Supplementary Table 2. Nutrient constraints applied during all linear optimization procedures.

Upper and/or lower limits that the optimized food supply had to comply with		
	Lower limit	Upper limit
Energy (kcal)[a]	674	674
Carbohydrates (%E)	45	60
Fat (%E)	22	40
Protein (%E)	10	20
Fiber (%E)[c]	2	—
Saturated fatty acids (%E)	—	10
Mono/disaccharides (%E)		10
Mono unsaturated fatty acids (%E)	10	20
Poly unsaturated fatty acids (%E)	5	10
Vitamin A (µg)[b]	188	—
Vitamin D (µg)[b]	3.1	—
Vitamin E (mg)[b]	2.2	—
Thiamine (mg)[b]	0.3	—
Riboflavin (mg)[b]	0.4	—
Vitamin C (mg)[b]	16.0	—
Niacin (mg)[b]	4.6	—
Vitamin B6 (mg)[b]	0.4	—
Vitamin B12 (µg)[b]	0.6	—
Folate (µg)[b]	62.7	—
Phosphor (mg)[b]	199	—
Iodine (µg)[b]	43.2	—
Iron (mg)[b]	3.4	—
Calcium (mg)[b]	282	—
Potassium (mg)[b]	971	—
Magnesium (mg)[b]	87.7	—
Salt (g)[c]	—	3.6
Selenium (µg)[b]	12.5	—
Zink (mg)[b]	3.4	—
Omega-3 fatty acids (%E)[b]	3.3	—

[a]Based on 30% of daily estimated energy requirement (EER) for an average pupil, 10-12 years, both sexes.
[b]Lower limit based on 30% of daily recommended intakes (RIs) for an average pupil, 10-12 years, both sexes.
[c]Upper limit based on 30% of daily recommended intake (RIs) for an average pupil, 10-12 years, both sexes.