

Supplemental Table 1. The changes of body weight, blood pressure, laboratory profiles of the participants during the 12-week intervention

| | AGM (n=37) | | | | Placebo group (n=39) | | | | <i>P</i> -value ²⁾ |
|----------------------------|---------------|--------------|---------------|-------------------------------|----------------------|--------------|--------------|-------------------------------|-------------------------------|
| | Baseline | 12-week | Change value | <i>P</i> -value ¹⁾ | Baseline | 12-week | Change value | <i>P</i> -value ¹⁾ | |
| Weight (kg) | 67.8±12.6 | 67.8±12.6 | 0.01±2.32 | 0.974 | 74.0±13.3 | 74.0±13.6 | -0.03±2.46 | 0.949 | 0.945 |
| BMI (kg/m ²) | 24.2±2.75 | 24.2±2.67 | 0.03±0.83 | 0.806 | 25.5±3.31 | 25.5±3.42 | 0.08±0.46 | 0.301 | 0.780 |
| SBP (mmHg) | 123.68±12.41 | 123.31±10.28 | -0.36±13.97 | 0.871 | 123.80±9.88 | 126.24±10.65 | 2.44±12.22 | 0.215 | 0.343 |
| DBP (mmHg) | 77.58±11.11 | 76.63±9.25 | -0.95±10.19 | 0.560 | 78.90±9.92 | 81.13±8.90 | 2.23±9.55 | 0.147 | 0.154 |
| Pulse (per min) | 79.9±12.7 | 78.3±10.1 | -1.64±11.4 | 0.368 | 77.4±9.21 | 78.4±11.7 | 1.04±10.8 | 0.546 | 0.283 |
| Serum total protein (g/dL) | 7.46±0.41 | 7.11±0.36 | -0.35±0.32 | <.0001*** | 7.51±0.40 | 7.19±0.36 | -0.32±0.30 | <.0001*** | 0.656 |
| Serum albumin (g/dL) | 4.41±0.21 | 4.29±0.19 | -0.11±0.18 | 0.0003*** | 4.49±0.22 | 4.38±0.18 | -0.10±0.19 | 0.001** | 0.809 |
| BUN (mg/dL) | 13.29±3.36 | 13.29±3.02 | 0.00±3.71 | 0.998 | 14.07±3.15 | 13.84±3.25 | -0.23±3.58 | 0.683 | 0.777 |
| Serum creatinine (mg/dL) | 0.91±0.17 | 0.88±0.17 | -0.03±0.11 | 0.131 | 0.92±0.12 | 0.90±0.14 | -0.02±0.08 | 0.164 | 0.723 |
| Serum CK (U/L) | 186.85±247.17 | 119.03±50.72 | -67.82±242.36 | 0.085 | 134.85±101.20 | 129.26±74.73 | -5.59±88.32 | 0.691 | 0.133 |
| Serum LD (U/L) | 154.90±27.40 | 144.46±22.64 | -10.44±31.13 | 0.040* | 149.05±31.00 | 146.37±25.39 | -2.68±32.14 | 0.601 | 0.276 |
| WBC (K/UL) | 6.42±1.51 | 5.73±1.21 | -0.68±1.21 | 0.001** | 6.75±1.33 | 6.04±1.35 | -0.72±0.86 | <.0001*** | 0.882 |

| | | | | | | | | | |
|------------------------------|--------------|--------------|-------------|-----------|--------------|--------------|-------------|-----------|-------|
| RBC (M/UL) Blood | 4.89±0.48 | 4.71±0.49 | -0.18±0.31 | 0.001** | 5.02±0.45 | 4.82±0.42 | -0.19±0.29 | 0.0001*** | 0.830 |
| hemoglobin (g/dL) | 14.49±1.23 | 13.97±1.19 | -0.52±0.73 | <.0001*** | 14.83±1.23 | 14.40±1.20 | -0.42±0.59 | <.0001*** | 0.529 |
| Hematocrit (%) Serum | 44.66±3.91 | 42.85±4.07 | -1.81±3.05 | 0.001** | 45.71±3.91 | 44.02±3.63 | -1.70±2.78 | 0.0004*** | 0.861 |
| platelets count (K/UL) | 264.03±53.44 | 254.29±51.65 | -9.74±27.44 | 0.031* | 254.65±41.88 | 245.82±42.81 | -8.83±27.25 | 0.047* | 0.883 |
| Urine pH | 6.08±0.77 | 5.99±0.76 | -0.09±1.08 | 0.606 | 5.96±0.84 | 5.72±0.59 | -0.24±1.01 | 0.143 | 0.525 |

¹⁾ Values are presented as mean ± SD.

²⁾ Analyzed by paired t-test between baseline and 12 weeks within the group

³⁾ Analyzed by independent t-test for the changed values from baseline to 12-week between the AGM and placebo groups

*P<0.05, **P<0.01. AGM, Mixture of Aronia, red ginseng, shiitake mushroom, and nattokinase (Chakreis)

SBP, systolic blood pressure; DBP, diastolic blood pressure; BUN, blood urinary nitrogen; CK, creatine kinase; LD, lactate dehydrogenase; WBC, white blood cell counts; RBC, red blood cell counts.

Supplemental Table 2. Adverse events

| | AGM (n=37) | Placebo(n=39) | Total (n=76) | P-value ¹⁾ |
|-----------------------|------------|---------------|--------------|-----------------------|
| Adverse events: N (%) | 3 (8.10%) | 5 (12.8%) | 8 (10.5%) | 0.714 |

Values are presented as number (%)

¹⁾ Analyzed by chi-square test between groups

AGM, Mixture of Aronia, red ginseng, shiitake mushroom, and nattokinase (Chakreis)