

Table S1. Dietary reference values applied as constraints in the linear programming models.

	Unit	Lower limit	Upper limit
Energy ^{a,b}	kcal	2410	
Carbohydrates ^a	g	271	361.0
Fat ^a	g	66.9	107.0
Protein ^a	g	60.3	120.5
Fiber ^a	g	26.0	
SFA ^a	g		26.8
MUFA ^a	g	26.8	53.6
PUFA ^a	g	13.4	26.8
Vitamin A ^b	µg	726	
Vitamin E ^b	mg	8.4	
Tiamine ^b	mg	1.2	
Riboflavine ^b	mg	1.4	
Vitamin C ^b	mg	66.7	
Niacin ^b	mg	16.2	
B6 ^b	mg	1.3	
B12 ^a	µg	2.0	
Folate ^b	µg	285	
Phosphora	mg	668	
Iodine	µg	150	
Iron ^b	mg	12.2	
Calcium ^a	mg	868	
Potassium ^b	mg	3.2	
Magnesium ^b	mg	301	
Sodium	mg		6.0
Selenium ^b	µg	49.6	
Zink ^b	mg	9.2	
Added sugars	g		60.3

^aAdjusted for age differences, with 34% of pupils in grade 5, 34% in grade 8 and 32% in grade 11.

^bAdjusted for age and sex differences with 55% females and 45% males.