

**Table S1.** Anthropometric results by bioimpedance analysis in regards of colonization.

	Colonized		Non-colonized		T test
	Mean	SD	Mean	SD	
BMI (kg/m <sup>2</sup> )	46.2	6.3	45.2	6.7	Ns
Abdominal circumference (cm)	132.7	13.3	128.7	14.2	Ns
FM%	50.1	4.9	50.3	5.2	Ns
FFM%	49.9	4.9	49.7	5.2	Ns
SKM%	27.8	2.9	27.7	3.2	Ns
Visceral fat area (cm <sup>2</sup> )	260.4	30.2	257.9	35.8	Ns
Phase angle	5.3	0.7	5.4	0.7	Ns

SD = standard deviation; BMI= body mass index; FM%: fat mass %; FFM%; fat free mass %, SKM%, skeletal muscle mass %; VFA: visceral fat area. Ns: no statistical differences found between groups.

**Table S2.** Daily intake of antioxidant nutrients clustered by colonization status.

	Colonized (n = 48)		Non-colonized (n = 49)		WT
	Median	1Q, 3Q	Median	1Q, 3Q	
Vitamin A (μg)	702.0	536.0, 903.0	688.0	484.8, 859.5	0.13
Vitamin C (mg)	87.3	58.3, 118.0	85.7	57.9, 118.0	0.21
Vitamin E (mg)	5.5	4.0, 8.3	5.5	3.6, 8.1	0.06
ω3/ω6 ratio	0.17	0.13, 0.28	0.18	0.13, .27	0.55
Copper (mg)	1.2	0.9, 2.1	1.2	0.9, 1.8	0.23
Zinc (mg)	8.5	6.6, 11.2	8.0	6.4, 10.5	0.06
Manganese (mg)	2.7	2.1, 6.5	2.6	2.0, 5.4	0.37
Selenium (μg)	104.0	77.6, 138.0	105.5	77.9, 135.5	0.34

1Q, 3Q: first and third quartiles \*Statistically significant (p < 0.05) between groups. WT: Wilcoxon rank sum test.

**Table S3.** Redox parameters clustered in regards of the fulfilment of DRI of antioxidants.

	None (n = 32)	Vitamin A (n = 4)	Vitamin C (n = 23)	Vitamin A + C (n = 22)	Vitamin A+C+E (n = 3)	KW T
MDA (ng/mL)	418.3	450.0	401.2	388.1	431.7	Ns
GSH/GSSG	0.38	0.48	0.35	0.37	0.33	Ns
TAC (mM)	3.31	3.59	3.26	3.24	3.84	Ns
SOD-3 (U/mL)	1.47	1.41	1.36	1.48	0.93	Ns
NOX (μG/mL)	30.3	33.9	37.4	33.0	27.0	Ns

KWT= Kruskal-Wallis test. Ns: no statistical differences found.