

Table S1. Data from blood tests^a.

	Test	Unit	Active Group Ave.\pm SEM	Placebo Group Ave.\pm SEM	p value
Baseline.	AST.	(μ L)	22.4 \pm 1.9.	23.4 \pm 1.4.	0.68..
	ALT	(μ L)	18.3 \pm 1.5	16.4 \pm 1.2	0.31
	ALP	(μ L)	215.9 \pm 32.2	188.6 \pm 10.7	0.42
	LD	(μ L)	195.8 \pm 7	192.7 \pm 5	0.72
	γ -GT	(μ L)	30.8 \pm 6	26.8 \pm 3.1	0.56
	Cholinesterase	(μ L)	327.6 \pm 16	300.2 \pm 13.5	0.2
	Creatine Kinase	(μ L)	96.2 \pm 8	124.2 \pm 20.2	0.2
	Creatininine	(mg/d L)	0.7 \pm 0	0.7 \pm 0	0.61
	Blood Urea Nitrogen	(mg/d L)	18.8 \pm 0.9	16.2 \pm 1	0.07
	Uric Acid	(mg/d L)	4.8 \pm 0.3	4.4 \pm 0.2	0.33
	Total Cholesterol	(mg/d L)	216.6 \pm 7.4	209.2 \pm 6.9	0.47
	Triglyceride	(mg/d L)	115.9 \pm 15.4	94.6 \pm 9.8	0.25
	Serum Amylase	(μ L)	75.8 \pm 5.2	98 \pm 6.3	0.01
	Fasting glucose	(mg/d L)	104 \pm 3.3	97.1 \pm 1.8	0.07
	HDL cholesterol	(mg/d L)	69 \pm 4	76.4 \pm 4.1	0.2
	LDL cholesterol	(mg/d L)	124.6 \pm 6.3	112.8 \pm 5.1	0.15
	White Blood Cell	(/ μ L)	5504 \pm 289	5572 \pm 227.6	0.85
	Red Blood Cell	(\times 10 ⁴ / μ L)	448 \pm 9	433.1 \pm 9.3	0.26
	Hemoglobin	(g/dL)	14 \pm 0.2	13.7 \pm 0.3	0.5
	Hematocrit	(%)	42.7 \pm 0.7	41.7 \pm 0.8	0.32
	MCV	(fL)	95.6 \pm 0.8	96.4 \pm 1.2	0.61
	MCH	(pg)	31.2 \pm 0.3	31.8 \pm 0.5	0.35
	MCHC	(g/dL)	32.7 \pm 0.2	32.9 \pm 0.2	0.48
	Platelet	(\times 10 ⁴ / μ L)	22.4 \pm 1	22.2 \pm 1.1	0.88
Followup	AST	(μ L)	22.5 \pm 2.2	23.9 \pm 1.2	0.6

	ALT	(μ/L)	18.7±2.2	16.7±1	0.42
	ALP	(μ/L)	231.8±43.7	192.8±11	0.39
	LD	(μ/L)	200.2±6.6	202.4±6	0.8
	γ-GT	(μ/L)	35.7±9.1	28.2±3.2	0.44
	Cholinesterase	(μ/L)	321.8±16.6	299.5±12.4	0.29
	Creatine Kinase	(μ/L)	95.4±8.6	129.1±17.7	0.09
	Creatinine	(mg/dL)	0.8±0	0.7±0	0.82
	Blood Urea Nitrogen	(mg/dL)	17.6±1	16.9±1	0.6
	Uric Acid	(mg/dL)	4.8±0.2	4.8±0.2	0.86
	Total Cholesterol	(mg/dL)	217.2±7.6	215.1±7.4	0.84
	Triglyceride	(mg/dL)	131.7±13.7	104.7±13.6	0.17
	Serum Amylase	(μ/L)	82.4±7.3	96.6±6	0.14
	Fasting glucose	(mg/dL)	122.1±8.7	101.2±3.4	0.03
	HDL cholesterol	(mg/dL)	69±4	77.9±4.8	0.16
	LDL cholesterol	(mg/dL)	122.4±4.9	113.9±5.7	0.26
	White Blood Cell	(/μL)	5584±290.3	5320±247.2	0.49
	Red Blood Cell	(×10 ⁴ /μL)	447.3±8.7	437.4±8.5	0.42
	Hemoglobin	(g/dL)	13.9±0.2	13.8±0.2	0.72
	Hematocrit	(%)	43.1±0.7	42.3±0.7	0.42
	MCV	(fL)	96.5±0.8	97±1.2	0.72
	MCH	(pg)	31.2±0.3	31.6±0.5	0.4
	MCHC	(g/dL)	32.3±0.2	32.6±0.2	0.32
	Platelet	(×10 ⁴ /μL)	21.6±0.9	21.2±0.8	0.73
Followup - Baseline	AST	(μ/L)	0.1±0.7	0.5±1	0.75
	ALT	(μ/L)	0.4±1.3	0.4±0.9	0.98
	ALP	(μ/L)	15.9±12.3	4.3±5.8	0.4
	LD	(μ/L)	4.4±2.5	9.7±4.4	0.3
	γ-GT	(μ/L)	4.9±3.5	1.3±1.4	0.35
	Cholinesterase	(μ/L)	-5.8±4.4	-0.7±4.4	0.42
	Creatine Kinase	(μ/L)	-0.7±5.3	4.9±12.1	0.67
	Creatinine	(mg/dL)	0±0	0±0	0.19

Blood Urea Nitrogen	(mg/d L)	-1.2±1	0.6±0.9	0.17
Uric Acid	(mg/d L)	0±0.1	0.4±0.1	0.01
Total Cholesterol	(mg/d L)	0.6±6	5.9±3.7	0.45
Triglyceride	(mg/d L)	15.8±8.7	10.1±8	0.64
Serum Amylase	(μ/L)	6.6±4.4	-1.4±2	0.1
Fasting glucose	(mg/d L)	18.2±8.8	4.1±3.2	0.14
HDL cholesterol	(mg/d L)	0±1.5	1.5±2.5	0.62
LDL cholesterol	(mg/d L)	-2.2±5.4	1.1±3.1	0.59
White Blood Cell	(/μL)	80±113.9	-252±228	0.2
Red Blood Cell	(×10 ⁴ /μL)	-0.7±5.6	4.3±3.8	0.47
Hemoglobin	(g/dL)	-0.1±0.1	0.1±0.1	0.49
Hematocrit	(%)	0.4±0.5	0.6±0.4	0.66
MCV	(fL)	0.9±0.4	0.7±0.4	0.72
MCH	(pg)	-0.1±0.2	-0.1±0.1	0.72
MCHC	(g/dL)	-0.4±0.2	-0.3±0.2	0.73
Platelet	(×10 ⁴ /μL)	-0.8±0.6	-1±0.5	0.8

^a p value was determined by student's t-test.

Table S2. Estimated anserine/carnosine daily intake from meals ^a.

Food	Active Group Ave. ± SEM		Placebo Group Ave. ± SEM	p value
Anserine (mg/day)	Poultry	169.8±29	174.3±25.2	0.91
	Pork	5.2±0.8	6.2±0.9	0.42
	Beef	4.9±0.9	4.7±1.3	0.92
	Red meat Fish	19.4±2.4	18.5±2.8	0.8
	Blue back Fish	0.1±0	0±0	0.16
	White Fish	0.3±0	0.4±0.1	0.34
	Salmon	106.2±17.8	143.1±22.9	0.21
	Eel	0±0	0±0	N.D.
Anserine (Total)		305.9±35	347.3±34.6	0.4

Carnosine e (mg/day)	Poultry	47.6±8.1	48.9±7.1	0.91
	Pork	69.7±10.8	82.7±11.7	0.42
	Beef	23.6±4.2	22.9±6.2	0.92
	Red meat Fish	15.4±1.9	14.7±2.2	0.8
	Blue back Fish	7.8±0.9	6.1±0.9	0.16
	White Fish	0±0	0±0	N.D.
	Salmon	0±0	0±0	N.D.
	Eel	13.8±5	7.6±1.2	0.24
Carnosine (Total)		177.9±18.6	182.9±21.2	0.86

^a *p* value was determined by student's t-test.