

ESM Table 2. Zinc, insulin, proinsulin and C-peptide:insulin after 14 days of zinc supplementation

	RR (n=23)	RW (n=25)	WW (n=7)
Fasting serum zinc, $\mu\text{mol/l}$	13.2 (12.6, 14.5)	13.6 (12.2, 15.8)	12.2 (11.6, 14.7)
Insulin AUC_{5min}, pmol min l^{-1}	1309.83 (945.21, 2200.18)	1038.28 (699.36, 1861.95)	1529.29 (1238.29, 2652.30)
Relative change from baseline, ratio (95% CI)	0.91 (0.78 to 1.07); P=0.26	1.20 (1.02 to 1.39); P =0.021	1.01 (0.73 to 1.30); P =0.96
Relative change vs. RR, ratio (95% CI)	reference	1.31 (1.05 to 1.65); P =0.021	1.10 (0.80 to 1.54); P =0.54
Insulin AUC_{10min}, pmol min l^{-1}	3173.87 (2277.27, 4864.28)	2664.80 (1653.60, 3732.94)	3684.32 (3410.69, 6150.49)
Relative change from baseline, ratio (95% CI)	0.98 (0.86 to 1.09); P =0.67	1.17 (1.04 to 1.31); P =0.007	1.05 (0.82 to 1.27); P =0.70
Relative change vs. RR, ratio (95% CI)	reference	1.20 (1.01 to 1.43); P =0.037	1.07 (0.84 to 1.38); P =0.58
Proinsulin:insulin_{5min}	0.24 (0.20, 0.29)	0.27 (0.22, 0.40)	0.21 (0.18, 0.30)
Relative change from baseline, ratio (95% CI)	1.08 (0.96 to 1.19); P =0.17	0.89 (0.80 to 0.99); P =0.035	0.99 (0.80 to 1.18); P =0.92
Relative change vs. RR, ratio (95% CI)	reference	0.83 (0.71 to 0.97); P =0.019	0.92 (0.74 to 1.15); P =0.45
Proinsulin:insulin_{10min}	0.38 (0.33, 0.45)	0.46 (0.37, 0.67)	0.27 (0.25, 0.38)
Relative change from baseline, ratio (95% CI)	1.00 (0.89 to 1.11); P =0.98	0.90 (0.80 to 1.00); P =0.076	0.73 (0.58 to 0.87); P =0.002
Relative change vs. RR, ratio (95% CI)	reference	0.90 (0.76 to 1.07); P =0.23	0.72 (0.57 to 0.92); P =0.009
C-peptide:insulin_{5min}, $\text{nmol/pmol}^{\text{a}}$	0.057 (0.047, 0.072)	0.063 (0.056, 0.075)	0.051 (0.043, 0.066)
Change from baseline, ratio (95% CI)	1.06 (0.98, 1.16); P=0.15	0.93 (0.86, 1.01); P =0.077	0.88 (0.76, 1.02); P =0.092
Relative change vs. RR, ratio (95% CI)	reference	0.87 (0.77, 0.99); P =0.033	0.83 (0.69, 0.99); P =0.038
C-peptide:insulin_{10min}, $\text{nmol/pmol}^{\text{b}}$	0.078 (0.060, 0.11)	0.095 (0.078, 0.13)	0.074 (0.053, 0.083)
Change from baseline, ratio (95% CI)	1.01 (0.89 to 1.14); P=0.90	0.97 (0.86, 1.10); P =0.66	0.69 (0.56, 0.87); P =0.002
Relative change vs. RR, ratio (95% CI)	reference	0.96 (0.80, 1.16); P =0.70	0.69 (0.53, 0.90); P =0.008

Median (p25, p75) zinc, AUC_{insulin}, proinsulin:insulin, and C-peptide:insulin shown.

Relative change in AUC_{insulin}, proinsulin:insulin adjusted for age, body mass index and fasting ln(Homeostasis Model of Assessment – Insulin Resistance).

Relative change in C-peptide:insulin adjusted for age, body mass index, fasting insulin, and fasting C-peptide.

^a n=24 for CT genotype

^b n=23 for CT genotype