Table S1. Correlation between frequency of consumption of selected products and levels of cytokines. Spearman's rank correlation coefficient is listed in the columns and for statistically significant correlations it is followed by the p value

Products	IL-6 (pg/ml)	IFN-γ (pg/ml)	TNF-α (pg/ml)
White bread	0.10	0.09	0.02
Wholemeal bread	0.05	0.02	–0.03
Confectionery bread	0.03	0.12	0.15
Oat flakes, barley, rye	0.03	–0.07	–0.07
Buckwheat, barley, millet	–0.01	–0.17	–0.06
White rice	0.05	–0.08	–0.04
Brown rice	–0.03	0.10	0.00
White noodles	–0.07	0.01	–0.04
Wholemeal pasta	0.05	–0.03	0.01
Potatoes	–0.10	–0.16	–0.06
Poultry	–0.14	0.13	–0.06
Red meat	–0.01	–0.10	–0.06
Fish	–0.08	–0.04	0.06
Cold cuts, frankfurters, sausages	–0.07	–0.05	–0.15
Milk	–0.05	–0.20	–0.10
Natural sour milk products	0.11	–0.07	0.05
Sweet fruit milk products	0.22* (p = 0.047)	0.06	–0.03
Cottage cheese	0.15	–0.06	–0.12
Cheese	–0.14	–0.05	–0.11
Eggs	–0.18	–0.08	–0.18
Vegetables	0.04	–0.11	–0.00
Fruit	0.08	–0.11	–0.01
Cakes, cookies	–0.10	–0.20	–0.14
Bars, chocolates	–0.18	–0.16	–0.13
Juices, nectars, fruit drinks	0.13	0.08	0.05
Sweetened carbonated drinks	–0.13	–0.12	–0.05
Alcohol	–0.23* (p = 0.043)	0.03	–0.07
Fast-food dishes	–0.21	–0.15	–0.18

* and red color indicate significant values ($p < 0.05$)

Table S2. Results of statistical analysis of correlation between frequency of nutrients' consumption and levels of cytokines. Rank correlation coefficient is listed in the columns and for statistically significant correlations it is followed by the p value

Nutrients	IL-6 (pg/ml)	IFN-γ (pg/ml)	TNF-α (pg/ml)
Energy [kcal]	0.02	–0.05	0.10
Protein [g]	–0.06	–0.07	–0.07
Fat [g]	–0.05	–0.09	–0.02
Digestible carbohydrates [g]	0.13	–0.01	0.15
Fiber [g]	–0.02	–0.08	0.02
Vegetable protein [g]	0.10	0.03	0.07
Animal protein [g]	–0.09	–0.04	–0.10
Sugars [g]	0.19	–0.08	0.28* ($p = 0.010$)
Fructose [g]	0.05	–0.04	0.11
Galactose [g]	–0.03	0.06	0.24* ($p = 0.030$)
Glucose [g]	0.10	–0.06	0.18
Lactose [g]	0.13	–0.17	0.02
Maltose [g]	0.05	0.07	0.14
Sucrose [g]	0.15	–0.05	0.28* ($p = 0.010$)
Starch [g]	0.02	0.03	0.06
SFA [g]	–0.09	–0.14	–0.06
MUFA [g]	–0.05	–0.04	0.03
n-3 fatty acids [g]	0.01	–0.02	0.20
n-6 fatty acids [g]	–0.01	0.03	–0.09
PUFA [g]	–0.00	–0.00	–0.02
Cholesterol [mg]	–0.21	–0.11	–0.04
Trans-fatty acids in total [g]	0.12	–0.18	0.04
Sodium [mg]	–0.06	–0.02	–0.06
Salt [g]	–0.06	–0.02	–0.06
Potassium [mg]	–0.10	–0.11	0.02
Calcium [mg]	0.08	–0.20	–0.00
Phosphorus [mg]	–0.04	–0.10	–0.05
Magnesium [mg]	–0.05	–0.11	0.00
Iron [mg]	–0.10	–0.06	–0.02
Zinc [mg]	–0.03	–0.06	–0.04
Copper [mg]	–0.02	–0.13	0.07
Manganese [mg]	0.01	–0.02	0.02
Selenium [µg]	0.09	0.03	0.05
Iodine [µg]	–0.08	–0.17	–0.00
Vitamin A [µg]	–0.04	–0.11	0.16
Retinol [µg]	–0.09	–0.10	–0.03
Beta carotene [µg]	–0.02	–0.14	0.11
Vitamin D [µg]	–0.12	–0.12	0.04

Nutrients	IL-6 (pg/ml)	IFN-γ (pg/ml)	TNF-α (pg/ml)
Vitamin E [mg]	0.09	0.09	0.06
Vitamin K [µg]	−0.22	−0.05	−0.00
Vitamin B1 [mg]	−0.15	−0.07	0.04
Vitamin B2 [mg]	0.06	−0.13	−0.02
Vitamin B3 [mg]	−0.17	0.06	−0.05
Vitamin B6 [mg]	−0.22	−0.07	0.01
Folates [µg]	−0.01	−0.01	0.01
Vitamin B12 [µg]	−0.10	−0.14	0.02
Vitamin C [mg]	−0.09	−0.17	0.06
Isoleucine [mg]	−0.07	−0.00	−0.08
Leucine [mg]	−0.06	−0.03	−0.08
Lysine [mg]	−0.08	−0.02	−0.09
Methionine [mg]	−0.07	−0.01	−0.07
Cystine [mg]	−0.04	0.02	−0.02
Phenylalanine [mg]	−0.04	−0.03	−0.06
Tyrosine [mg]	−0.03	−0.03	−0.08
Threonine [mg]	−0.08	−0.03	−0.08
Tryptophan [mg]	−0.10	−0.01	−0.07
Valine [mg]	−0.07	−0.03	−0.07
Arginine [mg]	−0.08	−0.12	−0.08
Histidine [mg]	−0.09	−0.01	−0.13
Alanine [mg]	−0.10	−0.00	−0.09
Aspartic acid [mg]	−0.13	−0.02	−0.05
Glutamic acid [mg]	−0.02	−0.01	−0.03
Glycine [mg]	−0.18	−0.03	−0.08
Proline [mg]	0.02	−0.00	0.00
Serine [mg]	−0.03	−0.03	−0.05
Glycemic Index	−0.09	−0.11	−0.04
Glycemic load	0.10	−0.02	0.13
Potential Renal Acid Load	0.11	0.07	−0.10

* and red color indicate significant values (p < 0.05)

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Table S3. Correlation between parameters obtained from body composition analysis and cytokine levels. Spearman's rank correlation coefficient is listed in the columns and for statistically significant correlations it is followed by the *p* value

Parameters	IL-6 (pg/ml)	IFN-γ (pg/ml)	TNF-α (pg/ml)
Height [cm]	0.04	0.14	0.02
Body weight [kg]	0.16	0.15	0.02
BMI [kg/m₂]	0.18	0.08	0.03
Fat tissue [%]	0.14	–0.02	–0.09
Fat tissue [kg]	0.16	0.01	–0.03
Visceral fat level	0.00	0.04	0.04
Lean body mass [kg]	0.15	0.20	0.08
Total water content [kg]	0.15	0.19	0.07
Muscle mass [kg]	0.15	0.20	0.08
Bone weight [kg]	0.16	0.20	0.08
Right leg adipose tissue [%]	0.14	–0.05	–0.12
Right leg adipose tissue [kg]	0.26* (p = 0.020)	0.05	–0.02
Right leg lean body mass [kg]	0.11	0.20	0.09
Right leg muscle mass [kg]	0.11	0.20	0.09
Left leg adipose tissue [%]	0.13	–0.06	–0.14
Left leg adipose tissue [kg]	0.24* (p = 0.30)	0.04	–0.03
Left leg lean body mass [kg]	0.10	0.20	0.09
Left leg muscle mass [kg]	0.10	0.20	0.10
Right hand adipose tissue [%]	0.16	0.04	–0.04
Right hand adipose tissue [kg]	0.26* (p = 0.020)	0.07	–0.00
Right hand lean body mass [kg]	0.13	0.16	0.06
Right hand muscle mass [kg]	0.13	0.16	0.06
Left hand adipose tissue [%]	0.19	0.06	–0.04
Left hand adipose tissue [kg]	0.22* (p = 0.047)	0.05	–0.02
Left hand lean body mass [kg]	0.13	0.16	0.04
Left hand muscle mass [kg]	0.13	0.16	0.04
Torso adipose tissue [%]	–0.06	–0.04	–0.07
Torso adipose tissue [kg]	0.04	0.07	–0.04
Torso lean body mass [kg]	0.19	0.18	0.09
Torso muscle mass [kg]	0.19	0.18	0.09

* and red color indicate significant values (p < 0.05)

File S1. Original food consumption frequency questionnaire

Diet and lifestyle survey:

Given name and surname:

1. Sex
    a) female
    b) male
2. Age .... years
3. Body weight .... kg
4. Body height .... cm
5. Place of residence
    a) rural
    b) urban
6. Assess your financial condition:
    a) very poor
    b) poor
    c) good
    d) very good
7. Diagnosed chronic diseases?
....
....
....
....
8. Medication?
....
....
....
....
9. Diet supplements?
....
....
....
....
10. Do you drink tea?
    a) yes
    b) no
11. If you answered yes in question 10, please describe what type of tea you drink and how often.
....
....
....
....

12. Do you drink coffee?
    a) yes
    b) no
13. Do you use sugar for sweetening tea or coffee?
    a) yes
    b) no
14. Do you drink water?
    a) yes
    b) no
15. How much fluid do you consume daily?
    a) < 0.5 l
    b) 0.5-1 l
    c) 1-2 l
    d) > 2 l
16. Do you drink alcohol?
    a) yes
    b) no
17. Do you salt foods and/or beverages?
    a) yes
    b) no
18. Do you use seasonings: Vegeta, Kucharek or Maggi?
    a) yes
    b) no
19. How many meals do you eat per day?
    a) 1-2
    b) 3
    c) 4-5
20. Do you eat between meals?
    a) yes
    b) no
21. What are the meal times?
....
....
....
....

22. How often do you eat these products? (mark X)

Products	Every day	4-5 times per week	2-3 times per week	Once per week	1-2 times per month	I do not eat this product at all
White (e.g. wheat) bread						
Dark (e.g. rye, graham) bread						
Sweet baked goods and pastries, e.g. donuts, buns, croissants						
Oat, barley and rye flakes						
Buckwheat, barley, millet						
White rice						
Brown rice						

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Products	Every day	4-5 times per week	2-3 times per week	Once per week	1-2 times per month	I do not eat this product at all
Wheat noodles						
Whole grain pasta						
Potatoes						
Poultry (chicken, turkey)						
Red meat (pork, beef, lamb)						
Fish						
Cold cuts, sausages, etc.						
Milk						
Sour natural milk products (buttermilk, kefir, yoghurt)						
Sour fruit milk products (buttermilk, kefir, yoghurt)						
White cheese, e.g. cottage cheese						
Cheese						
Eggs						
Vegetables						
Fruits						
Cakes						
Chocolate bars, chocolates, etc.						
Fruit juices, nectars, fruit drinks						
Sweetened carbonated drinks, e.g. Coke, Pepsi, Mirinda, Fanta, rangeade						
Alcohol						
Fast food						

In the questions below you can choose more than one answer.

23. Where do you eat your meals?
    a) at home
    b) at work
    c) in restaurants, canteens or fast food outlets
24. Which fats do you use for frying?
    a) olive oil
    b) sunflower oil
    c) rapeseed oil
    d) lard
    e) butter
25. What do you use to spread on your sandwiches?
    a) butter
    b) margarine
    c) olive oil
    d) fromage frais
26. What do you use to dress salads?
    a) olive oil
    b) rapeseed or sunflower oil
    c) mayonnaise
    d) yogurt
27. What are the most common heat treatment methods in your kitchen?
    a) boiling
    b) braising
    c) frying
    d) baking
28. Do you smoke cigarettes?
    a) yes
    b) no
29. Do you play sports?
    a) yes
    b) no
30. If you answered yes to question 29, please indicate what type of sport.
    ....
    ....
    ....
    ....