

## **Case study 1**

**Gender:** Male

**Age:** 42 years old

**Body Weight (initial) =** 97 Kg

**Height:** 1.76 m

**BMI =** 31.31 Kg / m<sup>2</sup>

**Health problems:** Hypertension, Elevated uric acid, high cholesterol

**Nutritional goal:** Weight loss, improvement of biochemical indicators

**Medication:** cosyrel 10/5 mg, Zyloric 100 mg

**Physical activity:** walking about 6km / day, 40-50 minutes (4-5 times a week)

Mr. Nikos K. started his 3-month dietary monitoring on 17/6/20, wanting to lose weight and improve biochemical indicators. His initial body weight was 97 kg with a height of 1.76 m, having a Body Mass Index (BMI) of 31.31 Kg / m<sup>2</sup>. He had a history of the following health problems: high blood pressure, high uric acid and high cholesterol. At the same time, he was taking corysel 10/5 mg while walking 6-7 km / day for at least 4-5 times / week.

The process started as follows:

1. Completion of the Medical and Nutritional history electronically.
2. Evaluation of the history by the dietitian and communication with the patient.
3. Confirmation of payment and start of diet plan.
4. Formulation of a personalized diet based on his needs and nutritional preferences.

Sending a diet and food recording diary to a patient's personal email in 1-2 working days.

### **Dietary monitoring**

Mr. Nikos K. was very consistent with the food log and from the first week he sent a small follow up to the dietitian for his progress. The official follow ups was done every 2 weeks, via email / phone contact with the dietitian.

In each follow up, the evaluation parameters were:

- Change in body weight
- Food and beverage log
- Measurement of waist circumference
- Changes in clothes (belt, pants)
- Changes in mood
- Evaluation of hydration and physical activity during the week

On 2/7/20 the patient sent the blood tests requested for his better evaluation and the results were as follows:

**Blood tests (23/6/20)**

Examination	Result	Base Referals
Sugar	90	74-115 mg/dl
Urea	42	16,5-48,5 mg/dl
Uric Acid	<b>9,9</b>	3,4-7,0 mg/dl
Creatinine	<b>1,60</b>	0,70-1,20 mg/dl
Total cholesterol	<b>225</b>	<170 mg/dl
Triglycerides	<b>224</b>	<150 mg/dl
HDL	59	>40 mg/dl
LDL	121	<116 for people at low risk <100 for people at moderate risk <55 for people at moderate risk mg/dl
Total lipids	<b>898,0</b>	<800 mg/dl

Evaluating the tests, the dietitian made some further changes to the diet, taking into account the biochemical indicators



26.8.2020	26.8.2020	26.8.2020	26.8.2020	26.8.2020	26.8.2020	26.8.2020
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On 26/8/20 Mr. Nikos K. did a re-examination of his blood tests and the results after 2 months were as follows:

**Blood tests (8/19/20)**

Examination	Result	Base Referrals
Sugar	86	74-115 mg/dl
Urea	39	16,5-48,5 mg/dl
Uric Acid	<b>8,0</b>	3,4-7,0 mg/dl
Creatinine	<b>1,56</b>	0,70-1,20 mg/dl
Total cholesterol	<b>173</b>	<170 mg/dl
Triglycerides	<b>224</b>	<150 mg/dl
HDL	50	>40 mg/dl

1/9/20

After 2.5 months (5th follow up)

**Loss:** 9.1 kg (97 to 87.9 kg)

**Waist circumference:** -18 cm (121 to 103cm)

**Uric acid:** -1.9 mg / dl

**Creatinine:** -0.04

**Cholesterol:** - 52 mg / dl

**Atherosclerotic index:** 3.46 (from 3.81) (desired range: 1-3.50)

## **Evaluation**

Mr. Nikos K. managed in 2.5 months to lose 9.1 kg and reduce his waist circumference by 18 cm, reaching BMI = 28.37 Kg / m<sup>2</sup>! Increased waist circumference is associated with increased visceral fat, which is directly associated with increased cardiometabolic risk and type II diabetes.

Mr. Nikos managed to improve his eating habits without deprivation, without meal replacements, without express diets and without magic drinks or pills. He achieved all this through a balanced diet based on the Mediterranean Diet, combined with regular physical activity (walking), organizing meals during the week and adopting proper eating habits during these months.

Mr. Nikos K. continues his monitoring, while through communication with the dietitian and nutrition plans he has learned to eat properly.

Congratulations!!