were overweight. (Helakorpi, Paavola, Prättälä, Uutela 2008: 17)

### **1.4 The Aim of the Research**

The aim of the research was to find out if there are customers who would be interested in eating healthy. With the research was also investigated the amount of daily exercising and respondents' most eaten food stuffs. My research question is: "Are people interested in healthy lunch options"? My research problem is: "Can lunch have an impact on people's weight problems"? My goal was to find answers to this question and problem, and I planned healthy recipes with their nutritional values for the restaurant. Recipes and the results of the questionnaire were brought to the restaurant's owner.

In the theory part, healthy eating habits were based on the Finnish Nutritional Recommendations, and there was also information about typical national diseases.

These diseases can evolve if people do not eat according to a healthy lifestyle. With the help of a food pyramid, a plate model and knowledge of energy consumption was clarified what belongs to a healthy lifestyle. In this research energy giving nutrients as well as vitamins and minerals are presented.

### **1.5 Research Method**

As a research method I used a combination of the quantitative and the qualitative method, because I thought it would be the most suitable one for evaluating customers' eating habits. A quantitative method means that the collected data is measured in numbers. I made a questionnaire consisting of 14 questions including an open question, and a free comment section where customers could write their comments. The questionnaire covered three sections. The eating habits section dealt with questions about eating times, and what meals customers ate. Their most important meal, and what food they eat the least and the most, was also asked. In addition, I asked what affects their choice of a lunch restaurant. The interest in healthy food part concerned matters such as customers' interest in eating healthily and reasons for that. In this section was also the qualitative part of the questionnaire; the question where people wrote their own opinion on what they regard to be healthy food. The section, lunch's effect on weight, was about preferred lunch options, a replacement of lunch and questions about exercising. At the end there was an open feedback section.

### **1.6 Research Problem**

My research problem is: Can lunch have an impact on Finnish people's weight problems? I wanted to know if people eat too much during lunch or as an opposite skips it and replace it with an unhealthy snack. Especially in the case of eating in a buffet, there is so much food, so it is easy to take too much. I seldom eat at a buffet but when I do I think that it is a waste of money if I eat just a little. In an article was claimed that if people skip lunch, they tend to eat more at home and too much because the hunger has gotten so big. As a contradiction, if you eat too much at lunch, you feel tired after it, which is not the purpose when consuming energy giving nutrition. (Työpiste 2009)

## **1.7 Research Question**

My research question is: Are people interested in healthy lunch options. With this question I wanted to know if people want to eat healthy during their lunch. For me eating healthy is important, but I can treat myself sometimes too. I assume that if I would eat lunch in a restaurant every day it would be a good thing if the food tasted good, and would be healthy too.

## 2 BUILDING HEALTHY EATING HABITS

Versatile and regular eating rhythm is a base for healthy eating habits. Nevertheless, people's dining has become more irregular and snacking more popular. If we eat regularly there is no need for extra snacking, or for eating too much at once because the hunger has become so big. (Niemi 2006: 132)

People are different and prone to different eating habits, but the recommended rhythm is to eat from four to six the same sized meals a day in every three or four hours. When eating several meals which are approximately the same size, energy intake divides evenly throughout the day. It is recommended to eat half of the whole calorie intake before half of the day. Although the regular dining rhythm is important and recommended, should also be taken in consideration the quality and amount of food. (Niemi 2006: 133)

### 2.1 Plate Model

The plate model is a guideline on how to build your meal on a plate. Vegetables fill half of the plate, one fourth is filled with a carbohydrate source such as potatoes and the final fourth is filled with protein source. To the plate model is also added a dessert which can be berries, bread as a fiber and carbohydrate source, and a glass of milk as milk products and vegetable fat as salad dressing and margarine for the bread. (Borg, Ilander, Laaksonen, Marniemi, Mursu, Pethman & Ray 2006: 23; Niemi 2006: 134)

Half a kilo of vegetables, fruit and berries should be eaten per day in total; a plate can be filled for example with grated vegetables, a warm side vegetable or salad. From vegetables we get vitamins and minerals, they have a low number of calories which are mostly carbohydrates. Vegetables, fruit and berries should be eaten with every meal, it is also recommended not to cook the vegetables every time and eat whole berries instead of juices. (Niemi 2006: 136)

The plate model's carbohydrate source can be potatoes, rice, pasta or other such as couscous. Potatoes have a great amount of starch but a low number of calories, it can be eaten plenty, also sweet potato is good for you and it has more fibers than

potato. White bread should be avoided. It is recommended to eat whole grain bread which should be half of the recommended six to nine slices per day. As a protein source is recommended to use meat with a low fat content and different fish at least twice a week. Meat products can be replaced with soya, nuts, seeds and bean vegetables. Tofu and soya products are good in a vegetarian diet. (Niemi 2006: 136—137)

## **2.2 Food Pyramid**

The three dimensioned food pyramid is made from the nutritional recommendation food triangle. The triangle consists of four layers, the bottom layer is the widest and the upper layer is the smallest, this shows how much food items one can eat from the layers compared to each. The food pyramid is made for consumption of 2000 calories, light working and exercising woman's energy need. (Huovinen & Leino 2000: 447—448)

The base of the pyramid is the source for energy and fiber intake. The second layer is constituted of vegetables, fruit and berries. The third layer consists of milk, meat, egg and fish and the final and narrowest layer consists of high calorie products; fat and treats. The bottom layer is the one of which should be eaten the most; there are for example grain products, potatoes and pasta. Referring to the plate model, the recommended bread amount is six to nine slices per day. (Huovinen & Leino 2000: 448—449)

For a good diet, for example recommended amounts to eat for one day from the bottom layer could be: six to nine slices of bread, one portion of porridge, 300 grams of pasta or rice and 200 grams of potatoes. From the green layer should be eaten two to three fruit and 225 grams of salad and 150 grams of vegetables. From the milk and meat product layer can be eaten three glasses of milk products, two to three slices of cheese and three portions of meat approximately 180 grams. And finally from the top shelf a diet for one day can have one tablespoon of vegetable oil, 18 grams of butter and half a deciliter of sugar. (Huovinen & Leino 2000: 449—454)

### 2.3 Health Triangle

Aleksi Niemi has upgraded the food triangle to the health triangle.

*“In the last years I was taking the traditional food triangle thinking further by adding exercising as the base for a healthy lifestyle. In other words, the food triangle has changed into health triangle.”* (Niemi 2006: 139)

In the health triangle there are five layers, in the bottom, and as the widest layer is activity and exercise, the second largest layer is grain products and potato, the third layer is vegetables, fruit and berries, the second layer consists of meat, fish, egg and milk products and the top layer is fat and sugar. (Niemi 2006: 139—141)

The bottom layer, physical activity, consists of all the exercise that should be done, taken into consideration planned workout for a day as well as the activity during free time, work and traveling to work. It is recommended to take into consideration options with the help of which you can add more exercise in your day, for example using the stairs instead of an elevator and walk by foot or bike to work if possible. (Niemi 2006: 139—140)

The triangle’s other layers are mainly the same as in the food pyramid. The idea is the same, the bigger the layer the more it should be used. Great physical activity combined with the right and versatile diet prevents being overweight and is good for the health. (Niemi 2006: 139—141)

### 2.4 Current Eating Habits

Information Centre of the Ministry of Agriculture and Forestry has made a Balance sheet for Food Commodities 2010. This research is about what Finnish people ate in 2010. In this research found that people consumed 183 kilos of liquid milk products, 81 kilos of fruit and berries, 80 kilos of grain, 76 kilos of meat and 68 kilos of vegetables. These numbers are presented in table one with the amounts of use in grams per day, calorie amount, and a division of proteins, fats



and carbohydrates. From the table can be seen that from grain products was got the biggest calorie intake, secondly from the meat and thirdly from liquid dairy products. (Kortesmaa 2011)

	kg/year	g/day	Energy kJ/day	Protein g/day	Fats g/day	Carboh. g/day
<b>Grain products</b>	<b>79.5</b>	<b>218</b>	<b>3086</b>	<b>24</b>	<b>4</b>	<b>133</b>
Potato	58.4	160	513	3	0	25
Vegetables	68.3	187	227	2	1	13
Fruit and berries	81.0	222	470	1	1	27
Meat	76.2	209	1632	33	25	0
Eggs	10	27	172	3	3	0
Fish	16	44.5	219	7	2	0
Liquid dairy products	183.4	502.4	1232	17	14	27

**Table1.** Food products Finnish people ate in 2010. (Kortesmaa 2011)

The use of milk and sour milk decreased approximately one percent, yoghurt was eaten four percent more in 2009. People ate more meat in 2010 than in 2009, the consumption rose by three percent. 34.9 kilos of pork was eaten per person, 18.6 kilos beef per person and poultry 18.2 kilos per person. The consumption of rye and oat increased and the consumption of wheat reduced. Still people ate the same amount of grain. 46 kilos of wheat per person was eaten, 16 kilos rye per person and five kilos of oat and rice were eaten per person. The amount of vegetables used decreased to the same as in 2008 and the consumption of fruit increased. (Kortesmaa 2011)

According to the “Finravinto 2007” research, Finnish people ate approximately six times a day and on working days more times were eaten than on a free day. Breakfast was usually eaten, and the most amount of food was eaten during lunch and dinner. Women had their lunch mostly as their own packed lunch and men ate approximately the same times at home, at a staff restaurant or brought their own lunch. Men ate one third of their whole calorie intake at lunch and women nearly 30 percent. (Kansanterveyslaitos 2008: 30)

## 2.5 Energy Consumption and Need

The human body needs energy because physical activity, warmth production and cardinal metabolism use it. Most of the energy we get from nutrition is consumed by the cardinal metabolism. Energy preserves in our system as fats, proteins and carbohydrates which we get from the food. Most of the energy is preserved as fat, and the proteins make the biggest fat free tissue. (Niemi 2006: 8)

The least amount that the human body consumes per day is 1200 kcal. Normally it is 2000—3000 kcal per day among adults. Compared to normal people, athletes who work out plenty can need energy up to 8000 kcal per day. This is because of the physical activity. (Niemi 2006: 9)

## 2.6 Cardinal Metabolism

Vital actions such as heart and blood circulation, breathing, warmth and brain function are functions that belong to cardinal metabolism; these actions can take up to 80 percent of the whole energy consumption. Normally the body uses from 60 to 70 percent of the whole energy consumption. How much the body uses energy with cardinal metabolism, depends on how much there is fatless tissue in the body. The more muscle tissue, the bigger is the cardinal metabolism. Normally men have more muscle tissue in their body, so their energy consumption is 15—20 percent bigger than women. (Niemi 2006: 9)

When being overweight, more energy is used by the cardinal metabolism because when the weight gets bigger, fatless tissue forms also. Opposite to this, when weight is lost, the cardinal metabolism gets smaller. The metabolism decreases because during the weight loss, fatless tissue among the fat, is lost. (Niemi 2006: 9)

Hormones affect the cardinal metabolism, for example thyroxin and age hormones accelerate the metabolism. If you suffer from thyroid hypo function, metabolism decreases and can cause weight gain. Also aging decelerates the metabolism, muscle tissue diminishes, and in every ten years the metabolism slows down approximately by two percent. (Niemi 2006: 9—10)

Heavy smoking and heavy exercising accelerates the metabolism. The nicotine has an effect of ten percent on the metabolism. After quitting smoking, metabolism decelerates with 100—200 calories. Exercising has effects due to growth of the muscle mass; one kilo of muscle mass consumes energy 12—15 calories per day. (Niemi 2006: 10)

Cardinal metabolism is individual; two people with the same muscle tissue, age, gender and weight can have totally different energy consumption. Heritage affects metabolism which explains why others have a bigger risk of gaining weight. (Niemi 2006: 11)

## **2.7 Production of Warmth Due Food**

Digesting, absorbing, transporting, and storing of the food cause an energy loss after eating for a couple of hours. This process is called the production of warmth due to food. During dining the energy consumption is approximately ten percent of the entire daily energy consumption. Energy received from proteins cause most of the warmth; approximately 20 to 30 percent of the gotten energy is consumed in warming. From the energy of carbohydrates five to ten percent of that causes warmth. Fat storing does not need much energy so that is why it has the smallest effect after eating, three to five percent. (Borg et al.: 2006: 39; Niemi 2006: 11—12)

Increase of the warmth after eating is affected by the meal's energy amount and nutritional composition. Physical activity, person's health, nutritional state and the time have passed from the previous meal have significance to warmth production. (Borg et al. 2006: 39; Niemi 2006: 11—12)

## **2.8 Energy Consumption Due to Physical Activity**

Physical activity consists of all the activities during the day. Exercising during free time does not affect much on consumption; greater impact has the activity during leisure time and work. The whole energy consumption increases with five percent per day when having a pre-planned exercise such as running or aerobics. If the meaning is to lose weight by exercising should be focused on leisure and

work activity, also known as a functional exercise. (Borg et al. 2006: 41; Niemi 2006: 12)

Energy loss caused by physical activity is normally 20—30 percent of the whole energy consumption. Power, duration, regularity, weight and physical shape affects the amount of energy loss during an exercise. The energy consumption of physical activity is often measured with the metabolic equivalent. The metabolic equivalent refers to the energy consumption of resting. A metabolic equivalent unit for resting is one. When we rest, the human body consumes one calorie per kilo in an hour. The metabolic equivalent value for resting is one. When comparing resting to standing up, standing consumes 2.5 times more energy than laying down. When we stand, 2.5 times more energy is lost in the same time that if we rested. Metabolic equivalent areas are from a light to a very heavy activity. Values 1—3 means light activity, 4—6 reasonable activity, 7—10 heavy activity and over 10 means very heavy activity. (Borg et al. 2006: 41; Niemi 2006: 13)

### 3 NUTRITION RECOMMENDATIONS

The Finnish Nutrition recommendations are based on the Nordic recommendations, newest are from 2005. During the year 2009 new recommendations started to be collect, and they will be published in 2012. Nutrition recommendations have been given to the population of Finland over 50 years of time by the National nutrition council. During this time, the recommendations have been almost the same, apart from particularizing and changing of emphasis due to more research and wider amount of living supplies. There has been a large debate about fat in Finland recently, in the year 1980, consumption of fat was considered important, nowadays the quality is emphasized. (Haglund, Huupponen, Ventola & Hakala-Lahtinen 2009: 10; Hyytinen, Mustajoki, Partanen, Sinisalo-Ojala 2009: 12; Valtion ravitsemus neuvottelukunta 2005)

Finnish nutrition recommendations consist of the preferred intake of the most important nutrients, which are carbohydrates, fats, proteins, vitamins and minerals. These recommendations are for healthy, and a fair amount exercising people. People who are also suffering from diseases such as diabetes type two with a high blood pressure can use them as a guide for nutrition. The purpose of the recommendations is to enhance and support the positive development of nutrition and health. Recommendations are used for planning eating habits to a great amount of people, teaching and a base for evaluation of the use of food and receiving nutrients. (Haglund et al. 2009: 10; Valtion ravitsemusneuvottelukunta 2005)

To maintain a good health, a stable and sufficient supply of nutrients should be considered. Stable energy intake and consumption are important too. Other issues to observe is increasing the amount of fiber carbohydrates and lower the intake of cleaned sugar. Hard fat should be consumed in small amounts and it should be replaced with soft fat. The recommendations suggest that use of salt is reduced, alcohol consumption is kept low, and time should be reserved for dining. Increasing daily exercise to 30 minutes a day is also recommended. (Haglund et al. 2009: 11; Valtion ravitsemusneuvottelukunta 2005)

Time has had an effect on the recommendations, for example, over a hundred years ago a high energy intake was essential. Compared to this day a diet needs to be of a lower calorie intake. People do more office work and hard work is more and more replaced with machines, due to this, people do not need as much energy as before. (Hyytinen et al. 2009: 12; Valtion ravitsemusneuvottelukunta 2005)

### **3.1 Fat**

In a good diet should always be fat included, and something that should be extremely taken into consideration is the quality of fat. There has been a lively debate about fat in Finland in 2010 about its quality; some research says that hard fat and animal fat are not as unhealthy in comparison with vegetable oils as earlier believed. Some vegetable oils such as coconut oil and palm oil do not have better fatty acids than animal based fat. Still as a general rule, vegetable fats are healthier. (Aro 2008: 19; YLE news 2010)

According to the nutrition recommendations, the amount of fat should be 25—35 percent of the daily calorie intake. Of this percentage, hard fat should be 10 percent. If a diet has plenty of hard fat in it, people will gain weight and have a risk to contract diabetes type two, heart— and blood diseases, and some cancer types. Hard fat is usually in milk products such as cheeses, ice cream and yoghurt as well as in meat. People should favor soft fat in their diet; this fat type is received from vegetable oils and margarine. In contrast to the nutrition recommendations, there are also many low-carbohydrate diets that recommend using plenty of fat and proteins instead of carbohydrates. One is for example very popular Atkins, and these kinds of diets are not recommended by the National nutrition recommendations. (Hyytinen et al. 2009: 21; Haglund et al. 2009: 33; Valtion ravitsemusneuvottelukunta 2005; Laatikainen 2011)

Fat is needed because it is an important source of energy. It contains fat dissolving vitamins and necessary fatty acids, and fat also covers from cold. Still it needs to be remembered that one gram of fat contains 38 KJ/nine calories. Compared to carbohydrates or protein, fat has over half more calories. Suitable amount of visible soft fat for adults is two tablespoons of turnip rape oil, which is the same as 10

teaspoons of margarine of 60 percent of fat or 17 teaspoons of margarine of 35 percent of fat. (Aro 2008: 13; Hyytinen et al. 2009: 21–22)

### 3.2 Proteins

Proteins are needed for building, regulation and transportation of tissues, and are also an energy source. Proteins consist of 20 amino acids. Ten of the amino acids are necessary which the human body cannot produce itself, so all of them need to get from nutrition. The other amino acids which are not necessary can be received from other amino acids or glucose byproducts. The amino acid order defines the shape and function of the protein in the body. If one amino acid is missing or replaced, the impacts of the protein will change. (Niemi 2006: 28)

Proteins are needed for building the system; part of the amino acids are dispersed and used for energy or stored as fat or carbohydrates. One gram of protein contains four calories. The amount of protein in the daily calorie intake is 10-20 percent. If the body does not receive enough proteins, this leads to Protein Energy Malnutrition which is a rare disease in Finland. Growth and development slow down, muscle and fat tissue reduce and the body is more exposed to infections, if it is not gotten enough proteins. (Haglund et al. 2009: 43–47)

The purpose of proteins is to build and maintain cells, build hormones, build antibodies and enzymes of the immune system and functioning as an energy source. Animal based food usually has all the right amino acids in a balanced proportion, in vegetables are not plenty or at all the necessary amino acids. Good sources of proteins are low-fat milk products, chicken, turkey, bean vegetables, fish and egg. When consuming a vegetarian diet lack of proteins may be compensated with seeds and nuts, soy is also a good source of protein. (Niemi 2006: 28–29)

It is not unhealthy to get more proteins than is recommended but if the amount is larger than consumption, proteins convert to carbohydrates and cause gaining weight. When is exercised plenty, the amount of proteins should be increased too. During normal exercise the increase of protein amount is not necessary to consider because then is necessary to eat more anyway. However, the loss of carbohy-

drates goes hand in hand with protein loss. There is no actual protein storage in the human body so, if the body does not get enough carbohydrates or protein, it will take it from the existing muscle tissue. (Niemi 2006: 29–31)

### 3.3 Carbohydrates

Potatoes, bread, pasta as well as berries and fruit have been a base for Finnish nutrition for a long period of time. One should get 50 to 60 percent of carbohydrates in the daily calorie intake according to the nutritional recommendations. Similar to proteins, one gram of carbohydrates has four calories. (Haglund et al. 2009: 26—27)

The main purpose of carbohydrates is to function as an energy source for cells and take care of the glucose balance in blood circulation. They are also needed for fat metabolism and if the body has received enough carbohydrates from the nutrition, it saves proteins for other missions. Carbohydrates and proteins work together and form important combinations for the system. The human brain as well as other parts of the body needs carbohydrates as an energy source, after consuming of carbohydrates, blood sugar rises approximately in half an hour. (Borg, Fogelholm, Hiilloskorpi 2004: 37; Haglund et al. 2009: 43–47)

In 2002, the main source of carbohydrates was grain products. In this research as grain products were also counted rice and pasta and the amount of whole calorie intake was 50 percent. Vegetables and fruit do not have many carbohydrates in them, and Finnish people do not eat many vegetables, furthermore when potato does not count as a vegetable and fruit source the amount that people get carbohydrates from vegetables and fruit is approximately 20 percent. From milk products and sugar was received around 10 percent of the daily calorie intake. (Borg et al. 2004: 34-35)

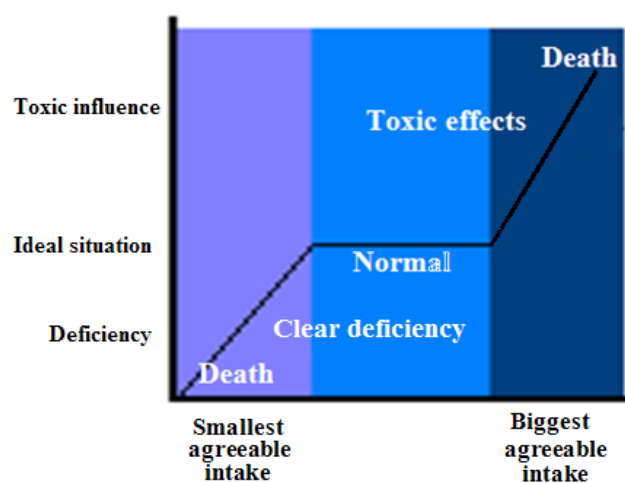
Glucose, fructose and galactose are monosaccharide units from which carbohydrates consist. These units can be either separate monosaccharide, disaccharide or polysaccharide chains. Starch, glycogen and nutrition fiber are polysaccharides. Monosaccharide and disaccharides are sugars; glucose, fructose and galactose,



disaccharide are pure sugar, lactose and maltose. Fruit, berries and honey contain glucose and fructose. Lactose is in milk and milk products, but from long aged cheeses the lactose has spread during the maturing. Sugar has a lot of energy and no nutritional value; it absorbs quickly and raises blood sugar. It can eliminate hunger for a small amount of time so if you try to lose weight, sugar is not good. Sugar also wakes the feeling that you need to eat more. (Haglund et al. 2009: 27—28)

### 3.4 Vitamins and Minerals

Protective nutrients; vitamins and minerals are needed for the energy gotten from carbohydrates, proteins and fats to be used in the human system. Vitamins dissolve whether in water or fat, minerals are divided based on their daily need. Macro minerals are needed over 20 milligrams per day, and trace substances are needed under 20 milligrams per day. Receiving all the protective nutrients needs to be balanced, if gotten more or less than needed; it is harmful to the system. Minor deficiency of nutrients may be hard to notice, and severe deficiency causes health damage or even death. If one is in a good nutritional state, an overdose of nutrients is not good for the health and too much supply can be dangerous such as the lack of them. This has been clarified in figure 1. (Fogelholm 1999: 154—155)



**Figure1.** Supply of the protective nutrients. (Fogelholm 1999: 155)

Some vitamins and macro minerals are needed for preventing oxidation which is caused by free radicals. When energy is produced in cells free radicals are born, also for example smoking, pollution and long-term exercise cause more free radicals. Antioxidants prevent oxidation and they are divided into two great groups; vitamins gotten from directly food and enzymes that body itself produces from the gotten food. E vitamin, C vitamin and beta-carotene; the pre state of vitamin A are antioxidant vitamins. In order to get antioxidants should be eaten vegetables versatile. (Fogelholm 1999: 156—157)

Vitamins are necessary organic unions that are needed for growth, sustaining life and regulation of chemical reactions. Vitamins have to be received from food as such, or in a form where they can transform into vitamins that function in the system. The necessary vitamins for people are A-, D-, E-, K-, C- and B-vitamin. (Haglund et al. 2009: 49)

Fat soluble vitamins dissolve according to their name in fats and fat solvents. If one gets more of these vitamins than needed they are usually stored in the liver and fat tissue. Because of the storing in tissue, the lack of fat soluble vitamins appears after months of minor receiving. A-, D-, E-, and K-vitamin are fat soluble and they stand heating during cooking well. Water soluble vitamins dissolve in water and do not preserve in the body due to this lack of these vitamins is easily noticeable. Unlike fat soluble vitamins, water soluble does not stand heating, and approximately 30 to 50 percent is lost during cooking. (Haglund et al. 2009: 50)

### **3.5 Typical National Deceases**

The great significance for health is how you live your life; nutrition also is a great part of a healthy lifestyle. If one wants to prevent long-term diseases, versatile, and health nutrition is the key. Nonsmoking and sufficient physical activity supports preventing long-term diseases and helps to take care of them. Obesity is a major risk for many long-term diseases. Diabetes, blood pressure, heart- and blood vessel disease and cancer may be caused by being overweight and lack of a healthy lifestyle. (Borg et al. 2004: 115—116; Niemi 2006: 72)

### **3.5.1 High Blood Pressure**

Less than 40 percent of Finnish adults have their blood pressure at recommended level. High blood pressure is one of the major risk factors to come down with coronary heart disease, and high blood pressure is also a typical illness among Finns. Inheritance and living conditions have an impact on blood pressure; high intake of salt, obesity and greater use of alcohol are a couple of reasons for it. Obesity is a cause of too much energy, with this extra energy is gotten too much of salt also. The Natrium gotten from eating salt or salty food is the major reason for high blood pressure. Exercising reduces blood pressure due to increase in energy consumption, losing weight and intensifying insulin functions. (Niemi 2006: 73—75)

### **3.5.2 Coronary Heart Disease**

There are many factors that can cause coronary heart disease but there are three major risk factors; high cholesterol, high blood pressure and smoking. Other influencing issues are overweight, diabetes and low physical activity. Although any of the previously mentioned things were not powerful, when they are affecting together can launch this decease. Coronary heart disease can begin during childhood. Clogging of the blood vessels is a slow incidence that can last for years or decades. This is due to unhealthy lifestyles; too high energy intake and minor exercising. With healthy lifestyles can be prevented the decease and caring about it if it is already started. Preventing coronary heart disease should be taken in consideration amount of fat and cholesterol, the intake of salt, balance between energy intake and consumption and nonsmoking. (Niemi 2006: 80—82)

### **3.5.3 Cerebrovascular Accident**

Cerebrovascular accidents as a cause of death has reduced in Finland, still they are the third usual reason to die after the coronary heart disease and cancers. High blood pressure is the most major risk factor to come down with this disease moreover a high intake of alcohol, smoking and overweight affects. Healthy lifestyle is a key factor preventing a stroke. As in coronary heart disease to prevent this dis-

ease, should be taken care of normal blood pressure the intake of salt, reasonable use of alcohol, quitting smoking and use of fat. Also regularly exercising helps in preventing it, and even moderate physical activity reduces risks. (Niemi 2006: 84—85)

#### **3.5.4 Diabetes**

There is type 1 diabetes and type 2 diabetes. Type 1 diabetes also known as juvenile-onset diabetes is usually contracted due to inheritance and immunological factors which are not accurately examined till this day. As a treatment insulin shots are taken and estimating the number of carbohydrates of eating food. (Hyytinen et al. 2009: 50; Niemi 2006: 87)

Overweight and immobility are common causes for diabetes 2. The disease is also affected by inheritance and is usually caught in middle-age or after. Type 2 diabetes has become a national disease and it is caught with nearly half a million of Finns. (STT-info). Metabolic syndrome is a cardinal metabolic related syndrome where are multiple health weakening factors simultaneously, and this is also a great risk factor. Ways to prevent type 2 diabetes are living and eating healthy, nonsmoking and reducing alcohol use. The last mentioned issues help also in the treatment. A big waist, blood sugar, the blood's fat values and blood pressure are controlled and insulin shots are used in the treatment. A type 2 diabetic can eat normal, high-in-fiber food. When eating according to the nutrition recommendations is this disease is effectively prevented. (Hyytinen et.al 2009: 57—58; Niemi 2006: 87—88)

#### **3.5.5 Osteoporosis**

When the density of bone structure has reduced, the state is called osteoporosis, as a cause of this, bone fractures can appear easily. The bone structure grows stronger till the age of 20, after that decomposition of bones becomes faster than construction. The strength that the bone is after the bone has stopped firming is affected by the bone mass reached in childhood. To reach a higher top bone mass

one has to exercise regularly, get enough calcium, D-vitamin and avoid smoking. (Niemi 2006: 90—92)

## 4 HEALTHY LUNCH OPTIONS

“Food portions that are eaten outside home have a great significance on the healthiness of Finnish people’s diet. The lunch portion should contain approximately one third of the daily energy intake. People who eat at staff restaurants are studied to eat more recommendable food items such as fish, vegetables, potatoes, berries and fruits.” (Valtion ravitsemusneuvottelukunta 2005)

So, why could this not be possible also in a normal restaurant, one which provides lunch? With this research I wanted to study if people are interested in that possibility and eating healthy. Although in Martin Ravintola the lunch always has a small green salad as a starter, the recommended amount of salads or side vegetables are not filled. (Valtion ravitsemusneuvottelukunta 2005)

I planned five healthy lunch portions to be used in Martin Ravintola. I used a Finnish website “kiloklubi.fi” to define the amount of proteins, carbohydrates and fat, and base for my recipes were “KuntoPlus” magazines. All recipes are made for one person and are attached in the appendices. In the graphs of each dish the amount of carbohydrates, proteins and fat both in grams and percentages is shown.

In the lunch portions has been taken in consideration the amount of proteins, carbohydrates and fat. With these lunch portions water or nonfat milk is served as a beverage and in addition two pieces of whole-grain bread. I wanted to keep the portions simple and maintain the restaurant’s style, so I wanted to use the same ingredients that are already used in the restaurant. The portions have many vegetables in them, and I planned a light sauce instead of the usual creamy one.

Although the recipes that I planned are low in number of calories, the bread and the starter salad increases that. Salad consists of lettuce and pieces of tomato, cu-

cumber and watermelon. From the salad is received 16 calories, from two slices of wholegrain bread 155.4 calories, and from a glass of milk 70 calories. Altogether from the salad, bread and milk is received 241.4 calories, and most calories consist of carbohydrates. The nutritional values of milk, bread and the starter salad are presented in table two.

**Table2.** Nutritional values of the restaurant's accompaniments. (Fineli 2011)

Ingredient	Amount (g/dl)	Carboh. %	Protein %	Fat %	Calories (kcal)
Salad	100 g	50 %	20 %	11 %	16
Bread	60 g	77 %	11 %	8 %	155.4
Milk	2 dl	58 %	37 %	3 %	70
<b>Sum.</b>					<b>241.4</b>

#### 4.1 Cauliflower Soup with Shrimps

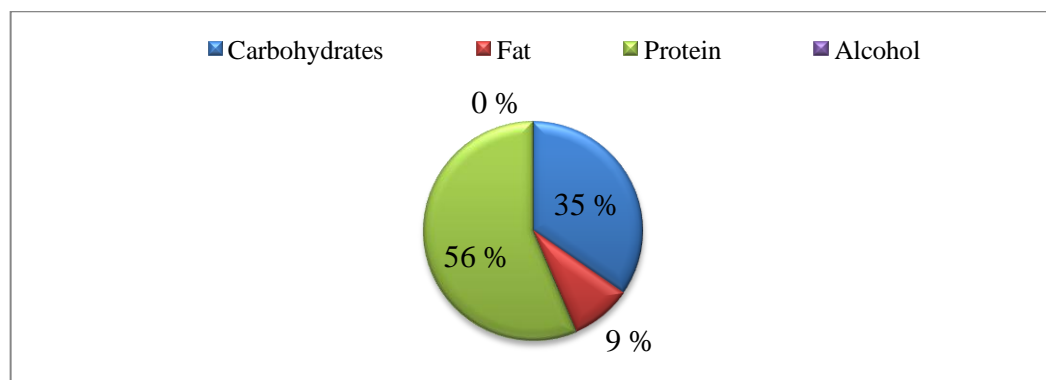
Cauliflower soup is a light lunch dish. The soup becomes more filling by adding shrimps to it. The dish's nutritional values can be seen in table three. The table shows calories, grams and percentages. The soup has 199 calories in total.

**Table3.** Nutritional values of the cauliflower soup.

Energy distribution			Portions:1
	calories	g	%
Carbohydrates	69	16.4g	35 %
Fat	17	1.8g	9 %
Protein	113	26.7g	57 %
Alcohol	0	0	0 %
Sum	199		100 %

In the soup 35 percent of the whole energy comes from carbohydrates, nine percent of fat and 57 percent of proteins. Although the soup has a small number of calories it can be filling due the high protein amount. Percentages are shown in the

figure below. With the starter salad and bread, the whole number of calories for this dish is 440.4 kcal.



**Figure2.** Nutritional values of the soup in percentages.

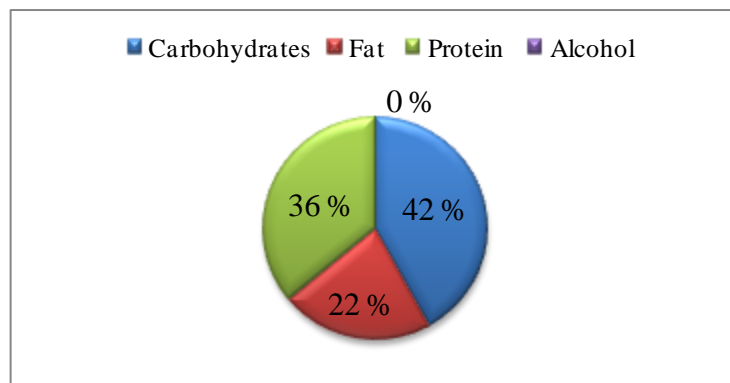
#### 4.2 Chicken with Rice and Ratatouille

This chicken dish consists of vegetables, dark rice and a chicken breast, and it has a light yogurt sauce. The whole number of calories is 310 and most of them come from carbohydrates. Number of nutrients can be seen in the table four.

**Table4.** Nutritional values of the chicken portion.

Energy distribution			Portions:1
	calories	g	%
Carbohydrates	131	33.1	42 %
Fat	68	7.7	22 %
Protein	111	28	36 %
Alcohol	0	0	0 %
Sum	310		100 %

The dish has 42 percent carbohydrates, 22 percent fat and 36 percent proteins and these are presented in figure 3. Altogether with the salad, bread and beverage the whole calorie number of this dish is 551.4 kcal.



**Figure3.** Nutritional values of the chicken dish in percentages.

### 4.3 Pork with Fruity Coleslaw and Garlic Sauce

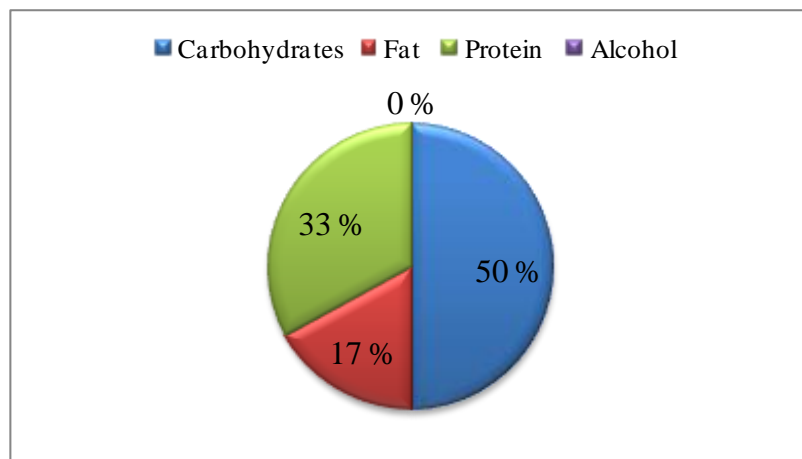
This dish consists of pork loins, potatoes and a salad made of cabbage. In addition, there is a mayonnaise and yoghurt based sauce which is seasoned with garlic. In the sauce is used both light mayonnaise and nonfat yoghurt. The total number of calories is 436. The number of calories among other values is shown in table 5. With the accompaniments the whole calorie amount of the portion is 677.4 kcal.

**Table5.** Nutritional values of the pork portion.

Energy distribution			Portions:1
	calories	g	%
Carbohydrates	217	52	50 %
Fat	73	7.8	17 %
Protein	146	34.9	33 %
Alcohol	0	0	0 %
Sum	436		100 %

The portion is high in carbohydrates and has a low fat amount. Fifty percent of the dish is carbohydrates, 33 percent is proteins and 17% is fat. The percentages are shown in figure 4.





**Figure4.** Nutritional values of the pork dish in percentages.

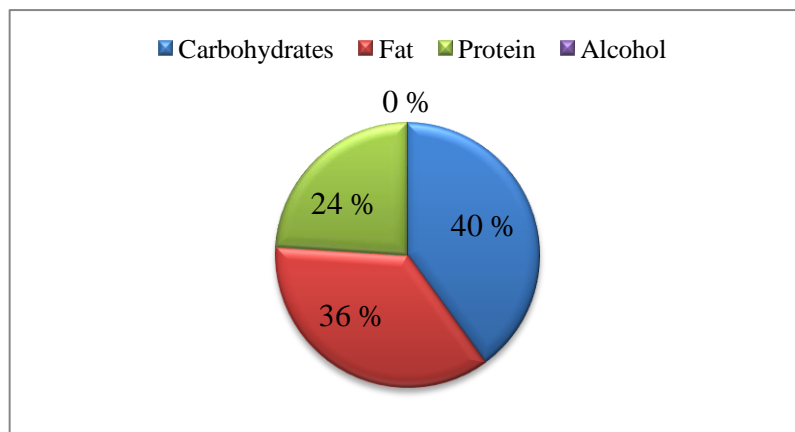
#### 4.4 Salmon with a Berry Side Salad and Yoghurt Sauce

Salmon itself has a big fat amount which explains the high fat amount in this dish. The dish is lightened with sweet potato and a salad of berries and cabbage. As a sauce is a yoghurt sauce seasoned with lime. Most of the calories come from carbohydrates, and the percentage of fat is also big. There is not much added fat, only what is used when frying the salmon. The numbers are seen in table 6.

**Table6.** Nutritional values of the fish portion.

Energy distribution			Portions:1
	calories	g	%
Carbohydrates	183	44.4	40 %
Fat	166	17.9	36 %
Protein	110	26.8	24 %
Alcohol	0	0	0 %
Sum	459		100 %

There are 24 percent of proteins, 36 percent of fat and 40 percent of carbohydrates. The total number of calories is 459 kcal. The percentages are shown in figure five.



**Figure5.** Nutritional values of the fish portion in percentage.

With the accompaniments the whole calorie amount is 700.4 kcal. Still this dish can be regarded as healthy due to the quality of the fat. The fats in salmon consist mostly of polyunsaturated fat acids which make the fat soft. These fat acids are good for the brains, heart and blood circulation. (Ruokatieto)

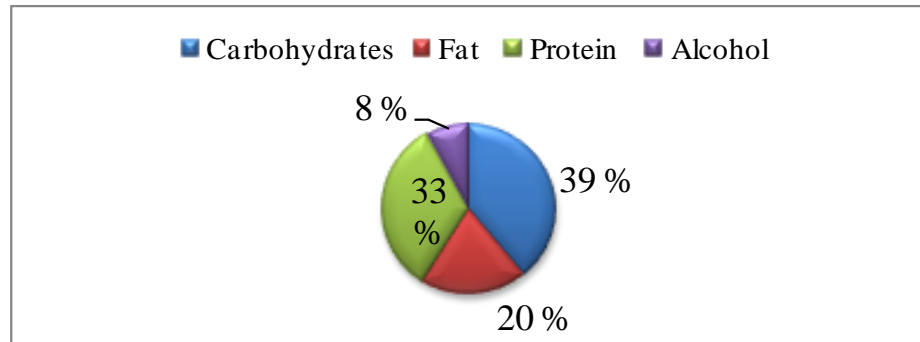
#### 4.5 Beef Steak with Root Vegetables and Red Wine Sauce

The beef sirloin steak is served with roasted root vegetables such as potato, carrot, parsnip and beetroot. Red wine sauce is a basic sauce made of stock, red wine and cornstarch. The dish has 436 calories in total. The numbers are shown in table 7. When the calories in the salad and bread are added, the whole amount is 677.4 kcal.

**Table7** Nutritional values of the steak.

Energy distribution			Portions:1
	calories	g	%
Carbohydrates	169	40.5	39 %
Fat	88	9.4	20 %
Protein	144	34.4	33 %
Alcohol	35	4.8	8 %
Sum	436		100 %

Most calories come from carbohydrates and the amount is 39 percent. The amount of proteins is 33 percent, and fat amount is 20 percent. The portion has also 4.8 grams of alcohol which is eight percent of the whole calorie amount. The percentages are presented in figure 6.



**Figure6.** Nutritional values of the steak in percentages.

## **5 METHODOLOGY**

As a research method I used combination of quantitative and qualitative methods. I thought a questionnaire would be most suitable for collecting opinions about healthy food because in that way I can get many results. The questionnaire was also qualitative due there was an open question where people could write their own answers.

### **5.1 Research Method**

Research methods are ways to get material for empiric research. These research methods can be classified as quantitative and qualitative. When choosing the research method should be taken in consideration that the research question and problem will be answered. (Saukkonen 2011)

When using the quantitative method, the results are observed and measurable. The gotten results are in numbers and are often analyzed statistically. In quantitative research all the respondents answer same questions, and a typical way to conduct a quantitative research is to use a questionnaire. As a contrast, qualitative method's results are the respondent's own thoughts and feelings. The main difference with these methods is that quantitative method measures issues and the purpose of qualitative method is to understand something. Usually qualitative research is an interview and done face- to-face. Choosing other of the research methods is dependent on the goals of the research, but it is also believed that most useful results are gotten when is used both of the methods. (DJS Research Ltd 2011)

### **5.2 Validity and Reliability**

The quality and competency of the conclusions are evaluated with validity and reliability; both are connected to the trustworthiness of the study as an information provider. Reliability of the research means that the research is made in a way that the gotten results can be repeated. A research can be considered as reliable if is gotten the same result when repeating the research with another similar respondent group. Things that can reduce the reliability of the study are for example if the material is collected carelessly or there has been mistaken in calculating the

results. The results of my research can be regarded as reliable because I double filled results to the SPSS program, and I translated customers' own answers word by word. However, having a bigger target group would have increased the reliability of my research. (Saukkonen 2011)

Validity means that the purpose of the research has achieved in a way that from the research was founded out what was wanted to study. The results I got from the respondents answered my research question well. In the questionnaire was one question that gave a direct answer for my research question. My research problem was solved with the theoretical part. Also testing the questionnaire increases the validity of my study. (Saukkonen 2011)

### **5.3 Data Collection Method**

I collected the data for my thesis in two ways. In the theoretical part books about nutrition and exercise, websites related to nutrition and research about health were used. For my healthy lunch portions I searched for information from health related magazines and Internet recipe sites. The empirical data was collected by primary research which was a questionnaire regarding customers of Martin Ravintola.

I did my questionnaire in Finnish, Swedish and English regarding the customers of Martin Ravintola. The questionnaire was tested by six different aged people from my vicinity. All questions in the questionnaire were understood correctly during the testing. I agreed with the restaurant's owner the days when I could come to implement the questionnaire. The weekdays we settled were Thursday and Friday which are usually the days when comes most lunch customers. I personally asked the lunch customers to fill out the questionnaire when they waited for the main course. The gotten results were analyzed with Microsoft Excel and SPSS statistics.

### **5.4 Questionnaire**

My questionnaire had two pages and consisted of three parts; eating habits, interest in healthy food and lunch's effect on weight. In addition there were one open

question and one free comment opportunity. First, in the questionnaire were asked basic details; age, gender and type of work.

### **5.5 Eating Habits**

In the eating habits part I asked how many times people eat in a day and what meals they eat. With this question I wanted to find out if people eat according to nutritional recommendations where is suggested to eat multiple times a day and regularly. I also wanted to know if their biggest meal is either breakfast, lunch, dinner or another option. In the food pyramid is recommended how much you should eat different food items such as meat products, vegetables and fruit, milk products, grain products, potatoes and fat. I asked what of these items they eat the most and asked people to range them in their eating amount order. This way I could find out if they eat by food pyramid's suggestions. The final question in the eating habits part was that what effects on their choice of lunch restaurant. The options to choose between were: location, price, healthiness, staff, taste or friends and respondents rated these according to what affects the most. By this I was curious how many selected their primary choice as healthiness.

### **5.6 Interest in Healthy Food**

In the interest in healthy food section I asked if the respondents are interested in eating healthy and if they are what the reason is. I gave choices to choose between and an opportunity to write their own other reason. My choices were appearance, disease, weight and to keep in shape. My goal here was to find out if they eat healthily because of their own willingness, or if they should eat healthily due to a disease or other reasons. Other questions in this section were if respondents think that they eat healthily and an open question where they could write what they consider as healthy food.

### **5.7 Lunch's Effect on Weight**

The lunch's effect on the weight part was about lunch portions and exercising. I asked what they preferred as a lunch option and gave answers possibilities. With this I wanted to know if they rather eat a big portion or light portion for lunch.

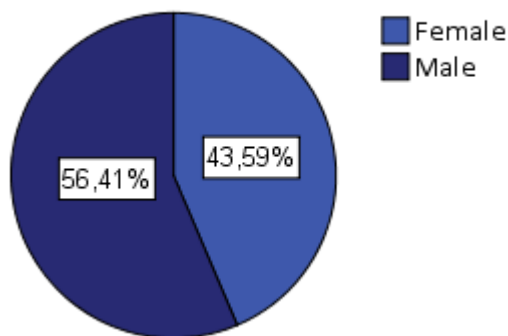
Another question was that if they have skipped lunch, what they replaced it with. The aim was to find out if they replace lunch with small snacks or nothing. The final questions were about exercising. I wanted to know if they exercise regularly and how. It is recommended to exercise at least half an hour a day in a week and I asked how many times they do that. One recommended thing is also practiced useful exercise and I asked if they practice that. Last part in the questionnaire was an open feedback part where respondents could write their own comments about food, survey or wishes.

## 6 DATA ANALYSIS

Normally the customer amount for one day in Martin Ravintola is approximately 30 to 40 people. In two days I expected to receive over 50 filled questionnaires. However, I received only 39 answers due to a small customer number in those two days and there were some people who refused to participate in the survey. Because my target group was customers of Martin Ravintola, I did not start to collect more answers from other restaurants or elsewhere. When taking into consideration that the restaurant itself has 40 customer seats, 39 answers is comprehensive.

There were people who marked their age themselves because I had given age groups that ended to 60. When analyzing the results I made a new age group: aged over 60. There also were some missing answers on questions about the age and type of work.

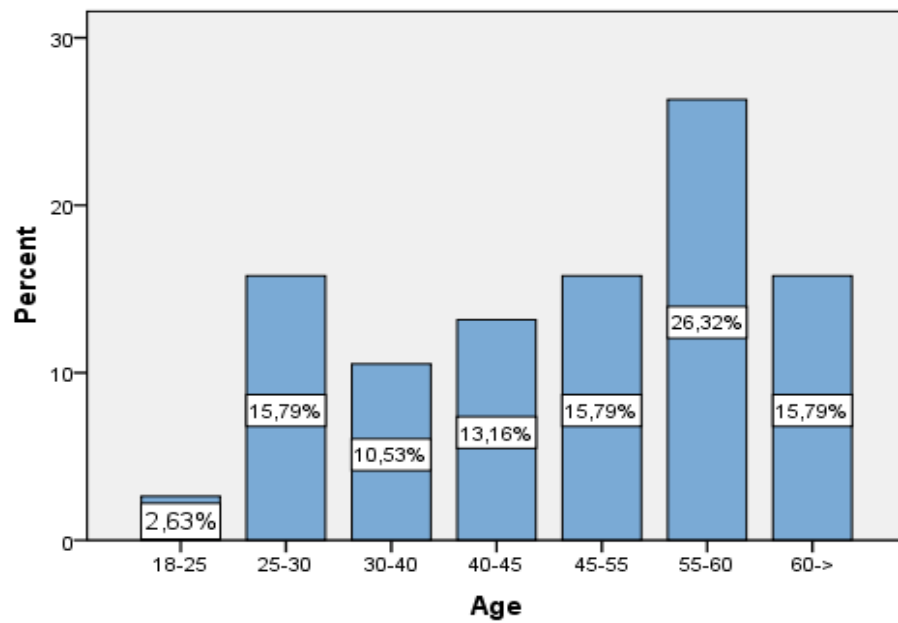
Most of the respondents were men, the percentages were 56.41% and 43.59%. This is shown in figure 7.



**Figure7.** Number of respondents.

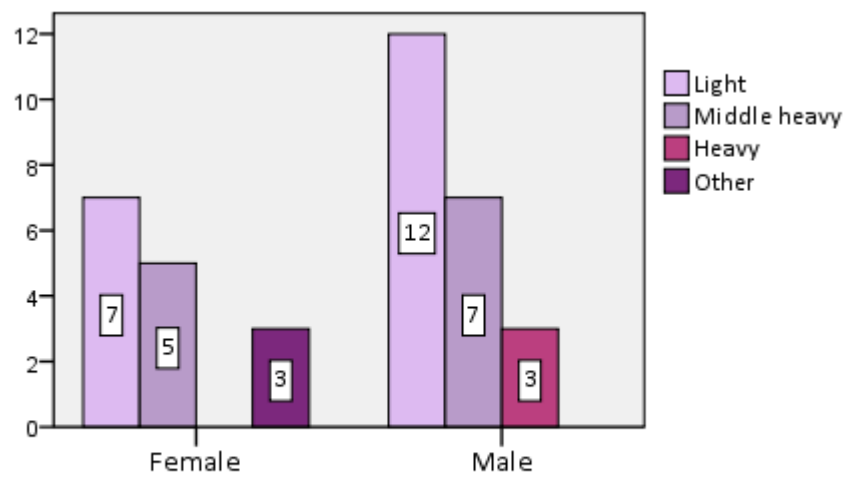
The majority of the respondents were aged from 55 to 60 and the minority less than 25 years old. The number of the respondents aged 25—30 and 55—60 was the same. The percentages are shown figure 8.





**Figure8.** Respondents' age.

Figure four shows the results as to the number of respondents. Most of both men and women rated their job as light or middle-heavy.



**Figure9.** The quality of the respondents' work.

Altogether 19 of the respondents thought their job as light and 12 as middle-heavy. Therefore, most of the customers have office work. Only three people rated their job as heavy, and three respondents answered other. Two persons left the question unanswered. Because there were people over 60 years old, they can be people who are retired.

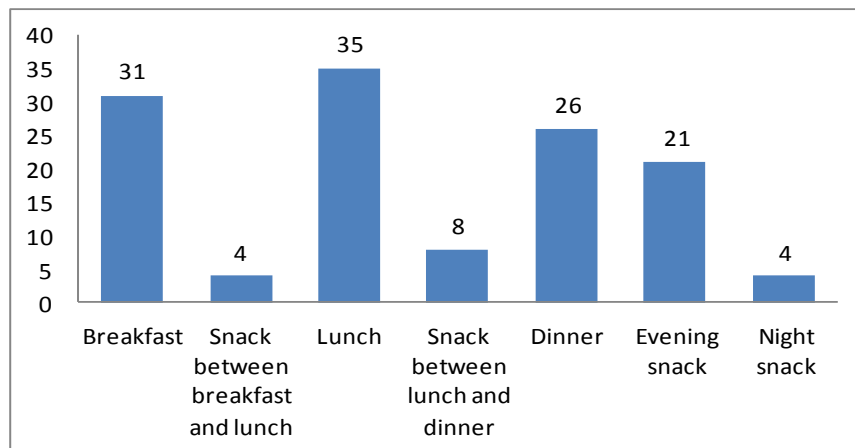
### 6.1 Eating Habits

The first question was how many times in a day people eat approximately. The second question was related to the first so that people answered which ones they eat of the regular meals. A majority, 43.6 percent of the respondents ate three times, and 28.21 percent eat four times in a day. About 20 percent of the respondents eats two times in a day. There was also one person who eats once and two people who eat five times in a day. Results of dining times are shown in table 8.

**Table8.** Respondents' eating times during a day.

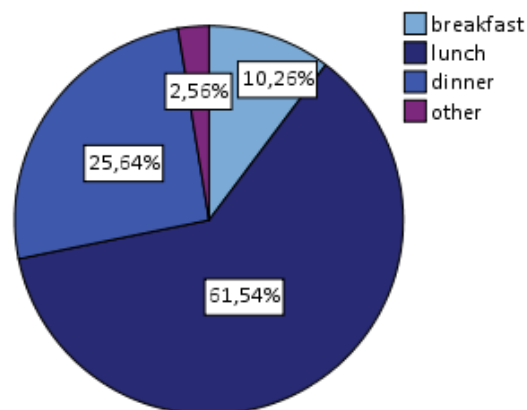
		Frequency	Percent
Valid	once	1	2,6
	2 times	8	20,5
	3.times	17	43,6
	4 times	11	28,2
	5 times	2	5,1
	Total	39	100,0

Almost every one of the respondents ate lunch and breakfast. Dinner and evening snack were also popular. Twenty six of the respondents ate dinner and 21 evening snack. Day snacks were not eaten much, and only four people ate a snack during nighttime. The results are shown in figure 10.



**Figure10.** The meals people eat during a day.

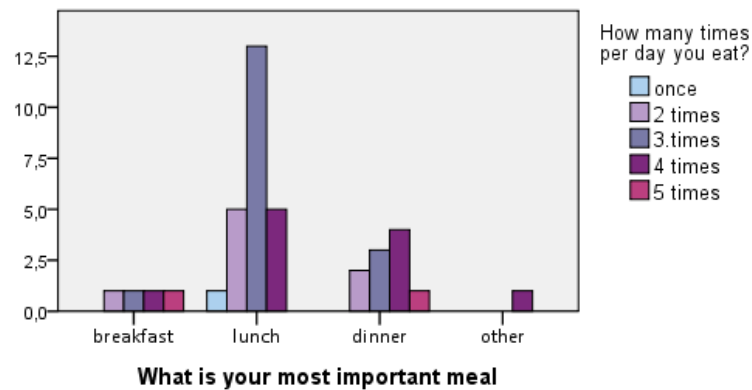
In the next question was asked about respondents' most important meal. In the questionnaire this was defined as the biggest meal of the day. Over half of the respondents that answered lunch was their most important meal and dinner was the second most chosen of the alternatives. Approximately ten percent of the customers had breakfast as their biggest meal. Figure 11 presents the results.



**Figure11.** What is the most important meal among the respondents.

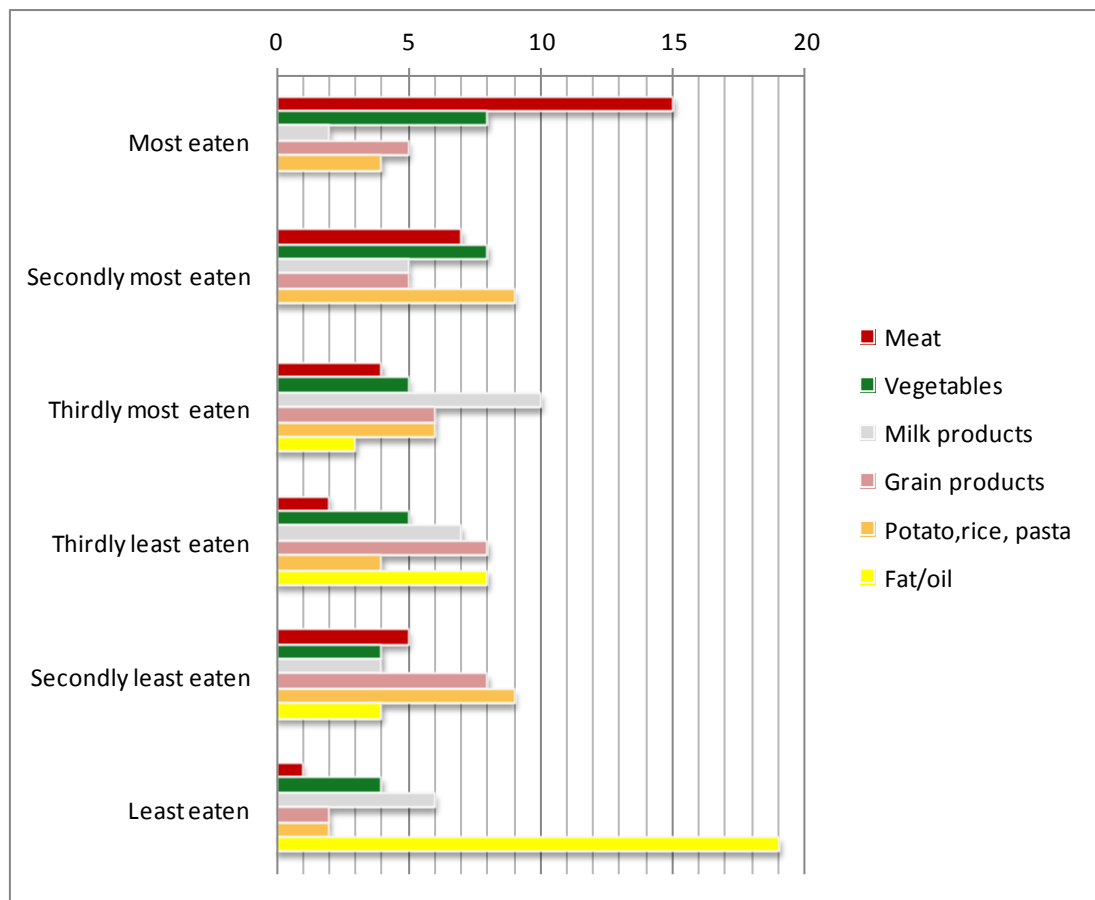
I wanted to know how many times people eat compared to what is their biggest meal. Mostly lunch was the most important meal regardless the people's eating times. People who considered dinner their most important meal ate mostly four

times a day. Also the person who ate five times a day considered dinner the biggest meal. The results can be seen in figure 12.



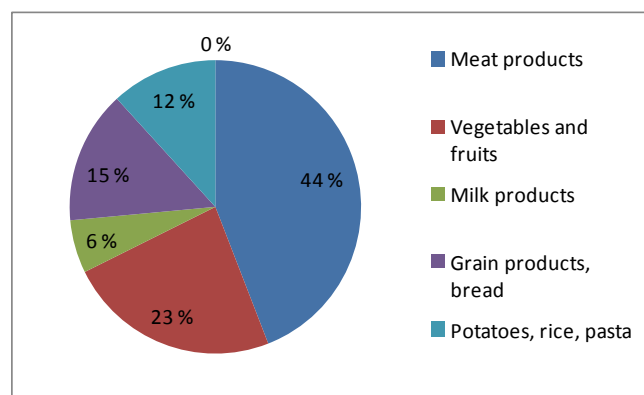
**Figure12.** Eating times compared to the most important meal of the customers.

Last questions in the eating habits section were about what food products customers eat, and what has affects the choice in choosing a lunch restaurant. Figure 13 shows results how many customers eat different food products in comparison and in figure can be found the most eaten food items. Customers rated their most eaten food items with numbers from one to six. Fifteen of the customers rated meat as their most eaten food. Vegetables came second. Almost everyone answered their least eaten food products as fat and oil products. There were people who avoided carbohydrates and ate mostly meat and vegetables. Milk products were eaten as the third most among most respondents and bread and grain products were also eaten approximately as much as milk products.



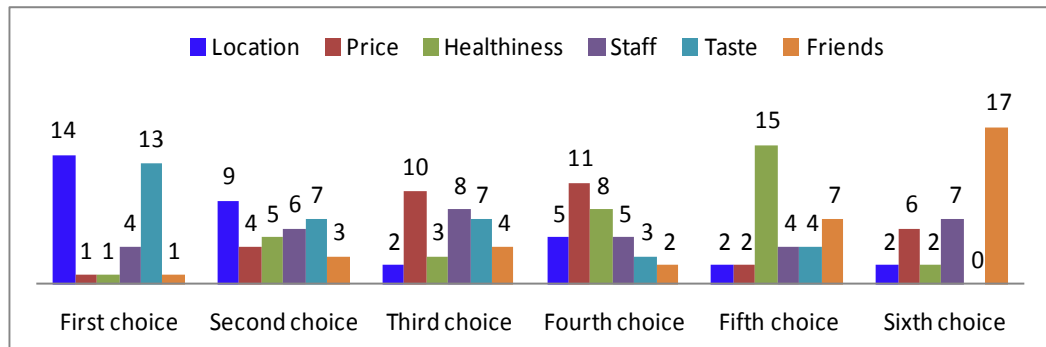
**Figure13.** The food products which people eat.

Figure 14 shows what customer rated as their most eaten food products the most.



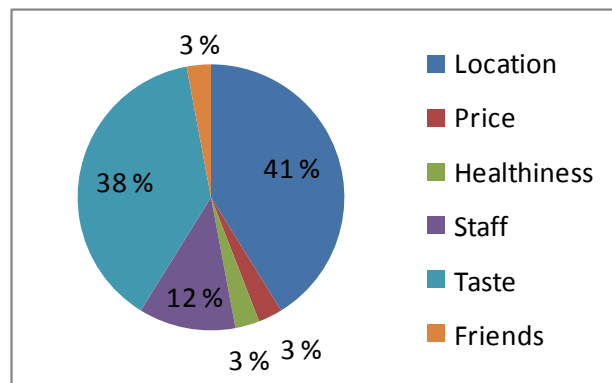
**Figure14.** Food items rated as the most eaten.

“Location” was rated as the factor having the biggest impact when selecting restaurant whereas “friends” was rated as the factor with the least impact. “Taste” was also rated as the first and second affecting issue by many customers. “Staff” and “price” were more effecting to customers than the “healthiness of the food”. All choices are shown in the figure 15 as in numbers of customers who rated.



**Figure15.** How customers rated the effecting things.

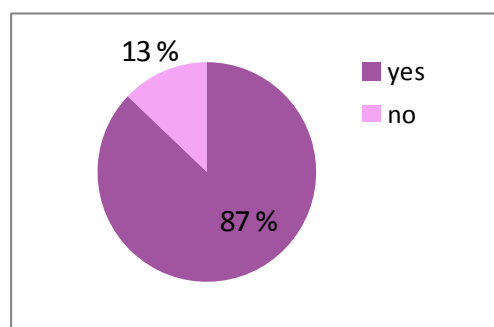
Figure 16 presents only what people rated as their first choice the most.



**Figure16.** Most effecting issues in choosing a lunch restaurant.

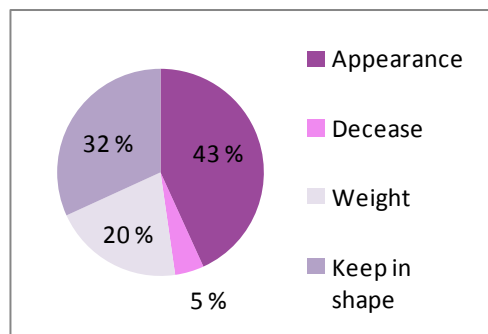
## 6.2 Interest in Healthy Food

In the section interest in healthy food four questions were included. The first one was if the customers are interested in healthy food and the second question was related to this so that if people answered yes, why is that. Figure 17 shows that almost all the respondents are interested in eating healthy. Only five of the respondents answered no.



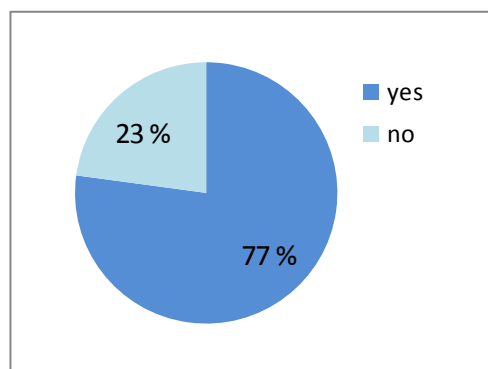
**Figure17.** Customers' interest to eat healthy.

When asked the reasons to want eat healthy, I gave response alternatives that respondents could choose more than one and a possibility of writing other reason than the given as well. Forty three percent answered appearance as an influence and 32 percent answered keeping in shape, weight also affected 20 percent of the respondents. Four people wrote their own reasons and they were; "health", "like of healthy food", "risk of inheritable decease" and "to feel good". Figure 18 relates to this question.



**Figure18.** Customers' reasons to eat healthy.

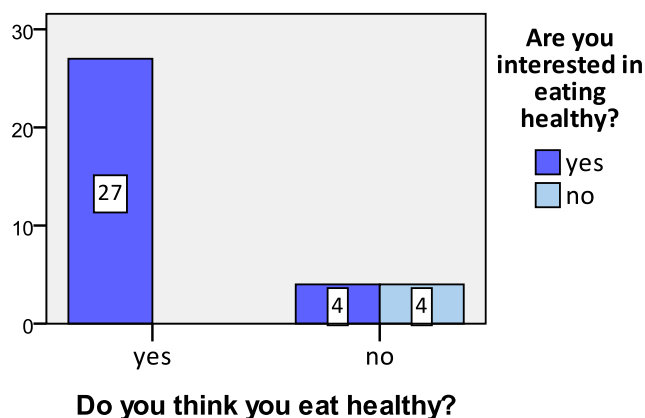
Next was asked if the respondents think that they eat healthily, and following an open question where people wrote what they consider as healthy food. 77 percent think that they eat healthy; this is shown in figure 19. Four answers were missing in this question and seven people left the open question unanswered.



**Figure19.** Customers' opinion if they think that they eat healthy.

I wanted to study how many of the respondents who wanted to eat healthily already think they eat healthily. Figure 20 shows that the 27 respondents who are interested in eating healthy think that they eat healthily too. Four people were interested in eating healthy but did not consider themselves eating healthy at the moment.



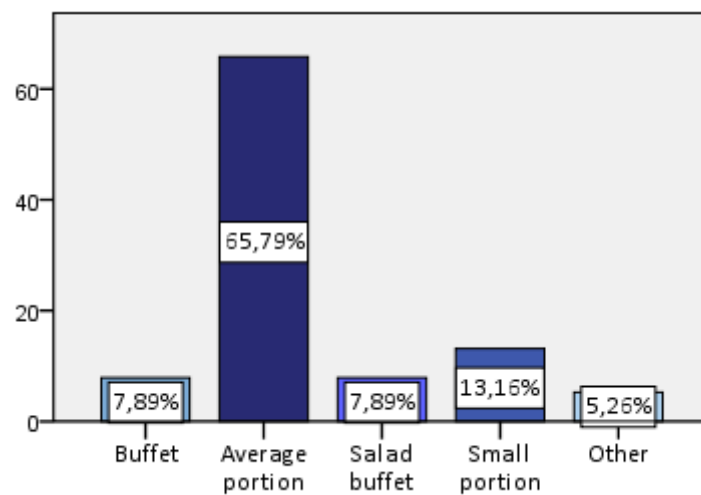


**Figure20.** Interest in eating healthy compared to thinking that they eat healthy.

The last question in this section was an open question. Almost everyone of the 32 respondents wrote vegetables, and versatile food as what they consider as healthy. Ten people also mentioned fish as healthy. More differing answers came from two respondents who stated low-carbohydrate food as healthy, another two respondents considered low produced food as healthy and one person answered locally produced food.

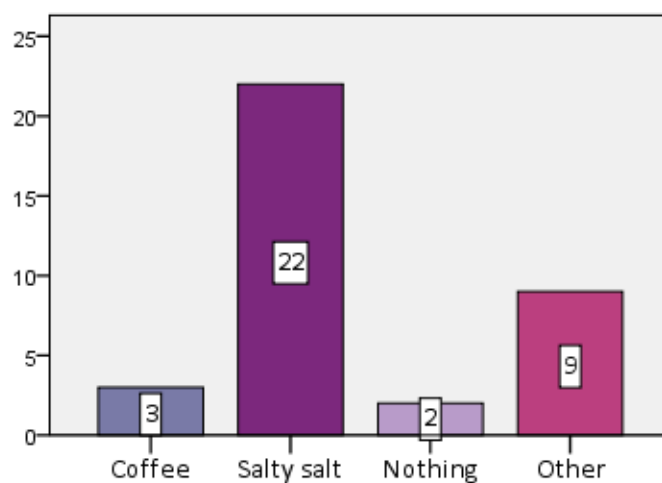
### 6.3 Lunch's Effect on Weight

This section was started with a question about lunch portions. I asked what kind of portion they prefer. I gave options to choose between from light to heavy portions and people could also write their own alternative. Figure 21 shows the results. There was one missing answer. The average portion was the most popular one, three people though as the best portion buffet or salad buffet. Five people preferred small portion. There was also an option “big portion” given which nobody chose. There were two “other” answers, another one left it unwritten but one person wrote that seldom eats lunch.



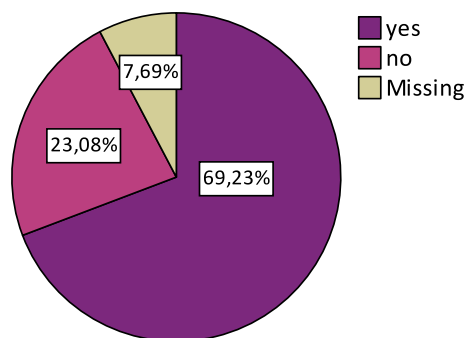
**Figure21.** Customers' favorite option as a lunch portion.

The second question was if customers had skipped lunch, what they replaced it with. The results can be seen in the figure 22. Three people left this question empty. Most people replaced lunch with a salty snack. The alternative “sweet snack” was also given but nobody chose it. Three people replaced lunch with coffee and two with nothing. I got five customers' own answers; two wrote that they never skip lunch; one wrote that replaces it with yogurt or a sandwich. Other answers were; water, egg, a glass of milk and two people answered fruit.



**Figure22.** Substitute of lunch.

The next question was if customers exercise regularly and how. Figure 23 shows the results. Three people did not answer to this question. Almost 70 percent of the respondents exercise regularly.



**Figure23.** Do respondents exercise regularly.

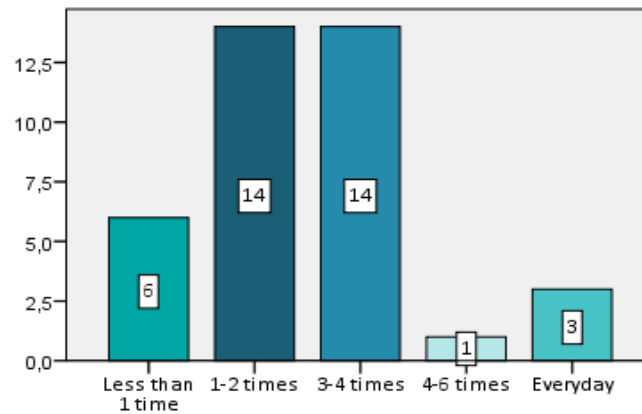
Thirteen of the people, who answered that they exercised, walked regularly. Six people run, five go to the gym or lift weights and to go to aerobics or gymnastics. There was also an option “other”. Seven people wrote as their own hobbies; swimming, ice hockey, football, yoga, cycling and skiing. Table 9 shows the used exercise method in amount of the customers.

**Table9.** Form of exercise.

Descriptive Statistics	
	N
Walk	13
Run	6
Gym, weightlifting	5
Aerobic, gymnastics	2

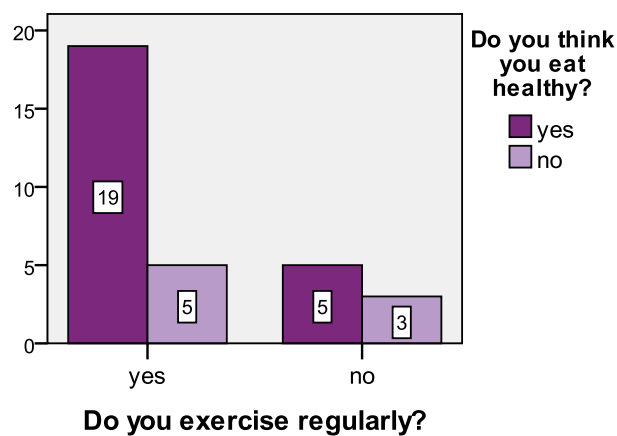
I wanted to know how many times in a week people exercise at least half an hour per day. The results can be found in figure 24. There was one missing answer. The results show that most people exercises from one to two times or from three to

four times in a week. Three people answered that they exercise every day. Six people exercised less than once in a week and one person from four to six times.



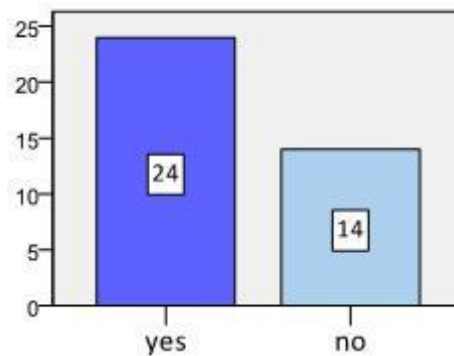
**Figure24.** The times respondents exercise in a week.

I was interested in knowing whether the people, who thought that they eat healthily, also exercised regularly. This is clarified in the figure below. Nineteen respondents that exercised regularly also ate healthy. Five of the respondents regularly exercised but did not consider eating healthy. Nevertheless, five respondents thought that they eat healthily but did not exercise regularly. Then there were three people who did not exercise regularly nor ate healthily.



**Figure25.** Regular exercising compared to eating healthy.

The last question was if the customers practice useful exercise. Useful exercise was clarified with an example: walking or riding to bike and using stairs instead of lift. Results can be found in figure 26. There was one missing answer. Twenty four people, 61.5 percent of the respondents practiced functional exercise.



**Figure26.** Do customers practice functional exercise.

Last part in the questionnaire was an open feedback part. Unfortunately, I got only a few comments from the respondents they are listed below and translated into English.

“All food is healthy consumed with reasonable and well prepared. No fast foods”

“Nice questionnaire”

“Healthy food is allowed to be tasty and also is”

“Nice questionnaire, the food is already so good that there is not much to improve”

## 7 CONCLUSIONS

In this chapter I will present the conclusions of my research both of a healthy lifestyle and the customer survey. I also present some propositions for further studies. Mainly I focus on the results of the customer survey.

My goal was to find out are the customers in Martin Ravintola interested in eating healthy, and I also asked about their physical activity. The research problem was whether lunch can have an effect in being overweight. From my theory I found out that lunch can have an effect. National nutrition recommendations suggest eating multiple times a day and versatile food. For example, if a person does not eat lunch at all and replaces it with something easy or nothing, this can lead to that the person is going to eat too much the next time because the hunger has gotten so big. The lunch can be replaced with a sweet snack such as a bun or a fatty pastry, which have a lot of calories but not much nutritional value.

When considering a buffet for a lunch alternative, it can be a good choice if the person knows what is healthy. Nevertheless, buffets usually consist of so much food and alternatives that it is easy to eat too much. In my opinion, normal restaurants should become more like staff restaurants where people tend to eat healthier. If people ate healthy food for their lunch, this could be a starting point to eat healthy for other meals too. I think that it could help people to find out that eating healthy is not difficult.

There were approximately ten percent more male respondents than female respondents among the respondents. Mostly the respondents were between the age 50 and 55 years old. I would have liked more age division, but most of the customers in Martin Ravintola are over 40 years old. The respondents mostly do either light or middle-heavy work; from the males were only three people whose work was heavy. This can be also due to that the big factories in Vaasa such as Wärtsilä have their own staff restaurant.

As mentioned before, the nutrition recommendations recommend eating multiple times during the day, ideally from four to six times. I asked the respondents how

many times they eat during the day and what meals. Mostly the customers ate three times per day, which is less than recommended. However, 30 percent of the customers eat at least four times a day. When asked what meals people eat, many of the respondents did not eat between breakfast and lunch or after lunch and before dinner. The majority of the people ate breakfast and lunch, what is a good thing in managing the workday. Still there can be too much time between breakfast and lunch which can lead to eating too big portions. The people who ate four times usually ate breakfast, lunch, dinner and an evening snack. The customers rated their most important meal to be lunch. Approximately 60 percent answered lunch and there were 25 percent whose most important meal was dinner and 10 percent thought it was lunch. This means that the significance of a healthy lunch is major. Because the majority ate lunch and considered it the biggest meal, by eating a healthy lunch people would eat at least one healthy meal per day.

According to the food pyramid, food can be rated so that some foodstuffs are allowed to be eaten more than others. I asked the customers to rate different food products with numbers from one to six. The food pyramid is divided into layers, from bottom layer can be eaten the most, and the foodstuffs there are carbohydrate sources such as bread and potato. People rated grain products as the fourth eaten food products the most. That means that mostly they are eaten too little among the customers. However, there were some exceptions; some of the respondents ate these products the most.

In the second layer there are vegetables, fruit and berries. These customers ate most as secondly most eaten or they even ate vegetables the most. This was very positive because vegetables should be eaten second most according to food pyramid's directions.

The third layer is the protein layer, which consists of meat and milk products. This recommendation regarding the meat did not fulfill among the customers at all. Forty four percent of the customers ate meat the most. For instance milk products were consumed as a third and fourth option as most eaten. Probably the reason to eat much meat is due to the popularity of low-carbohydrate diet nowadays.

Among the respondents there were two people who considered it a healthy way to eat.

I wanted to find out what affects people's choice of a lunch restaurant. Mostly I was interested in knowing whether people would choose a restaurant according to the healthiness of the food. Unfortunately, I did not get the results I wanted. The most popular reason to choose a restaurant was its location. As a second reason was taste. Healthiness was chosen to be the fifth factor affecting the choice of restaurant. The staff of the restaurant had also a greater impact than healthiness. However, in my opinion many restaurants in Vaasa do not advertise their lunch as healthy so there are not many restaurants which state their food as healthy. However, some of the restaurants in Vaasa have nutritional values of the portions available.

Are people interested in eating healthy? This was my research question. My results showed that almost all the customers in the research restaurant were interested in eating healthy. The major reason for the customer to eat healthily was appearance, 30 percent also wanted to keep in shape with healthy eating. As a result, healthier lunch options would be attracted among the customers and could tempt more new customers to the restaurant. In addition, 77 percent of the customers thought that they already eat healthily. I also wanted to know how many of the people who were interested in eating healthy think that they eat healthily. Twenty seven of the customers who were interested in it already ate healthily. Only four people were interested but thought that they did not eat healthily. I am sure that putting healthy options on the lunch menu and advertising it would be profitable to the restaurant. Many people were conscious about what is healthy also. A majority stated vegetables and eating versatile as healthy.

Over half of the customers thought an average portion as the best alternative for lunch. Nobody preferred a big portion as a lunch option. This is a good thing according to nutritional recommendations, customers are aware that eating too much at one meal is not good. Customers were also health conscious when asked if they have skipped lunch, and with what. No one answered replacing lunch with a sweet



snack. A majority had answered salty snack. Two people answered that they replaced it with a fruit which is also positive.

To nutritional recommendations is added along with food, also exercising. People should be physically active at least half an hour in a day. I asked if customers exercised regularly and how. Almost 70 percent exercised regularly, most of the people walked. Other customers' ways to exercise were running and working out. Fourteen of the respondents exercised at least half an hour from once to twice a week, or from three to four times a week. There were also three people who exercised every day.

As a result, most the customers in Martin Ravintola are living and eating healthily. Nineteen of the people who think they eat healthily exercised regularly. Of the customers 60 percent practiced useful exercise also. That is a good way also to keep up in a good condition, especially when work is light and does not require physical activity.

In the future, if these lunch options are added to the menu, a similar survey could be conducted. This could find out if more people have become more interested in eating healthy. In the survey also people's opinions about the healthy options and whether they want more of them, could be asked.

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**RECIPES****Cauliflower shrimp soup**

200g Cauliflower

100g Shrimps

1 dl Non-fat milk

50g Leek

3dl Water

1tsp Sea salt

3tsp Dill

3tsp Persil

Chop cauliflower and leek, and then cook them about 10 minutes until they are soft. Puree vegetables, put back to heat and add seasonings and milk. Bring to boil. Before serving add shrimps to the soup and garnish with dill. (Larsen, Anne & Kreutzer, Martin 2011)

**Chicken with rice and ratatouille**

125g Chicken breast

25g Dark rice

25g Tomato

25g Red bell pepper

25g Green bell pepper

25g Zucchini

25g Red onion

2tsp Olive oil

2tsp Sea salt

1tbs Herbs

Yoghurt sauce

2tbs Natural non-fat yoghurt

1tbs Squeezed lime juice

1tsp Black pepper

½tsp Salt

1tsp Thyme

Boil rice with salt for approximately 30minutes. Chop tomatoes, bell peppers, zucchini and onion in average size. Warm a pan hot and add oil and vegetables, cook them so they get little softer but still with little texture, season with salt and herbs. Fry chicken on a hot pan both sides from three to five minutes and season with salt and black pepper. Mix rice and vegetables, place in the middle of the plate, then on top chicken and garnish with yoghurt sauce. (Larsen, Anne & Kreutzer, Martin 2011)

**Pork files with coleslaw and garlic**

125g Pork sirloin

1tsp Mustard

1tsp Salt

1tsp Black pepper

100g potatoes

**Salad**

100g Cabbage

50g Apple

50g Onion

1tsp Salt

2tsp Sweet chili sauce

1tbsp lime juice

1tsp Black pepper

**Garlic sauce**

1tbsp Light Mayonnaise

1tbsp Non-fat yoghurt

1 glove of garlic

1tsp Salt

1tsp Lime pepper

Cut sirloin into 125g pieces brush them with mustard and leave to get taste. Shred cabbage, apple and onion for the salad and mix together with salt, chili sauce, lime juice and black pepper. For the sauce, squash garlic and mix all ingredients. The salad and sauce should be kept in the fridge to get some taste before serving. Cut potatoes to wedges, brush them with oil, season with salt and bake for 30 minutes in 225 Celsius. Grill pork loins from both side, and season them with little amount of salt and pepper. Build portion by sauce in the middle of the plate and potato wedges to the side. Put pork loins on top of the sauce. (Larsen, Anne & Kreutzer, Martin 2011; Välimäki 2011)

**Autumn's salmon**

100g Salmon file

50g Sweet potato

200g Red cabbage

75g Blackcurrants

75g Redcurrants

1tsp Olive oil

1tsp Sea salt

1tsp Thyme

1tsp Tarragon

1tbls vinegar

Yoghurt sauce

2tbs Natural non-fat yoghurt

1tbs Squeezed lime juice



1tsp Black pepper

½tsp Salt

1tsp Thyme

Shred cabbage, put it in a strainer and drizzle salt on top. Let cabbage lose its liquid for 20 minutes, then rinse the salt and dry cabbage. Mix cabbage with vinegar, thyme, tarragon and the berries. Peel and chop the sweet potato and roast in oven for 15 minutes in 225 degrees. Fry salmon from both sides for 2 minutes. Place berry salad in the middle of the plate, set salmon on top, sweet potatoes to the side and garnish with yoghurt sauce. (Larsen, Anne & Kreutzer, Martin 2011)

### **Beef steak with root vegetables and red wine sauce**

125g Beef sirloin

50g Potato

50g Carrot

50g Parsnip

50g Beetroot

1tbls Honey

1tsp Sea salt

1tsp Black pepper

1tsp Butter

2tsp Herbs

### **Red wine sauce**

1dl Meat bouillon

10g Onion

0,5dl Full bodied red wine

1tsp Cornstarch

1tsp Sea salt

1tsp Butter

Chop potato, carrot, parsnip and beetroot into chunks, place on an oven tray. Spread honey, salt and herbs over the vegetables and roast in 225 Celsius for 20 to 30 minutes. Make sauce, melt butter in a casserole add minced onion and sauté. Add red wine, bring to boil and let simmer for 5 minutes. Then add meat stock, bring to boil and simmer for 10 to 12 minutes or until the sauce is thick. Season the sauce with pepper. Cut Beef sirloin into 125g steaks and grill on both sides depending on wanted maturity. Plate up by putting sauce in the middle, steak on top and vegetables on the side. Garnish with fresh herbs. (Kirrily La Rosa 2008)

## APPENDIX 2

### QUESTIONNAIRE (English, Finnish, Swedish)

Dear respondents,

I am a student at university of applied sciences, studying the hotel and restaurant business. This survey is for my final thesis and it is about eating habits and knowledge of healthy food. For my thesis I am planning a healthy lunch option for one week, and I want to see if people will be interested of that opportunity.

Best regards,

Mira Järvenpää

#### Questionnaire

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**Age**      18-25 ☐    25-30 ☐    30-40 ☐    40-45 ☐    45-55 ☐    55-60 ☐

**Gender**      Female ☐    Male ☐

**Do you consider your work as?**    Light ☐    Middle-heavy ☐    Heavy ☐    Other? \_\_\_\_\_

#### Eating habits:

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**1. How many times a day do you eat approximately? \_\_\_\_**

**2. Which of these you eat?**

- ☐ Breakfast
- ☐ Snack between breakfast and lunch
- ☐ Lunch
- ☐ Snack between lunch and dinner
- ☐ Dinner
- ☐ Evening snack
- ☐ Night snack

**3. What is your most important meal** (biggest meal?)

- ☐ Breakfast    ☐ Lunch    ☐ Dinner    ☐ Other? \_\_\_\_\_

**4. Rate these in order what you eat** (1 being the most eaten food, 6 the least)

- ☐ Meat products    ☐ Vegetables, fruits    ☐ Milk products  
☐ Bread, grain products    ☐ Potatoes, rice, pasta    ☐ Fat/oil

**5. Rate these what effects on your choice of lunch restaurant most?**

(1 biggest effect, 6 lowest)

- ☐ Location    ☐ Price    ☐ Healthiness  
☐ Staff    ☐ Taste    ☐ Friends

## APPENDIX 2

### Interest in healthy food:

1. Are you interested in eating healthy? ☐ Yes ☐ No
2. If you answered yes, why are you interested?
- ☐ Appearance ☐ Disease ☐ Weight
- ☐ Keep in shape Other? \_\_\_\_\_
3. Do you think you eat healthy? ☐ Yes ☐ No
4. What do you consider as healthy food?

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### Lunch's effect on weight:

5. Which do you prefer for lunch option?
- ☐ Big portion/big price ☐ Buffet ☐ Normal portion/average price
- ☐ Salad buffet ☐ Light portion/light price Other? \_\_\_\_\_
6. If you have skipped lunch, what did you replaced it with?
- ☐ Coffee ☐ Salty Snack ☐ Sweet snack
- ☐ Nothing Other? \_\_\_\_\_
7. Do you exercise regularly? ☐ Yes ☐ No
- If yes, how?
- ☐ Walk ☐ Run ☐ Gym/Weight lifting
- ☐ Aerobic/Gymnastics Other \_\_\_\_\_
8. How many times in a week do you exercise at least half an hour?
- ☐ Less than 1 time ☐ 1-2 times ☐ 3-4 times
- ☐ 4-6 times ☐ everyday
9. Do you practice useful exercise, for example walk or bike to work, use stairs instead of lift?
- ☐ Yes ☐ No

Here you can write own comments about food, this survey or other feedback and wishes

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Thank you for your time!

## APPENDIX 2

Hyvät vastaajat,

Opiskelen Vaasan ammattikorkeakoulussa hotelli- ja ravintola alaa. Tämä kysely on opinnäytetyötäni varten ja koskee terveellisiä elämän tapoja ja ruokaa. Opinnäytetyötäni varten suunnittelen terveellisen lounasvaihtoehdon viikoksi ja tämä kysely kartoittaa ihmisten kiinnostusta terveelliseen lounaaseen.

Ystävällisen terveisin,

Mira Järvenpää

### Kysely

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**Ikä**            18-25 ☐    25-30 ☐    30-40 ☐    40-45 ☐    45-55 ☐    55-60 ☐

**Sukupuoli**    Nainen ☐    Mies ☐

**Onko työsi mielestäsi?** ☐ Kevyttä    ☐ Keskiraskasta    ☐ Raskasta    Jotain muuta? \_\_\_\_\_

### Syömistavat:

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**1. Kuinka monta kertaa päivässä syöt? \_\_\_\_\_**

**2. Mitä näistä syöt?**

- ☐ Aamupala
- ☐ Välipala aamupalan ja lounaan välissä
- ☐ Lounas
- ☐ Välipala lounaan ja päivällisen välissä
- ☐ Päivällinen
- ☐ Illtapala
- ☐ Yöpala

**3. Mikä on tärkein ateriasi?(Suurin ateria)**

☐ Aamupala    ☐ Lounas    ☐ Päivällinen    Joku muu \_\_\_\_\_

**4. Järjestele nämä numeroilla 1-6 mitä syöt eniten näistä (1 eniten syöty, 6 vähiten)**

☐ Lihatuotteet                      ☐ Kasvikset, hedelmät                      ☐ Maitotuotteet  
☐ Leipä, viljatuotteet                      ☐ Peruna, riisi, pasta                      ☐ Rasva/Öljy

**5. Järjestele nämä numeroilla 1-6 mikä vaikuttaa sinun lounaspaikkasi valintaan (1 eniten vaikutusta, 6 vähiten)**

☐ Sijainti                      ☐ Hinta                      ☐ Terveellisyys  
☐ Henkilökunta                      ☐ Maku                      ☐ Ystävät

## APPENDIX 2

### Kiinnostus terveelliseen ruokaan:

1. Oletko kiinnostunut syömään terveellisesti? ☐ Kyllä ☐ Ei
2. Jos vastasit Kyllä, miksi?
- ☐ Ulkonäkö ☐ Sairaus ☐ Paino
- ☐ Kunnon ylläpito Muu syy, mikä? \_\_\_\_\_
3. Syötkö mielestäsi terveellisesti? ☐ Kyllä ☐ Ei
4. Mitä pidät terveellisenä ruokana?
- \_\_\_\_\_
- \_\_\_\_\_

### Lounaan vaikutus painoon:

5. Mitä näistä suosit lounasvaihtoehtona?
- ☐ Iso annos/korkea hinta ☐ Buffet ☐ Keskikokoinen annos/hinta
- ☐ Salaatti buffet ☐ Pieni annos/hinta Joku muu, mikä? \_\_\_\_\_
6. Jos et ole syönyt lounasta, millä olet korvannut sen?
- ☐ Kahvi ☐ Suolainen välipala ☐ Makea välipala
- ☐ Ei mitään Jollain muulla? \_\_\_\_\_
7. Liikutko säännöllisesti? ☐ Kyllä ☐ Ei
- Jos Kyllä, miten?
- ☐ Kävely ☐ Juoksu ☐ Kuntosali/painojen nosto
- ☐ Aerobic/Jumppa Jotain muuta? \_\_\_\_\_
8. Kuinka monta kertaa viikossa liikut vähintään puolen tunnin ajan?
- ☐ Kerran tai harvemmin ☐ 1-2 kertaa ☐ 3-4 kertaa
- ☐ 4-6 kertaa ☐ Joka päivä
9. Harrastatko hyötyliikuntaa, esimerkiksi kävelet tai pyöräilet töihin tai käytät portaita hissin sijaan?
- ☐ Kyllä ☐ Ei

Tänne voit kirjoittaa palautetta kyselystä, tai jostain muusta esimerkiksi terveellisestä ruoasta

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Kiitos ajastasi!

## APPENDIX 2

Bästa svarande,

Jag studerar hotell och restaurang bransch vid Vasa yrkeshögskola. Den här enkäten är en del av mitt lärdomsprov som handlar om hälsosam livsstil och mat. För mitt lärdomsprov kommer jag att planera en hälsosam lunchalternativ för en vecka, och försöker att ta reda på om människor är intresserade av hälsosammare lunch.

Med vänlig hälsning, Mira Järvenpää

### Enkät

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**Ålder**      18-25 ☐    25-30 ☐    30-40 ☐    40-45 ☐    45-55 ☐    55-60 ☐

**Kön**      Kvinna ☐    Man ☐

**Mitt jobb är?**    Lätt ☐      Mellantungt ☐      Tungt ☐      Annat? \_\_\_\_\_

### Matvanor:

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**1. Hur många gånger äter du per dag? \_\_\_\_**

**2. Vilka av de här äter du?**

- ☐ Frukost
- ☐ Mellanmål, förmiddag
- ☐ Lunch
- ☐ Mellanmål, eftermiddag
- ☐ Middag
- ☐ Kvällsmat
- ☐ Nattmat

**3. Vilken är din viktigaste måltid? (Största)**

- ☐ Frukost      ☐ Lunch      ☐ Middag      Annat? \_\_\_\_\_

**4. Vilka av de här matvarorna äter du mest? Arrangera från 1 till 6 (1 mest, 6 minst).**

- ☐ Kött produkter      ☐ Grönsaker, frukt    ☐ Mjölk produkter
- ☐ Bröd, spannmålsprodukter    ☐ Potatis, ris, pasta    ☐ Fett/olja

**5. Vad påverkar ditt val av lunch plats mest? Arrangera så att 1 har mest påverkan, 6 minst.**

- ☐ Läge      ☐ Pris      ☐ Hälsosamhet
- ☐ Personal      ☐ Smak      ☐ Vänner

## APPENDIX 2

### Intresse på hälsosam mat:

1. Är du intresserad av att äta hälsosamt? ☐ Ja ☐ Nej
2. Om du svarade ja, varför?
- ☐ Utseende ☐ Sjukdom ☐ Vikt
- ☐ Vara i bra fysik ☐ Annat? \_\_\_\_\_
3. Tycker du att du äter hälsosamt? ☐ Ja ☐ Nej
4. Hurdan mat tycker du är hälsosamt?
- \_\_\_\_\_
- \_\_\_\_\_

### Lunchens påverkan på vikten:

5. Vilka av de här lunchalternativ föredrar du?
- ☐ Stor portion/högt pris ☐ Buffet ☐ Normal portion/mellan pris
- ☐ Sallads buffet ☐ Lätt portion/låg pris ☐ Annat? \_\_\_\_\_
6. Om du har hoppat över lunch, med vad ersatte du det?
- ☐ Kaffe ☐ Salt mellanmål ☐ Sött mellanmål
- ☐ Inget ☐ Annat? \_\_\_\_\_
7. Motionerar du regelbundet? ☐ Ja ☐ Nej
- Om Ja, hur?
- ☐ Promenerar ☐ Springer ☐ Gym/Vikt lyftning
- ☐ Aerobics/Gymnastik ☐ Annat? \_\_\_\_\_
8. Hur många gånger per vecka idrottar du minst en halvtimme?
- ☐ Mindre än en gång ☐ 1-2 gånger ☐ 3-4 gånger
- ☐ 5-6 gånger ☐ Varje dag
9. Brukar du vardagsmotionera, t.ex. cyklar eller promenerar till jobbet, använda trappor istället för hiss?
- ☐ Ja ☐ Nej

Hit kan du skriva feedback om förfrågan eller annat tex. om hälsosam mat.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Tack för din tid!