

**Supplementary Table S1.** General Characteristics of Participants Stratified by Serum Vitamin B12 Level, n=92

Variables	Vitamin B12		P-value
	High serum vitamin B12 > 404.0 pg/ml	Low serum vitamin B12 ≤ 404.0 pg/ml	
<b>Anthropometric Measurements</b>			
BMI (kg/m <sup>2</sup> )	25.6 ± 6.9	31.8 ± 8.2	<0.001
WHR (ratio)	0.7 ± 0.1	0.8 ± 0.1	0.05
Body Fat (%)	39.7 ± 8.9	45.6 ± 8.8	0.003
Muscle mass (%)	30.4 ± 6.3	26.2 ± 6.7	0.006
<b>Blood Analysis</b>			
Total cholesterol (mmol/l)	3.6 ± 1.6	4.6 ± 1.3	0.003
HDL- cholesterol (mmol/l)	0.9 ± 0.3	1.1 ± 0.3	0.096
LDL- cholesterol (mmol/l)	2.5 ± 1.3	3.3 ± 1.2	0.008
Total cholesterol/HDL ratio	3.9 ± 1.2	4.6 ± 2.0	0.06
Triglyceride (mmol/l) #	0.5 (0.4 - 0.8)	0.9 (0.7 - 1.1)	<0.001
FBG (mmol/l)	4.6 ± 0.9	4.7 ± 0.5	0.237
Insulin (μIU/mL) #	7.3 (5.5 - 13.7)	12.5 (8.6 - 18.3)	0.007
HOMA-IR #	1.3 (1.0 - 3.0)	2.5 (1.5 - 3.9)	0.006
HOMA-β #	142.4 (90.7 - 208.7)	211.9 (135.7 - 310.6)	0.007
Vitamin B12 (pg/ml)	632.2 (474.3 - 724.1)	310.7 (267.9 - 359.7)	<0.001
<b>Dietary History</b>			
Energy intake (kcal/day)	3495.1 (2790.1 - 4454.9)	3383.2 (2658.3 - 4499.0)	0.93
Fat intake (%)	36.6 (32.7 - 41.2)	42.0 (34.4 - 46.7)	0.04
Vitamin B12 (mg/day)	8.7 (6.2 - 13.2)	7.6 (4.9 - 13.1)	0.46
Dairy (gm/1000kcal)	84.5 (53.1 - 132.8)	92.7 (51.6 - 123.8)	0.96
Fruit (gm/1000kcal)	126.5 (72.4 - 211.5)	79.0 (50.7 - 156.9)	0.04
Vegetables (gm/1000kcal)	174.1 (104.9 - 220.6)	182.5 (137.8 - 283.7)	0.38
Egg (gm/day)	25.7 (10.0 - 68.2)	42.6 (9.8 - 74.6)	0.59
Chicken (gm/day)	87.7 (55.0 - 124.3)	56.0 (12.4 - 109.8)	0.02
Red meat (gm/day)	46.5 (31.3 - 71.4)	39.1 (12.3 - 68.9)	0.30

*Note:* Data presented as mean ± SD for normal variables whereas median (1st quartile – 3rd quartile) for non-normal variables; n (%) for categorical variables; # indicates non-normal variables. p<0.05 considered significant. Body mass index (BMI), waist-to-hip ratio (WHR), high-density lipoprotein (HDL), low-density lipoprotein (LDL), fasting blood glucose (FBG), homeostatic model assessment of insulin resistance (HOMA-IR), homeostatic model assessment of β-cell function (HOMA-β), Gram (gm), Milligram (mg).