

Supplementary table 1. Associations between the diet quality categories and absolute nutrient intakes calculated from the five day food diaries.

Nutrient	Diet quality category				P-value
	Poor (<6 points, n=132 [‡])		Good (≥6 points, n=131 [‡])		
	Median or (mean)	IQR or (SD)	Median or (mean)	IQR or (SD)	
Protein (g)	57.6	48.2 – 66.7	64.5	56.6 – 74.6	<0.001 ^a
Carbohydrates (g)	(178.0)	(40.5)	(190.7)	(44.2)	0.016 ^b
Sucrose (g)	39.2	28.3 – 56.6	34.6	27.7 – 46.3	0.03 ^a
Fat (g)	(56.4)	(15.1)	(57.1)	(15.0)	0.718 ^b
SFA (g)	21.7	17.9 – 26.8	21.5	17.5 – 25.9	0.544 ^a
MUFA (g)	(18.6)	(5.3)	(19.4)	(5.6)	0.212 ^b
PUFA (g)	(8.7)	(2.7)	(9.6)	(3.0)	0.01 ^b
Fibre (g)	13.0	10.9 – 16.7	16.8	14.4 – 22.6	<0.001 ^a
Cholesterol (mg)	171.4	135.5 – 212.2	155.8	122.6 – 206.7	0.08 ^a
Vitamin C (mg)	67.7	45.3 – 104.4	88.6	66.8 – 119.0	<0.001 ^a
Vitamin D (µg)	7.2	5.5 – 10.2	9.1	6.2 – 12.7	0.001 ^a
Vitamin E (mg)	5.8	5.0 – 7.3	7.4	6.0 – 9.0	<0.001 ^a
Vitamin A (RE)	644.5	465.1 - 958.1	775.9	555.1 – 1028.3	0.034 ^a
Thiamin (mg)	0.93	0.75 – 1.10	1.06	0.90 – 1.22	<0.001 ^a
Riboflavin (mg)	(1.6)	(0.5)	(1.9)	(0.6)	<0.001 ^b
Niacin (NE)	21.8	18.0 – 25.5	24.6	21.5 – 28.1	<0.001 ^a
Vitamin B6 (mg)	(1.6)	(0.4)	(1.7)	(0.4)	<0.001 ^b
Vitamin B12 (µg)	4.1	3.3 – 5.5	4.8	3.5 – 6.1	0.015 ^a
Folic acid (µg)	158.9	136.7 – 195.5	191.2	165.0 – 240.9	<0.001 ^a
Pantothenic acid (mg)	(4.0)	(1.1)	(4.7)	(1.4)	<0.001 ^b
Biotin (µg)	(23.6)	(7.4)	(29.2)	(8.8)	<0.001 ^b
Calcium (mg)	(882.4)	(317.6)	(1112.2)	(390.9)	<0.001 ^b
Iron (mg)	7.1	6.2 -8.6	8.2	7.1 – 10.0	<0.001 ^a
Zinc (mg)	(8.6)	(2.1)	(9.9)	(2.4)	<0.001 ^b
Potassium (mg)	(2516.3)	(606.3)	(2989.7)	(730.4)	<0.001 ^b
Magnesium (mg)	(232.7)	(53.1)	(286.2)	(70.8)	<0.001 ^b
Phosphorus (mg)	(1116.7)	(273.0)	(1347.7)	(354.0)	<0.001 ^b
Selenium (µg)	(53.2)	(13.8)	(59.1)	(16.0)	<0.001 ^b

Iodine (μg)	(157.9)	(49.1)	(181.8)	(57.2)	0.001 ^b
IQR, interquartile range					
SD, standard deviation					
RE, retinol equivalent					
NE, niacin equivalent					
^a Mann-Whitney U test					
^b Independent samples T-test					
[†] Altogether 3 cases had answered under 70% of the questions chosen for the index					

Supplementary table 2. Correlations between the diet quality score and absolute and energy adjusted nutrient intakes calculated from the five day food diaries.

Diet quality score (<i>n</i>=263[†])		
Nutrient	Correlation coefficient, <i>r</i>	<i>P</i>-value
Energy (MJ)	0.119	0.055 ^a
Protein		
g	0.325	<0.001 ^b
E%	0.353	<0.001 ^a
Carbohydrates		
g	0.137	0.026 ^a
E%	0.059	0.342 ^a
Sucrose		
g	-0.204	<0.001 ^b
E%	-0.339	<0.001 ^a
Fat		
g	-0.047	0.452 ^a
E%	-0.251	<0.001 ^a
SFA		
g	-0.086	0.165
E%	-0.302	<0.001 ^a
MUFA		
g	0.010	0.872 ^a
E%	-0.90	0.145 ^b
PUFA		
g	0.125	0.042 ^a
E%	0.047	0.451 ^b
Fibre		
g	0.436	<0.001 ^b
g/MJ	0.447	<0.001 ^a
Cholesterol		
mg	-0.130	0.035 ^b
mg/MJ	-0.219	<0.001 ^b

Vitamin C		
mg	0.214	<0.001 ^b
mg/MJ	0.175	0.004 ^b
Vitamin D		
µg	0.282	<0.001 ^b
µg/MJ	0.285	<0.001 ^a
Vitamin E		
mg	0.308	<0.001 ^b
mg/MJ	0.263	<0.001 ^b
Vitamin A		
RE	0.173	0.005
RE/MJ	0.135	0.028 ^b
Thiamin		
mg	0.333	<0.001 ^b
mg/MJ	0.328	<0.001 ^a
Riboflavin		
mg	0.375	<0.001 ^a
mg/MJ	0.367	<0.001 ^a
Niacin		
NE	0.293	<0.001 ^b
NE/MJ	0.294	<0.001 ^a
Vitamin B6		
mg	0.259	<0.001 ^a
mg/MJ	0.212	<0.001 ^a
Vitamin B12		
µg	0.215	<0.001 ^b
µg/MJ	0.174	0.005 ^b
Folic acid		
µg	0.400	<0.001 ^b
µg/MJ	0.376	<0.001 ^b
Pantothenic acid		
mg	0.359	<0.001 ^a
mg/MJ	0.355	<0.001 ^a

Biotin		
μg	0.408	<0.001 ^a
μg/MJ	0.405	<0.001 ^a
Calcium		
mg	0.401	<0.001 ^a
mg/MJ	0.400	<0.001 ^a
Iron		
mg	0.277	<0.001 ^b
mg/MJ	0.250	<0.001 ^b
Zinc		
mg	0.348	<0.001 ^a
mg/MJ	0.392	<0.001 ^a
Potassium		
mg	0.422	<0.001 ^a
mg/MJ	0.465	<0.001 ^a
Magnesium		
mg	0.471	<0.001 ^a
mg/MJ	0.486	<0.001 ^b
Phosphorus		
mg	0.434	<0.001 ^a
mg/MJ	0.496	<0.001 ^a
Selenium		
μg	0.249	<0.001 ^a
μg/MJ	0.210	<0.001 ^a
Iodine		
μg	0.321	<0.001 ^a
μg/MJ	0.292	<0.001 ^a

MJ, megajoule

E%, percent of energy intake

RE, retinol equivalent

NE, niacin equivalent

^a Pearson correlation

^b Spearman correlation

[†] Altogether 3 cases had answered under 70% of the questions chosen for the index

Supplementary table 3. Associations between the diet quality scores and diet quality categories and gender, school grade and weight status of the children.

	Diet quality score (<i>n</i> =263 [†])				Diet quality category				<i>P</i> -value
	Total <i>n</i>	Mean	SD	<i>P</i> -value	Poor (<6 points, <i>n</i> =132 [†])		Good (≥6 points, <i>n</i> =131 [†])		
					<i>n</i>	%	<i>n</i>	%	
Gender				0.738 ^a					0.109 ^b
Female	126	6.1	2.7		70	53.0	56	42.8	
Male	137	6.2	2.7		62	47.0	75	57.3	
School grade				0.004 ^c					<0.001 ^d
1 st	52	6.6	2.5		21	15.9	31	23.7	
2 nd	56	6.5	2.8		25	18.9	31	23.7	
3 rd	54	5.6	2.9		35	26.5	19	14.5	
4 th	36	7.2	2.3		10	7.6	26	19.9	
5 th	35	5.9	2.4		19	14.4	16	12.2	
6 th	30	4.9	2.5		22	16.7	8	6.1	
Weight status ^e				0.853 ^c					0.356 ^d
Underweight	13	5.7	3.5		8	6.1	5	3.8	
Normal weight	195	6.1	2.7		101	76.5	94	71.8	
Overweight	42	6.2	2.1		19	14.4	23	17.6	
Obese	13	6.7	2.7		4	3.0	9	6.9	

SD, standard deviation

^a Independent Samples T-test

^b Fisher's Exact test

^c ANOVA

^d Chi-Squared test

^e According to Finnish growth reference curves ⁽¹⁶⁾, underweight was defined as BMI SDS ≤ -1.6482 for girls and BMI SDS ≤ -1.8344 for boys, normal weight as BMI SDS -1.6481-1.1628 for girls and BMI SDS -1.8343-0.7783 for boys, overweight as BMI SDS 1.1629-2.1064 for girls and BMI SDS 0.7784-1.7015 for boys, and obesity as BMI SDS ≥ 2.1065 for girls and BMI SDS ≥ 1.7016 for boys.

[†] Altogether 3 cases had answered under 70% of the questions chosen for the index