



STUDY CASE OF LOW CARB DIET

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Abstract

Food it's an enormous part of our lives, it influences the way we look, defines our culture, influences our mood and usually it's on our mind a big parte of the day.

It's is common knowledge that the food pyramid suggests a diet compounded of 50-55% carbohydrate, 25-30% protein and 15-20% fat, but what happens when the percentage of carbohydrate intake is reduced?

The following study follows a one month low card diet and it's effects on weight loss.

Keywords: *Diets, Nutrition, Healty life style, logevity, low carb, wheight loss.*

JEL classification: *I10; I12; I18; I19.*

Introduction

Food it's an important part of our life, influencing our mood, our body, culture and for a big part of the day it's what we think about.

The whole idea of civilization it's self comes down to food, from the way cities were built to technology development all gravitated to food.

But since when did it get to complicated to eat? Majority of people just want to look good, feel good and livea long life. Many would argue that by now we as a civilization must have an pretty good idea of what a correct diet and what we should eat every day, but on the contrary, we have countless opinions on what the correct diet should be.

Idea of an ideal diet

The first diet was proposed in 1724 by George Cheyne, and more than 50,000 books on this subject can be found today. (www.wikipedia.com - History of Diet)

What is strange is that in most of these books we are described how to eat like our ancestors, without anyone pointing to the fact that everything we now think of vegetables and fruits certainly did not exist at the beginning as Homosapiens.

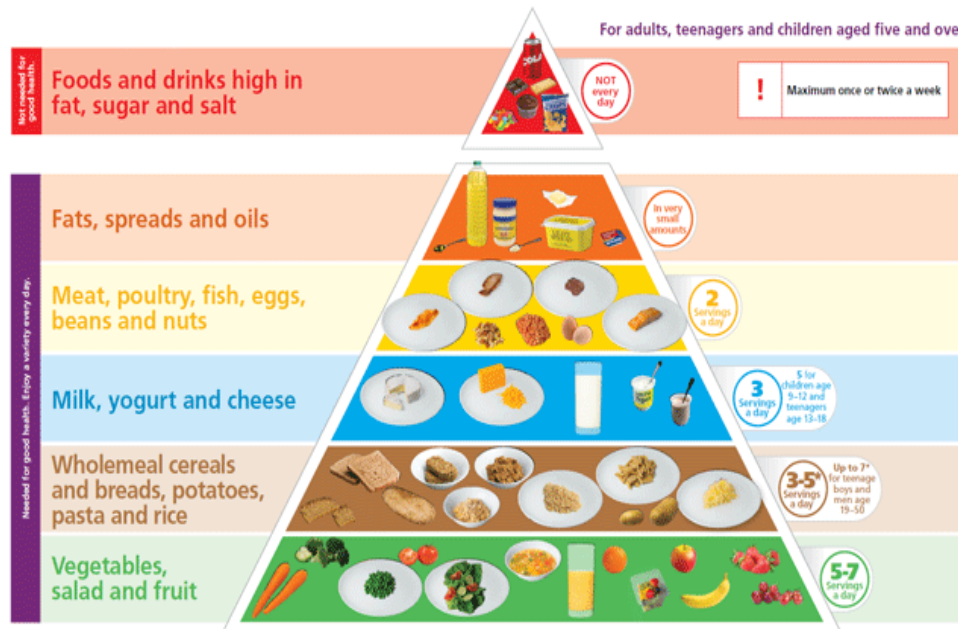
We can easily infer that the environment would have chosen our diet rather than we, and our only choices were to eat what was available or die.

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The idea that our body has to adapt to a certain range of macronutrients available in the environment is not new, being well known for its "Paleo diet" (summing up as a lack of carbohydrate diet) but very few have also highlighted the adaptation to the frequency of food availability.

Food pyramid



The Food Pyramid is designed to make healthy eating easier. Healthy eating is about getting the correct amount of nutrients – protein, fat, carbohydrates, vitamins and minerals you need to maintain good health.

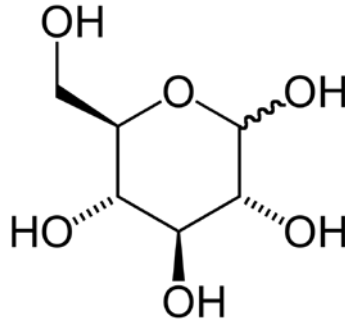
Foods that contain the same type of nutrients are grouped together on each of the shelves of the Food Pyramid. This gives you a choice of different foods from which to choose a healthy diet. Following the Food Pyramid as a guide will help you get the right balance of nutritious foods within your calorie range. Studies show that we take in too many calories from foods and drinks high in fat, sugar and salt, on the top shelf of the Food Pyramid. They provide very little of the essential vitamins and minerals your body needs. Limiting these is essential for healthy eating. (www.safefood.eu/Healthy-Eating)

According to the archaeological evidence, Homo Sapiens appeared about 200,000 years ago, but agriculture did not exist for about 190,000 years, and the fruits and vegetables we have today were cultivated, grafted, combined to our taste in the past 800-1000 years. (<https://lifeforbusypeople.com/2016/07/23/longevity-why-i-eat-once-a-day>)



The metabolism of glucose and the absorption process

There is a misconception that it is necessary to have a consistent blood glucose level to survive so it would be biologically justified 3 meals per day. However, constant consumption of carbohydrates to maintain blood glucose is not only useless, but can be a vicious and harmful cycle for the body.



After carbohydrates are consumed – Bread, Pasta, Potatoes, Candy and others, Glucose enters the bloodstream and insulin is secret to properly distribute glucose. By means of an insulin receptor, glucose enters the cells and an enzyme chain acts on it to produce energy in the form of adenosine triphosphate (ATP).

This process produces a residual product called pyruvate, which is transported by mitochondria or the "energetic plant of living matter". The basic function of mitochondria is to create energy for cellular activity in addition to the aerobic respiration process. In this process, glucose is broken by cells in the cytoplasm to form a pyruvic acid that is transported into the mitochondria. In a series of reactions, in which part is called the citric acid cycle or the Krebs cycle, the pyruvic acid reacts with water to produce carbon dioxide (CO₂) and ten hydrogen atoms. (www.scritub.com – Mytocondria)

A residual product called citrate is produced in the mitochondria, and when enough stacks create an enzyme called PhosphoFructoKinase that forms a blockage in the enzyme chain so that excess glucose does not damage the cell.

This process, however, can be done at a specific frequency and to avoid that blood glucose remains in the blood, it is stored in the liver 70 grams, and in the muscle 200 grams.

The body does not want the cells to be loaded with glucose, this is a harmful inflammatory situation called glycosis, where glucose binds to proteins and inhibits their functions. Thus, the body secretes insulin to handle glucose, this makes insulin receptors in cells becoming insulin resistant everywhere, except for fat cells (body fat).

The problem arises when energy levels begin to fall and you can not enter the energy reserves of fat cells precisely because the hormone that can do this process



is LIPAZA (a glycoprotein that in the presence of bile salts and colipase transforms Fatty acids in fatty acids and glycerol) is inhibited by insulin.

Thus, through a carbohydrate-rich diet, we enter a vicious circle that prevents us from accessing fatty energy stores because of the hunger that has occurred with the disappearance of glycogen stores in the liver and muscle.

The solution – A low carb diet

A low-carb diet means that you eat fewer carbohydrates and a higher proportion of fat. This can also be called a low-carb, high-fat diet (LCHF) or a keto diet.

For decades we've been told that fat is detrimental to our health. Meanwhile low-fat "diet" products, often full of sugar, have flooded supermarket shelves. This has most likely been a major mistake that coincided with the start of the obesity epidemic. (<https://www.dietdoctor.com>)

Case study

Name: V.V.;
Age 37 years old;
Height 1.91;
Weight 134.5 kg.
Activity: moderately active;

Prior to the initial assessment, he was asked to keep a nutritional diary for 2 weeks.

V.V. can be classified as a moderately-active person, a former performance athlete, who 10 years ago weighed 75 kg. He began to gain weight immediately after interrupting sports performance and believed he grew fat because of lack of movement combined with a chaotic food style.

Currently he has at least 10 hours a day at the office, however he plays basketball or football at least once a week for 2 hours. More importantly, I found out that because of traffic the road to the office is sometimes easier to walk, the home being 6.5 km from the workplace.

Food Journal Conclusions

Following the analysis of the diary, we noticed a constant in serving meals, but we found a very high consumption of fresh oranges at least 3-4 times a day at least 250 ml each day. Also, every lunch or dinner serves a dessert, thus exceeding daily the calorie requirement, with a priority diet composed of carbohydrates.

In addition, whether lunch or dinner, we find pizza or pasta, usually ordered.



Calculation of Caloric Needs and Antropometric Indicators

Age 37 years old;
 Height 1.91;
 Weight 134.5 kg
 Neck perimeter 47 cm
 Bust circumference 121 cm
 Waist perimeter 126 cm
 Hip Perimeter 131 cm
 Boom perimeter 39 cm
 Thigh perimeter 73.5 cm

MLI Formula (Metropolitan Life Insurance)

For men

$$G \text{ (kg)} = 50 + 0,75 \times (I \text{ (cm)} - 150) + (V(\text{years}) - 20)/4$$

$$G \text{ (kg)} = 50 + 0,75 \times (191 - 150) + (37 - 20)/4$$

$$G \text{ (kg)} = 85$$

The subject has an optimum weight of 85 kg, so we deduct a difference of 49.5 kg in addition to the optimal weight and according to the calculations provided by the formulas used, the ideal weight is between **80-91 kg**.

Body mass index (BMI)

$$\text{BMI} = G/I^2$$

$$\text{BMI} = 36.9 \text{ kg/mp} - \text{Obesity (Second Grade)}$$

Abdominal circumference

126 cm – Target is 110 cm (in six month period)

The Caloric Necessary

Following the interview I concluded that V.V. has a light physical work of 25 Kcal/kg/body/day.

$$\text{CN} = 25 \text{ Kcal} \times 134.5 \text{ kg body}$$

$$\text{CN} = 3362.5 \text{ Kcal /day}$$

In order to loose weight we agreed on a daily diet of no more than 2875 Kcal/day.

Target Weight 115 kg (-20kg) Long Term!

We have determined following the discussions to have a long-term goal of 20 kg loss in 6 months, with an average of 3.5 kg per month, considering it more important to have a modest and achievable goal towards a big but difficult goal to achieve, what would be starvation and effort beyond limits.



We have also established that he can not make daily movements, but we have set every day to go to the office on foot a distance of 6.5 km. This will create a total of 13 km / day and a deficit of about 400-500 Kcal/day.

So we set a target weight of 115 kg and a caloric requirement of 2875 Kcal/day.

After discussions I found out that she does not have a group of foods to be allergic to, does not cook very complex things, has a Mega Image near home and work, so I suggested a menu that can easily be created with products it does not take too long to prepare Mega Image. Also in the workplace there is a canteen serving cooked food.

Taking into account the very large body of fat that V.V has, we have decided to make a diet that is deficient in carbohydrates so we can force it to lose weight.

Most importantly, I have removed from my eating habits whatever means juice, whether it is freshly squeezed or carbonated, we have eliminated anything that means cakes or sweet product that comes in a pack, we have reduced as much as we can bread consumption and we have excluded anything that means pizza or pasta.

Making a Ketogenic Diet:

2875 Kcal

15% -25% carbohydrates

25% -35% protein

45% -55% fat

DAY 1

Breakfast Omelette of 3 eggs XL scrambled cheese with cheese and cheese with half sliced red peppers next to 5 cherry tomatoes

Daytime Caffe Latte with Starbucks whole milk (no sugar or honey)

Lunch Grilled chicken breast with rice paddy with vegetables and a Chef salad

Snack A handful of nuts + an orange

Dinner Baked salmon with potato baked potato, 1 NutLine seed bag

Chicken egg - 220 grams, 341 calories, 28.6 proteins, 24.2 lipids, 2.4 carbohydrates, 0 fiber

Olive oil - 5 grams, 41.3 calories, 0 proteins, 4.6 lipids, 0 carbohydrates, 0 fibers

Classic cheese - 50 grams, 166 calories, 12 proteins, 13 lipids, 0.3 carbohydrates, 0 fiber

Cow's cheese - 50 grams, 130 calories, 8.5 proteins, 10.5 lipids, 0.3 carbohydrates, 0 fiber

Fat red pepper - 100 grams, 31 calories, 1 protein, 0 lipids, 6 carbohydrates, 2.1 fiber

Red cherry - 50 grams, 10 calories, 0.7 protein, 0 lipids, 2 carbohydrates, 0.7 fiber

Caffe Latte - 200 grams, 108 calories, 6 proteins, 5.2 lipids, 8.4 carbohydrates, 0 fiber

Chicken breast without skin - 250 grams, 377.5 calories, 72.5 proteins, 7.5 lipids, 0 carbohydrates, 0 fiber

Chef Salad - 100 grams, 77 calories, 3.8 proteins, 4.6 lipids, 5.8 carbohydrates, 2.5 fiber

Nuts - 60 grams, 392.4 calories, 9.1 proteins, 39.1 lipids, 8.2 carbohydrates, 4 fibers

Salmon - 250 grams, 317.5 calories, 51.3 protein, 11 lipids, 0.5 carbohydrates, 0 fiber

Rice with vegetables - 200 grams, 217.6 calories, 4.8 proteins, 9.4 lipids, 27.6 carbohydrates, 3.6 fiber

Baked potatoes - 200 grams, 186 calories, 5 proteins, 0.2 lipids, 42.4 carbohydrates, 4.4 fibers

Oranges - 200 grams, 94 calories, 1.8 proteins, 0.2 lipids, 23.6 carbohydrates, 4.8 fiber

Sunflower seeds - 100 grams, 418 calories, 15 proteins, 26 lipids, 8 carbohydrates, 0 fiber

TOTAL: 2035 grams, 2907.3 calories, 220.1 proteins, 155.5 lipids, 135.5 carbohydrates, 22.1 fiber



DAY 2

Breakfast Omelette of 2 eggs XL cuts scrambled with cheese and cheese with half sliced red peppers next to 5 cherry tomatoes

Daytime Caffe Latte with whole milk from Starbucks (no sugar or honey).

Lunch Grilled pork bowl with a Chef salad

Snack A handful of nuts

Dinner Potatoes with egg, mushrooms, butter, cheese and cheese baked in a bowl in the oven.

Chicken egg - 220 grams, 341 calories, 28.6 proteins, 24.2 lipids, 2.4 carbohydrates, 0 fiber

Olive oil - 5 grams, 41.3 calories, 0 proteins, 4.6 lipids, 0 carbohydrates, 0 fibers

Classic cheese - 50 grams, 166 calories, 12 proteins, 13 lipids, 0.3 carbohydrates, 0 fiber

Cow's cheese - 50 grams, 130 calories, 8.5 proteins, 10.5 lipids, 0.3 carbohydrates, 0 fiber

Fat red pepper - 100 grams, 31 calories, 1 protein, 0 lipids, 6 carbohydrates, 2.1 fiber

Red cherry - 50 grams, 10 calories, 0.7 protein, 0 lipids, 2 carbohydrates, 0.7 fiber

Caffe Latte Starbucks - 200 grams, 108 calories, 6 proteins, 5.2 lipids, 8.4 carbohydrates, 0 fiber

Chef Salad - 100 grams, 77 calories, 3.8 proteins, 4.6 lipids, 5.8 carbohydrates, 2.5 fiber

Nuts - 60 grams, 392.4 calories, 9.1 proteins, 39.1 lipids, 8.2 carbohydrates, 4 fibers

Pork chicken - 250 grams, 577.5 calories, 59.3 protein, 35.8 lipids, 0 carbohydrates, 0 fiber

Preserve mushrooms - 100 grams, 14 calories, 2.5 proteins, 0.2 lipids, 0.3 carbohydrates, 0 fibers

Baked potatoes - 250 grams, 232.5 calories, 6.3 proteins, 0.3 lipids, 53 carbohydrates, 5.5 fiber

Butter 80% - 50 grams, 386 calories, 0.1 protein, 40 lipids, 0.2 carbohydrates, 0 fibers

Classic cheese - 100 grams, 332 calories, 24 proteins, 26 lipids, 0.5 carbohydrates, 0 fiber

Fagaras cheese - 100 grams, 105 calories, 9 proteins, 6 lipids, 3.8 carbohydrates, 0 fibers

TOTAL: 1685 grams, 2943.7 calories, 170.9 protein, 209.5 lipids, 91.2 carbohydrates, 14.8 fiber

DAY 3

Breakfast Whole grains Fitness with milk 3.5%

Daytime Caffe Latte with Starbucks whole milk (no sugar or honey)

Lunch Grilled salmon with chef salad with olive oil and balsamic vinegar.

Snack Sandwich with sliced avocado and hard boiled egg.

Dinner Grilled pork mussels and pork rinds.

Whole grains - 100 grams, 372 calories, 8.4 proteins, 1.4 lipids, 78.4 carbohydrates, 1.4 fiber

Milk 3.5% - 250 grams, 150 calories, 7.5 proteins, 8.8 lipids, 11.3 carbohydrates, 0 fiber

Pea Food - 250 grams, 123.5 calories, 7.8 protein, 4 lipids, 14.5 carbohydrates, 8.5 fiber

Wild Salmon File - 300 grams, 372 calories, 63 proteins, 12 lipids, 0 carbohydrates, 0 fiber

Chef Salad - 100 grams, 77 calories, 3.8 proteins, 4.6 lipids, 5.8 carbohydrates, 2.5 fiber

Olive oil - 10 grams, 90 calories, 0.1 protein, 1.5 lipids, 0.1 carbohydrates, 0.1 fiber

Balsamic vinegar - 10 grams, 6.7 calories, 0 proteins, 0 lipids, 1.3 carbohydrates, 0 fiber

Macadamia Nuts - 40 grams, 295.6 Calories, 3.6 Proteins, 30.4 Lipids, 1.9 Carbohydrates, 2.1 Fiber

Avocado - 100 grams, 167 calories, 2 proteins, 15.4 lipids, 8.6 carbohydrates, 6.8 fiber

Egg boiled egg - 80 grams, 124 calories, 10.1 protein, 8.5 lipids, 0.9 carbohydrates, 0 fiber

Sushi bread - 60 grams, 163.8 calories, 5.6 protein, 1 lipid, 32.8 carbohydrates, 0.5 fiber

Pork mushrooms - 250 grams, 362.5 calories, 52.3 protein, 13.8 lipids, 3.8 carbohydrates, 0 fiber

Caffe Latte - 150 grams, 81 calories, 4.5 proteins, 3.9 lipids, 6.3 carbohydrates, 0 fiber

Pork mice - 90 grams, 506.7 calories, 57.1 protein, 31.7 lipids, 0 carbohydrates, 0 fiber

TOTAL: 1790 grams, 2891.8 calories, 225.8 protein, 137 lipids, 165.7 carbohydrates, 21.9 fiber

**DAY 4**

Breakfast Two Greek yoghurts of 150 grams of 10% fat, with oatmeal and a nutmeg (preferably mixed in a bowl one evening before the oatmeal is soft)

Daytime Caffe Latte with Starbucks whole milk (no sugar or honey)

Lunch Pangasius fish with salad with olive oil and balsamic vinegar and a humus.

Snack A handful of Orlando's sea-baked salt pistachio and a medium banana.

Dinner Grilled chicken breast with vegetable mixture for wok Edenia to which we add mushrooms.

Greek yoghurt 10% - 300 grams, 372 calories, 15 proteins, 30 lipids, 10.5 carbohydrates, 0 fibers

Oat flakes - 50 grams, 123 calories, 8.5 proteins, 3.5 lipids, 33 carbohydrates, 7.7 fiber

Caffe Latte Starbucks - 150 grams, 81 calories, 4.5 proteins, 3.9 lipids, 6.3 carbohydrates, 0 fiber

Humus Oriental - 250 grams, 592.5 calories, 20.3 proteins, 32.3 lipids, 41.3 carbohydrates, 10.5 fibers

Chef Salad - 100 grams, 77 calories, 3.8 proteins, 4.6 lipids, 5.8 carbohydrates, 2.5 fiber

Olive oil - 10 grams, 90 calories, 0.1 proteins, 1.5 lipids, 0.1 carbohydrates, 0.1 fiber

Balsamic vinegar - 10 grams, 9.8 calories, 0.1 protein, 0 lipids, 1.9 carbohydrates, 0 fiber

Pangasius - 300 grams, 270 calories, 39 proteins, 12 lipids, 0 carbohydrates, 0 fiber

Frozen vegetables for wok - 225 grams, 65.3 calories, 3.6 proteins, 0.5 lipids, 8.3 carbohydrates, 7 fibers

Pistachios with salt - 40 grams, 239.2 calories, 8.4 proteins, 19 lipids, 6.5 carbohydrates, 4.1 fiber

Walnut core - 40 grams, 260.8 calories, 6.4 proteins, 23.9 lipids, 7.2 carbohydrates, 4.4 fibers

Frozen mushrooms - 200 grams, 38 calories, 5.6 proteins, 0.2 lipids, 0.8 carbohydrates, 5 fibers

Bananas - 170 grams, 151.3 calories, 1.9 proteins, 0.5 lipids, 38.8 carbohydrates, 4.4 fibers

Chicken breast without skin - 300 grams, 453 calories, 87 proteins, 9 lipids, 0 carbohydrates, 0 fiber

TOTAL: 2145 grams, 2822.9 calories, 204.2 proteins, 140.9 lipids, 160.5 carbohydrates, 45.7 fibers

DAY 5

Breakfast 3 boiled egg eggs with 2 buns of butter and salami from Sibiu.

Daytime Caffe Latte with Starbucks whole milk (no sugar or honey)

Lunch Beef soup from the canteen. Pork neck with peas.

Snack One orange.

Dinner Bean soup without meat. Bean bean meal.

Egg boiled egg - 180 grams, 279 calories, 22.7 proteins, 19.1 lipids, 2 carbohydrates, 0 fiber

Butter 82% President - 10 grams, 73.8 calories, 0 proteins, 8.2 lipids, 0 carbohydrates, 0 fibers

Salam Sibiu - 25 grams, 119 calories, 7.3 proteins, 9.9 lipids, 0.1 carbohydrates, 0 fiber

Caffe Latte Starbucks - 150 grams, 81 calories, 4.5 proteins, 3.9 lipids, 6.3 carbohydrates, 0 fiber

Sushi bread - 120 grams, 327.6 calories, 11.3 proteins, 1.9 lipids, 65.6 carbohydrates, 1 fiber

Cooked pork - 250 grams, 577.5 calories, 59.3 protein, 35.8 lipids, 0 carbohydrates, 0 fiber

Peanut - 250 grams, 123.5 calories, 7.8 proteins, 4 lipids, 14.5 carbohydrates, 8.5 fiber

Oranges - 200 grams, 94 calories, 1.8 proteins, 0.2 lipids, 23.6 carbohydrates, 4.8 fiber

Bean bean soup - 300 grams, 102.6 calories, 5.4 proteins, 2.4 lipids, 15.6 carbohydrates, 3.6 fiber

Bean meal - 240 grams, 208.8 calories, 19.4 proteins, 1.4 lipids, 29.5 carbohydrates, 13.9 fiber

Cucumber soup - 300 grams, 114 calories, 12.6 proteins, 3.6 lipids, 7.8 carbohydrates, 0 fiber

Pork loin - 200 grams, 674 calories, 32 proteins, 58 lipids, 0.6 carbohydrates, 0 fiber

TOTAL: 2225 grams, 2774.8 calories, 184.1 proteins, 148.4 lipids, 165.6 carbohydrates, 31.8 fibers

**DAY 6**

Breakfast "American" (keto) rind of almond pancakes (I also put egg, coconut oil and glycerin glycerin sweetener) roasted with a little coconut butter.

Lunch Grilled salmon fish with iceberg lettuce, 5 cherry tomatoes, and half peppers with olive oil and balsamic vinegar and a humus vinegar.

Snack A handful of nuts

Dinner Turkey breast fried with boiled cauliflower and butter 82% fat from Napolact.

In the evening Two Ursus beers at 0.33 l and water at discretion.

Almond meal - 150 grams, 871.5 calories, 33 proteins, 76.5 lipids, 30 carbohydrates, 15 fiber

Chicken egg - 60 grams, 93 calories, 7.8 proteins, 6.6 lipids, 0.7 carbohydrates, 0 fiber

BIO Coconut Oil - 10 grams, 81.9 calories, 0 proteins, 9.1 lipids, 0 carbohydrates, 0 fiber

Sweet & Safe - 80 grams, 0 calories, 0 proteins, 0 lipids, 78.4 carbohydrates, 0 fiber

Wild frozen salmon filet - 300 grams, 255 calories, 57 proteins, 3 lipids, 0 carbohydrates, 0 fiber

Red cherry - 50 grams, 10 calories, 0.7 protein, 0 lipids, 2 carbohydrates, 0.7 fiber

Fat red pepper - 50 grams, 15.5 calories, 0.5 protein, 0 lipids, 3 carbohydrates, 1.1 fiber

Iceberg salad - 50 grams, 7 calories, 0.5 protein, 0.1 lipids, 1.5 carbohydrates, 0.6 fiber

Olive oil - 10 grams, 90 calories, 0.1 proteins, 1.5 lipids, 0.1 carbohydrates, 0.1 fiber

Balsamic vinegar - 10 grams, 6.7 calories, 0 proteins, 0 lipids, 1.3 carbohydrates, 0 fiber

Beer Ursus - 660 grams, 270.6 calories, 0 proteins, 0 lipids, 6.6 carbohydrates, 0 fiber

Butter 82% Napolact - 50 grams, 369.5 calories, 0.1 protein, 41 lipids, 0.1 carbohydrates, 0 fiber

Skinless turkey breast - 350 grams, 472.5 calories, 105.4 protein, 2.5 lipids, 0 carbohydrates, 0 fiber

Cauliflower - 200 grams, 50 calories, 4.8 proteins, 0.2 lipids, 10.6 carbohydrates, 5 fibers

Nut nut - 40 grams, 260.8 calories, 6.4 proteins, 23.9 lipids, 7.2 carbohydrates, 4.4 fibers

TOTAL: 2070 grams, 2854 calories, 216.3 proteins, 164.4 lipids, 141.5 carbohydrates, 26.9 fibers

DAY 7

Breakfast Coffee (usually spends every Saturday so wakes up after 11:00) bean beaten from Mega Image and red pepper instead of bread

Lunch Vegetable soup, Duck breast with green bean garnish.

Snack Low carb KETO Cake from almonds flower and glyceemic sweetener.

Dinner Add beaten mushrooms until melted cheese and sheepskin with an iceberg salad and baby spinach, olive oil and balsamic vinegar.

Cafe Latte - 200 grams, 45 calories, 3 proteins, 2 lipids, 4 carbohydrates, 0 fiber

Green beans - 250 grams, 145 calories, 4.5 proteins, 7.5 lipids, 12.5 carbohydrates, 5 fiber

Duck breast with cooked skin - 300 grams, 651 calories, 80.4 protein, 34.2 lipids, 0 carbohydrates, 0 fiber

Vegetable soup - 300 grams, 61.5 calories, 0.9 proteins, 0.6 lipids, 12.6 carbohydrates, 1.8 fiber

Mega Image Sliced Meat - 60 grams, 163.8 calories, 5.6 protein, 1 lipid, 32.8 carbohydrates, 0.5 fiber

Negresa low carb keto - 100 grams, 134.8 calories, 6.4 proteins, 9.8 lipids, 7.2 carbohydrates, 8.9 fibers

Beaten beans 365 - 250 grams, 545 calories, 28 proteins, 14.8 lipids, 87 carbohydrates, 24.3 fiber

Fat red pepper - 150 grams, 46.5 calories, 1.5 proteins, 0 lipids, 9 carbohydrates, 3.2 fiber

Beef - 300 grams, 540 calories, 60 proteins, 33 lipids, 0 carbohydrates, 0 fiber

Classic cheese - 70 grams, 232.4 calories, 16.8 proteins, 18.2 lipids, 0.4 carbohydrates, 0 fiber

Iceberg salad - 100 grams, 12.1 calories, 1 protein, 0.2 lipids, 3.4 carbohydrates, 1.8 fiber

Baby Spinach - 50 grams, 11.5 calories, 1.8 proteins, 0.2 lipids, 1 carbohydrates, 0.9 fiber

Olive oil - 10 grams, 90 calories, 0.1 proteins, 1.5 lipids, 0.1 carbohydrates, 0.1 fiber

Sheep cheese - 50 grams, 141.5 calories, 9.1 protein, 10.6 lipids, 1.5 carbohydrates, 0 fiber

TOTAL: 2190 grams, 2820.1 calories, 219.1 proteins, 133.6 lipids, 171.5 carbohydrates, 46.5 fibers



Conclusions

Discussions were made daily with Vlastimir to find out if the menu required changes. As he is not a moody person, he was pleased with the diversity of the menu, the speed of preparation and especially the simplicity.

He agreed to continue this diet, with small changes in the type of meat from each meal, basically a day-to-day roccake.

The most important thing was that he learned to work at calories.oneden.com so he simulated several menu variants, also noticed the figures of the old lifestyle through self-analysis of his diary.

The "no sweet in the packaging" rule seems to work (at least in the short term).

At the end of the first week after weighing, we found a weight loss of 1.5 kg from 134.5 kg to 133 kg!

At the end of the second week, there was a 2,5 kg of weight loss.

At the end of the 3rd week, there was another 2 kg of weight loss, and at the end of the 4th week, we had a 1,5 kg of weight loss.

In total there was a 7,5 kg weight loss over a period of one month, with no big calorie reduction, and most important no starvation.

My personal view of the "epidemic" of obesity is a combination of factors (diet, stress, lack of physical activity, etc.) but if I would point to the highest guilty I would point to SUGAR.

A solution to improve the health of the general population is to treat sugar as alcohol or tobacco! Overwhelming it and banning the advertising of sweet products to children. There is a direct correlation between candy marketing and infant obesity.

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