

Table S1 Primer pairs targeting bacterial 16S rRNA genes

Target microorganism ^a	Primer sequence (5'→3') ^{b,c}	Product size (bp)	Ta	Efficiency (%)	Reference
Total bacteria (Universal 180)	F: AAACCTCAAAGGAATTGACGG R: CTCACRRCACGAGCTGAC	180	60	91	(Bacchetti De Gregoris et al. 2011) [80]
Firmicutes (P)	F: TGAAACTYAAAGGAATTGACG R: ACCATGCACCACCTGTC	200	64	87	(Bacchetti De Gregoris et al. 2011) [80]
Bacteroidetes (P)	F: CRAACAGGATTAGATACCCT R: GGTAAGGTTCTCGCGTAT	240	64	74	(Bacchetti De Gregoris et al. 2011) [80]
γ -Proteobacteria (C)	F: TCGTCAGCTCGTGTGTGTA R: CGTAAGGGCCATGATG	170	53	74	(Bacchetti De Gregoris et al. 2011) [80]
<i>Prevotella</i> spp. (G)	F: GGTTCTGAGAGGAAGGTCCCC R: TCCTGCACGCTACTTGGCTG	267	56	81	(Stevenson and Weimer 2007) [81]
<i>Roseburia</i> (G)	F: GCGGTRCGGCAAGTCTGA R: CCTCCGACACTCTAGTMCGAC	80	55	86	(Walker et al. 2005; Ramirez-Farias et al. 2008) [82,83]
<i>Ruminococcus</i> (G)	F: GCGGCTCTCTGGGCTTT R: CCAGGTGGATWACTTATTGTGTAA	156	63	68	(Ramirez-Farias et al. 2008) [83]
<i>Faecalibacterium</i> (G)	F: GGAGGAAGAAGGTCTTCGG R: AATTCCGCCTACCTCTGCACT	247	63	79	(Ramirez-Farias et al. 2008; Wang et al. 1996) [83,84]
<i>Bacteroides</i> (G)	F: GAAGGTCCCCCACATTG R: CGCKACTTGGCTGGTTCAG	103	64	89	(Ramirez-Farias et al. 2008; Bartosch et al. 2004) [83,85]
<i>Akkermansia</i> (G)	F: CAGCACGTGAAGGTGGGGAC R: CCTTGCGGTTGGCTTCAGAT	349	60	91	(Collado et al. 2007) [86]
<i>Bifidobacteria</i> (G)	F: TCGCGTCYGGTGTGAAAG R: GGTGTTCTTCCCAGATATCTACA	601	64	79	(Matsuki et al. 2002; Rinttila et al. 2004) [87,88]
<i>Lactobacillus</i> spp. (G)	F: AGCAGTAGGGAATCTTCCA R: CACCGCTACACATGGAG	341	56	84	(Walter et al. 2001; Heilig et al. 2002) [89,90]

Note: ^aP=phylum, C=class and G=genus; ^bF and R represent forward and reverse primers, respectively.

^cDegenerate base covering: R = A/G; Y = T/C; M = A/C; W = A/T; K = T/G

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Table S2 Demographics of school-aged children in the control and intervention groups at baseline

Demographic variables	mean (sd)		p-value	Test
	WR (n = 33)	SLR (n = 52)		
Age (years)	7.02 (0.71)	10.52 (0.82)	< 0.0001	Wilcoxon rank sum test
Gender (n, boys/girls)	14/19	17/35	0.49	Fisher's exact test
Weight (kg)	27.36 (11.2)	40.18 (10.99)	< 0.0001	Wilcoxon rank sum test
Height (cm)	122.11 (8.15)	144.68 (8.88)	< 0.0001	t-test
BMI (kg/m2)	17.9 (4.99)	18.97 (3.93)	0.03	Wilcoxon rank sum test
BMI zscore (n)				
Severe thinness	0	0	0.42	Fisher's exact test
Thinness	0	3		
Normal	20	32		
Overweight (OV)	6	11		
Obese (OB)	7	6		
Ethnicity (n)				
Akha	11	15	0.98	Fisher's exact test
Chinese	9	14		
Lahu	1	1		
Thai	5	9		
Thai Yai	7	13		
Delivery mode (n)				
Vaginal delivery	18	35	0.26	Fisher's exact test
Caesarean section	15	17		
Feeding type (n)				
Breastfeeding	22	47	0.02	Fisher's exact test
Formular feeding	8	3		
Mixed feeding	3	2		

A *p*-value less than 0.05 is statistically significant. Abbreviations: WR, white rice; SLR, Sinlek rice.

Table S3 Demographics of school-aged children in the control and intervention groups at week 4

Demographic variables	mean (sd)		p-value	Test
	WR (n = 33)	SLR (n = 52)		
Age (years)	7.08 (0.67)	10.6 (0.85)	< 0.0001	Wilcoxon rank sum test
Gender (n, boys/girls)	14/19	17/35	0.49	Fisher's exact test
Weight (kg)	27.36 (11.62)	42.54 (10.67)	< 0.0001	Wilcoxon rank sum test
Height (cm)	123.64 (8.28)	146.44 (9.12)	< 0.0001	t-test
BMI (kg/m2)	18.3 (5.01)	19.6 (3.71)	0.005	Wilcoxon rank sum test
BMI zscore (n)				
Severe thinness	0	0	0.5	Fisher's exact test
Thinness	0	0		
Normal	21	33		
Overweight (OV)	5	12		
Obese (OB)	7	7		
Ethnicity (n)				
Akha	11	15	0.98	Fisher's exact test
Chinese	9	14		
Lahu	1	1		
Thai	5	9		
Thai Yai	7	13		
Delivery mode (n)				
Vaginal delivery	18	35	0.26	Fisher's exact test
Caesarean section	15	17		
Feeding type (n)				
Breastfeeding	22	47	0.02	Fisher's exact test
Formular feeding	8	3		
Mixed feeding	3	2		

A *p*-value less than 0.05 is statistically significant. Abbreviations: WR, white rice; SLR, Sinlek rice.

Table S4 Demographics of school-aged children in the control and intervention groups at week 15

Demographic variables	mean (sd)		<i>p</i> -value	Test
	WR (n = 33)	SLR (n = 52)		
Age (years)	7.23 (0.71)	10.8 (0.85)	< 0.0001	Wilcoxon rank sum test
Gender (n, boys/girls)	14/19	17/35	0.49	Fisher's exact test
Weight (kg)	29.24 (11.35)	42.54 (10.67)	< 0.0001	Wilcoxon rank sum test
Height (cm)	123.88 (8.23)	146.65 (9.12)	< 0.0001	t-test
BMI (kg/m ²)	18.6 (4.87)	19.7 (3.73)	0.01	Wilcoxon rank sum test
BMI zscore (n)				
Severe thinness	0	0		
Thinness	1	0		
Normal	18	33	0.54	Fisher's exact test
Overweight (OV)	7	11		
Obese (OB)	7	8		
Ethnicity (n)				
Akha	11	15		
Chinese	9	14		
Lahu	1	1	0.98	Fisher's exact test
Thai	5	9		
Thai Yai	7	13		
Delivery mode (n)				
Vaginal delivery	18	35	0.26	Fisher's exact test
Caesarean section	15	17		
Feeding type (n)				
Breastfeeding	22	47		
Formular feeding	8	3	0.02	Fisher's exact test
Mixed feeding	3	2		

A *p*-value less than 0.05 is statistically significant. Abbreviations: WR, white rice; SLR, Sinlek rice.

Table S5 Demographics of school-aged children in the control and intervention groups at week 56

Demographic variables	mean (sd)		<i>p</i> -value	Test
	WR (n = 39)	SLR (n = 18)		
Age (years)	11.38 (0.61)	7.66 (0.48)	< 0.0001	Wilcoxon rank sum test
Gender (n, boys/girls)	16/23	8/10	1	Fisher's exact test
Weight (kg)	43.49 (11.12)	27.89 (9.62)	< 0.0001	Wilcoxon rank sum test
Height (cm)	144.22 (8.29)	121.81 (7.48)	< 0.0001	Wilcoxon rank sum test
BMI (kg/m ²)	20.7 (3.87)	18.49 (4.46)	0.01	Wilcoxon rank sum test
BMI zscore (n)				
Severe thinness	0	0		
Thinness	0	0		
Normal	19	10	0.55	Fisher's exact test
Overweight (OV)	14	4		
Obese (OB)	6	4		
Ethnicity (n)				
Akha	9	5		
Chinese	13	6		
Lahu	1	1	0.48	Fisher's exact test
Thai	9	1		
Thai Yai	7	5		
Delivery mode (n)				
Vaginal delivery	26	10	0.56	Fisher's exact test
Caesarean section	13	8		
Feeding type (n)				
Breastfeeding	37	11		
Formular feeding	1	4	0.004	Fisher's exact test
Mixed feeding	1	3		

A *p*-value less than 0.05 is statistically significant. Abbreviations: WR, white rice; SLR, Sinlek rice.

Table S6 Demographics of school-aged children in the control and intervention groups at week 61

Demographic variables	mean (sd)		<i>p</i> -value	Test
	WR (n = 39)	SLR (n = 18)		
Age (years)	11.43 (0.62)	7.67 (0.47)	< 0.0001	Wilcoxon rank sum test
Gender (n, boys/girls)	16/23	8/10	1	Fisher's exact test
Weight (kg)	44 (11.36)	28.06 (9.66)	< 0.0001	Wilcoxon rank sum test
Height (cm)	146.05 (9.47)	121.81 (7.48)	< 0.0001	Wilcoxon rank sum test
BMI (kg/m ²)	20.49 (3.87)	18.61 (4.44)	0.03	Wilcoxon rank sum test
BMI zscore (n)				
Severe thinness	1	0		
Thinness	0	0		
Normal	19	10	0.66	Fisher's exact test
Overweight (OV)	14	4		
Obese (OB)	5	4		
Ethnicity (n)				
Akha	9	5		
Chinese	13	6		
Lahu	1	1	0.48	Fisher's exact test
Thai	9	1		
Thai Yai	7	5		
Delivery mode (n)				
Vaginal delivery	26	10	0.56	Fisher's exact test
Caesarean section	13	8		
Feeding type (n)				
Breastfeeding	37	11		
Formular feeding	1	4	0.004	Fisher's exact test
Mixed feeding	1	3		

A *p*-value less than 0.05 is statistically significant. Abbreviations: WR, white rice; SLR, Sinlek rice.

Table S7 Demographics of school-aged children in the control and intervention groups at week 71

Demographic variables	mean (sd)		<i>p</i> -value	Test
	WR (n = 39)	SLR (n = 18)		
Age (years)	11.57 (0.55)	7.8 (0.44)	< 0.0001	Wilcoxon rank sum test
Gender (n, boys/girls)	16/23	8/10	1	Fisher's exact test
Weight (kg)	44.03 (11.6)	28.39 (9.38)	< 0.0001	Wilcoxon rank sum test
Height (cm)	146.06 (9.49)	121.86 (7.49)	< 0.0001	Wilcoxon rank sum test
BMI (kg/m ²)	20.51 (4.31)	18.85 (4.37)	0.07	Wilcoxon rank sum test
BMI zscore (n)				
Severe thinness	1	0		
Thinness	0	0		
Normal	20	7	0.66	Fisher's exact test
Overweight (OV)	13	7		
Obese (OB)	5	4		
Ethnicity (n)				
Akha	9	5		
Lahu	13	6		
Chinese	1	1	0.48	Fisher's exact test
Thai	9	1		
Thai Yai	7	5		
Delivery mode (n)				
Vaginal delivery	26	10	0.56	Fisher's exact test
Caesarean section	13	8		
Feeding type (n)				
Breastfeeding	37	11		
Formular feeding	1	4	0.004	Fisher's exact test
Mixed feeding	1	3		

A *p*-value less than 0.05 is statistically significant. Abbreviations: WR, white rice; SLR, Sinlek rice.