

Table S1 baseline diet data of participants prior to each intervention.

Nutrient	C	RO	AOK	<i>p</i>
Energy (kcal)	1732 ± 99	1701 ± 99	1665 ± 99	0.632
Fats (g)	68.6 ± 5.4	66.3 ± 5.4	67.5 ± 5.4	0.881
Saturated fatty acids (g)	24.9 ± 2.5	23.7 ± 2.5	26.2 ± 2.5	0.526
Monounsaturated fatty acids (g)	24.7 ± 2.2	24.6 ± 2.2	23.5 ± 2.2	0.797
Polyunsaturated fatty acids (g)	14.5 ± 1.2	13.6 ± 1.2	13.6 ± 1.2	0.642
Cholesterol (mg)	293 ± 46	322 ± 46	322 ± 46	0.452
Protein (g)	76.1 ± 6.4	80.5 ± 6.4	74.6 ± 6.4	0.258
Total carbohydrates (g)	211 ± 12	205 ± 12	204 ± 12	0.837
Available carbohydrates (g)	193 ± 12	185 ± 12	185 ± 12	0.765
Total sugar (g)	58.5 ± 5.7	53.5 ± 5.7	55.5 ± 5.7	0.738
Dietary fiber (g)	20.8 ± 2.0	20.7 ± 2.0	19.5 ± 2.0	0.722
Insoluble dietary fiber (g)	14.7 ± 1.5	15.3 ± 1.5	13.8 ± 1.5	0.605
Soluble dietary fiber (g)	5.8 ± 0.5	4.9 ± 0.5	5.2 ± 0.5	0.220
Sodium (mg)	2655 ± 322	2857 ± 322	2424 ± 322	0.178
Calcium (mg)	648 ± 65	626 ± 65	588 ± 65	0.626

Values presented as mean ± standard error. All statistical tests done by linear mixed effect model, paired with post-hoc Tukey HSD test. AOK – autoclaved okara flour substituted biscuits; C – control biscuits; RO – biovalorized okara flour-substituted biscuits.

Table S2 iAUC and AUC values not provided in the journal article.

Biomarker	C	RO	AOK	<i>p</i>
Glucose AUC (mmol/L · min) ¹	1344 (1251, 1437) ^b	1569 (1475, 1662) ^a	1475 (1381, 1568) ^{ab}	0.005
Insulin iAUC (mIU/L · min) ¹	10260 (7020, 13499) ^a	8911 (5672, 12151) ^{ab}	8707 (5467, 11946) ^b	0.028
Insulin AUC (mIU/L · min) ¹	10246 (6483, 14009)	13576 (9813, 17339)	11420 (7657, 15183)	0.450
Acetic acid iAUC (μmol/L · min) ²	1447 (-308, 3202)	2510 (456, 4564)	2405 (32, 4778)	0.080
Propionic acid iAUC (μmol/L · min) ²	753 (246, 1260)	1145 (664, 1626)	1329 (752, 1906)	0.214
Butyric acid iAUC (μmol/L · min) ²	76 (32, 121)	104 (31, 178)	47 (21, 74)	0.127
Total serum SCFA iAUC (μmol/L · min) ²	1782 (-377, 3941) ^b	3280 (823, 5737) ^a	3246 (430, 6062) ^{ab}	0.063
Acetic acid AUC (μmol/L · min) ²	14617 (11745, 17489)	15850 (12745, 18955)	16855 (13869, 19841)	0.127
Propionic acid AUC (μmol/L · min) ²	4318 (3723, 4913)	4581 (4073, 5089)	4804 (4282, 5326)	0.074
Butyric acid AUC (μmol/L · min) ²	320 (252, 388)	342 (275, 409)	266 (233, 299)	0.127
Total serum SCFA AUC (μmol/L · min) ²	19234 (16116, 22352)	20773 (17359, 24187)	21924 (18540, 25308)	0.091
TC iAUC (mmol/L · min) ²	6.0 (0.2, 11.8)	5.7 (0.8, 10.7)	8.8 (1.5, 16.0)	0.563
HDL-C iAUC (mmol/L · min) ²	5.9 (0.4, 11.3)	2.0 (0.6, 3.4)	2.1 (-0.3, 4.5)	0.482
LDL-C iAUC (mmol/L · min) ²	0.1 (-0.1, 0.3)	1.2 (0.1, 2.2)	1.1 (0.0, 2.2)	0.122
TC AUC (mmol/L · min) ²	1192 (1039, 1345)	1233 (1081, 1385)	1198 (1057, 1339)	0.177
HDL-C AUC (mmol/L · min) ¹	339 (266, 413)	346 (272, 419)	335 (261, 408)	0.369
LDL-C AUC (mmol/L · min) ¹	654 (524, 784)	681 (551, 811)	677 (546, 807)	0.451
TG AUC (mmol/L · min) ²	423 (302, 544)	432 (312, 552)	393 (282, 504)	0.129

Values presented as mean (95% CI). Different alphabet superscript indicates a significant difference across the comparisons within the same row. Superscript a indicates the highest group across the row. Superscript 1 indicates statistical test done by linear mixed effect model, paired with post-hoc Tukey HSD test. Superscript 2 indicates statistical test done by non-parametric Friedman test and Wilcoxon signed rank test with Bonferroni *p* adjustment. AOK – autoclaved okara flour substituted biscuits; AUC – area under curve; C – control biscuits; HDL-C – high-density lipoprotein cholesterol; iAUC – incremental area under curve; LDL-C – low-density lipoprotein cholesterol; RO – biovalorized okara flour-substituted biscuits; SCFA – short-chain fatty acids; TC – total cholesterol; TG – triglyceride.