

Table 4.14 Biochemical results for all the groups before and after the intervention.

Variables	Before (pre-testing, mean $\pm$ SD)					After (post-testing, mean $\pm$ SD)					
	Normal range	Vetkoek n=40	CSB n=37	Sejo n=82	PSNP n=30	Fruit n=18	Vetkoek n=40	CSB n=37	Sejo n=82	PSNP n=30	Fruit n=18
Red blood cell count	4.0-5.4 $\times 10^6$ /mm ³	4.6 $\pm$ 0.6 ^c	4.7 $\pm$ 0.5 ^b	4.9 $\pm$ 0.4 _{a,b,c}	4.6 $\pm$ 0.3 ^a	4.9 $\pm$ 0.3	4.7 $\pm$ 0.3	4.8 $\pm$ 0.4	4.8 $\pm$ 0.4 ^d	4.7 $\pm$ 0.3 ^d	4.8 $\pm$ 0.3
Haemoglobin	12.4-14.0 g/dl	13.5 $\pm$ 1.7 ^c	13.1 $\pm$ 1.7 ^b	13.9 $\pm$ 0.9 _{a,b,c}	13.2 $\pm$ 0.8 ^a	13.8 $\pm$ 0.9	12.9 $\pm$ 0.7 ^{d,e}	13.4 $\pm$ 0.9 ^d	13.7 $\pm$ 0.8 ^{e,f}	12.6 $\pm$ 2.3	13.2 $\pm$ 0.8 ^f
Haematocrit	36.0-44.0 %	0.40 $\pm$ 0.05 ^c	0.40 $\pm$ 0.04 ^b	42.6 $\pm$ 0.3 _{a,b,c}	0.40 $\pm$ 0.3 ^a	41.3 $\pm$ 2.8	38.4 $\pm$ 1.9 ^g	36.5 $\pm$ 7.3 ^{e,f}	41.4 $\pm$ 6.0 ^{d,e,g}	39.2 $\pm$ 2.4 ^{d,f}	39.2 $\pm$ 2.4
Mean red cell volume	77-91 fl	85.9 $\pm$ 5.0 ^b	84.2 $\pm$ 4.9 ^a	87.3 $\pm$ 4.4 ^{a,b}	85.6 $\pm$ 4.2	84.5 $\pm$ 2.2	83.0 $\pm$ 3.9	83.7 $\pm$ 4.0	84.5 $\pm$ 7.2	84.3 $\pm$ 4.1	81.9 $\pm$ 2.6
White cell count	4.5-13.5 μ l $\times 10^6$ /mm ³	6.8 $\pm$ 2.8 ^{a,d}	5.41.3 ^{a,c}	5.1 $\pm$ 2.2 ^{b,d}	6.6 $\pm$ 1.7 ^{b,c}	6.4 $\pm$ 2.1	6.6 $\pm$ 2.3	6.6 $\pm$ 1.6	5.1 $\pm$ 2.2	6.6 $\pm$ 1.7	6.0 $\pm$ 1.7
Total protein	64.83 g/l	73.2 $\pm$ 11.1 ^b	75.2 $\pm$ 6.7 ^a	78.8 $\pm$ 7.5 ^{a,b}	77.3 $\pm$ 5.8	78.1 $\pm$ 8.0	75.5 $\pm$ 6.8 ^c	78.4 $\pm$ 5.2 ^c	77.8 $\pm$ 6.0	77.3 $\pm$ 7.3	75.4 $\pm$ 6.5
Albumin	37-52 g/l	43.2 $\pm$ 5.8 ^c	43.4 $\pm$ 4.6 ^b	46.4 $\pm$ 7.1 _{a,b,c}	43.4 $\pm$ 4.2 ^a	45.5 $\pm$ 6.4	44.2 $\pm$ 7.0 ^{d,g}	47.6 $\pm$ 5.7 ^{d,f}	46.4 $\pm$ 5.7 ^{e,g}	44.1 $\pm$ 5.2 ^{e,f}	44.6 $\pm$ 5.9
Total cholesterol	<5.2 mmol/l	3.6 $\pm$ 0.8	3.8 $\pm$ 0.8	4.7 $\pm$ 4.5	3.8 $\pm$ 0.8	3.9 $\pm$ 0.7	3.6 $\pm$ 0.8 ^b	3.7 $\pm$ 0.7	3.9 $\pm$ 0.6 ^{a,b}	3.5 $\pm$ 0.7 ^a	4.1 $\pm$ 0.9
HDL	>0.9 mmol/l	1.1 $\pm$ 0.3 ^c	1.1 $\pm$ 0.3 ^b	0.84 $\pm$ 0.5 _{a,b,c}	1.0 $\pm$ 0.3 ^a	1.0 $\pm$ 0.3	1.4 $\pm$ 0.5	1.5 $\pm$ 0.4 ^e	1.2 $\pm$ 0.3 ^{d,e,f,g}	1.3 $\pm$ 0.4 ^d	1.4 $\pm$ 0.3 ^{f,g}
Triglycerides	<1.80 mmol/l	0.69 $\pm$ 0.2 ^{a,d}	1.1 $\pm$ 0.4 ^{a,c}	1.1 $\pm$ 0.7 ^{b,d}	0.75 $\pm$ 0.4 _{b,c}	0.93 $\pm$ 0.9	0.76 $\pm$ 0.3 ^{f,h}	0.98 $\pm$ 0.4 ^{f,g}	1.3 $\pm$ 0.5 ^{e,g,h,i}	1.0 $\pm$ 0.5 ^e	0.88 $\pm$ 0.4 ^f
Ferritin	12-200 μ g/l	33.6 $\pm$ 18.9	31.2 $\pm$ 16.9	99.4 $\pm$ 462.2	29.4 $\pm$ 18.2	25.4 $\pm$ 13.7	32.0 $\pm$ 21.2 ^c	36.7 $\pm$ 20.7 ^b	34.0 $\pm$ 26.9 _{a,b,c,d}	31.1 $\pm$ 21.1 ^a	32.7 $\pm$ 15.8 _d
Transferrin	2-4 g/l	3.0 $\pm$ 0.6 ^d	2.8 $\pm$ 0.5 ^{a,b,c}	3.3 $\pm$ 0.5 ^{c,d}	3.2 $\pm$ 0.4 ^b	3.4 $\pm$ 0.6 ^a	3.1 $\pm$ 0.5 ^g	3.1 $\pm$ 0.4 ^f	3.4 $\pm$ 0.4 ^{e,f,g}	3.2 $\pm$ 0.5 ^e	3.2 $\pm$ 0.5
Serum iron	9-31 μ mol/l	31.2 $\pm$ 23.3 _{a,d}	33.6 $\pm$ 5.1 ^{a,c}	17.5 $\pm$ 5.8 _{b,c,d}	25.5 $\pm$ 11.7 _b	36.8 $\pm$ 26.0	30.1 $\pm$ 14.9 ^{f,i}	14.6 $\pm$ 5.0 ^{f,g,h}	17.6 $\pm$ 6.8 _{e,g,i,j}	33.3 $\pm$ 19.4 _{e,h}	33.6 $\pm$ 14.9 ^f

 μ l - microlitre

mmol - millimol

fl - fluid

 μ mol/l - micromol

a, b, c – statistical significant differences