A REPORT ON THE PARTICIPANTS ENERGY BALANCE FOR THE PROJECT ERASMUS+ »Sports and healthy food for inclusion«

Energy balance is the ratio between the average intake and the average consumption of energy.

The goal to achieve is that the two are balanced.

The data on the average energy intake was obtained by recording one-week menus. With the help of the Nutrition Navigator app (SLO - prehranski navigator), we obtained information about the average energy intake (in kilojoules/kJ).

The data for the average energy consumption was calculated using the Harris-Benedict formula.

First we calculated the energy for the basal metabolism. This is the energy that helps our internal organs function. The formula takes into account the age, the height and the weight of a person. The value obtained was multiplied by the factor of physical activity.

DEN (daily energy needs) = ENERGY OF THE BASAL METABOLISM x PAL (physical activity level)

1. ENERGY OF THE BASAL METABOLISM

- For men:

66,47 + (13,75×W) + (5,03 ×H)- (6,75 ×A) :

- For women:

655,10 + (9,56×W) + (1,85 ×H)- (4,68 ×A)

W= weight in kg
H = height in cm
A = age in years

Units: kcal/day

1kcal = 4,186kJ = 4,2kJ

2. PHYSICAL ACTIVITY LEVEL (PAL)

Težavnost dela	PAL	Primeri
Izključno ležeč ali sedeč način življenja	1,2	Stari, betežni ljudje
Izključno sedeča dejavnost z malo ali nič aktivnosti v prostem času	1,4 -1,5	Pisarniški uslužbenci, finomehaniki
Sedeča dejavnost, občasno tudi večja poraba energije za hojo in stoječe aktivnosti	1,6 -1,7	Laboranti, vozniki, študenti, delavci ob tekočem traku, medicinske sestre
Pretežno stoječe delo	1,8 -1,9	Gospodinje, prodajalci, natakarji, mehaniki
Fizično naporno poklicno delo	2,0 – 2,4	Gradbeniki, kmetovalci, gozdarji, rudarji, tekmovalni športniki

I have performed an individual discussion about the energy balance with all the students and participants of the project Erasmus+.

The project involves 16 students (11 girls and 5 boys)

Findings:

1. 75% of students have a balanced energy balance, 25% do not.
2. This means that the students who do not have a balanced energy balance have a higher energy consumption than its intake (they leave out meals, mainly breakfast)

Findings that arose after the students interviews:

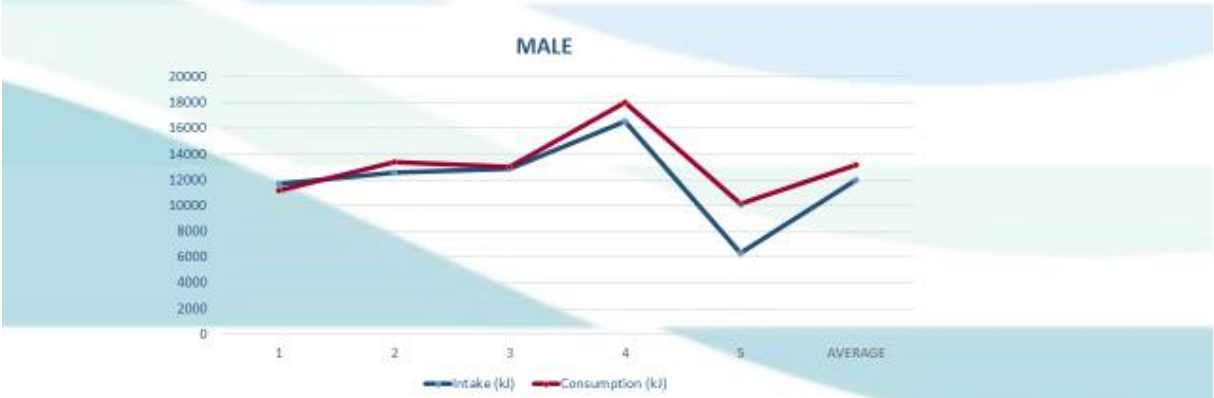
1. Students have increased their water intake (1,5 – 3l/day).
2. They are much more aware of the importance of breakfast and some of them have changed their bad eating habits.
3. They are aware how important the correct distribution of energy is throughout the day (3-5 meals/day). Some succeed to eat every 3-4 hours.
4. Salt intake (max.5g/day). They are trying to use less salt and replace it with natural spices and fragrances. But they still eat salted foods.
5. Students are aware of their low intake of fresh, seasonal vegetables.
6. Students are aware of the importance of consuming nutritional fibres (fruits, vegetables and cereal).
7. Students are aware of the fact that there are a lot of hidden fats (bad ones) in processed food.

8. Students are also aware of how important a properly composed healthy dish is (1/2= cooked vegetable dish, ¼ = starch dish, ¼ = meat or some other protein food) with a fresh seasonal salad and water.

Comparison between intake and consumption

MALE

PERSON	1	2	3	4	5	AVERAGE
INTAKE (kJ)	11655	12600	12855	16514,7	6317,1	11988,4
CONSUMPTION (kJ)	11137	13353,8	13050	17997,9	10141,3	13136



Comparison between intake and consumption

FEMALE

PERSON	1	2	3	4	5	6	7	8	9	10	11	AVERAGE
INTAKE (kJ)	10350,5	9850	10855	8827,5	8967	8560,5	8550,5	9643,7	8175,4	12799,3	9542,4	9647,4
CONSUMPTION (kJ)	11687,6	11205	11133	8977,9	8936,5	9057,7	8981,9	9828,8	9785,9	12605,9	10354,5	10232,2

Comparison between intake and consumption

TOTAL AVARAGE

	TOTAL	AVERAGE
INTAKE (kJ)	171801,8	10737,6
CONSUMPTION (kJ)	178234,7	11139,7