

Table S1. Pomegranate polyphenols content from Pomanox ® P30.

		Concentration(g/100g)
<b>Pomegranate polyphenols</b>	Pomegranate polyphenols were calculated by adding the sum of punicalagins+ellagic acid+other ellagitanins+anthocyanins	44.2
<b>Ellagitannins</b>	Punicalagins	31.6
	Ellagic acid	1.5
	Other ellagitannins (galloylglucose.punicalin. ellagic acid glucoside. ellagic acid rhamnoside)	11.1
<b>Anthocyanins</b>	(delphinidin3.5-diglucoside. cyanidin3.5-diglucoside.delphinidin 3-glucoside.cyanidin 3-glucoside.pelargonidin3-glucoside)	<0.1

Table S2. Hematological parameters in the blood of old mice with or without supplementation of pomegranate extract.

Hematological parameters	Old 22 months		Old 22 months + PE		p-value
	Mean	SD	Mean	SD	
<b>WBC (10<sup>9</sup>/L)</b>	4.27	1.47	3.76	1.63	0.38
<b>Neu # (10<sup>9</sup>/L)</b>	1.52	0.87	1.20	5.03	0.50
<b>Lym # (10<sup>9</sup>/L)</b>	2.40	1.13	2.00	8.88	0.61
<b>Eos # (10<sup>9</sup>/L)</b>	0.15	0.08	0.19	3.69	0.69
<b>Bas # (10<sup>9</sup>/L)</b>	0.01	0.02	0.01	0.06	0.45
<b>Neu % (%)</b>	34.72	9.80	33.45	0.29	0.81
<b>Lym % (%)</b>	56.10	10.06	50.50	1.27	0.39
<b>Eos % (%)</b>	4.53	4.00	5.88	0.11	0.60
<b>Bas % (%)</b>	0.38	0.14	0.35	0.01	0.65
<b>RBC (10<sup>12</sup>/L)</b>	7.79	0.26	7.62	0.55	0.49
<b>HGB (g/dL)</b>	10.98	0.74	10.63	0.94	0.50
<b>HCT (%)</b>	34.52	1.99	33.85	3.91	0.74
<b>MCV (fL)</b>	44.27	2.06	44.38	2.84	0.95
<b>MCH (pg)</b>	14.10	0.87	13.93	0.38	0.71
<b>MCHC (g/dL)</b>	17.08	0.53	32.57	16.29	0.77
<b>RDW-CV (%)</b>	16.66	1.04	14.93	1.16	0.07
<b>PLT (10<sup>9</sup>/L)</b>	731.50	208.47	1592.25	934.74	0.32
<b>MPV (fL)</b>	5.46	0.09	5.57	2.78	0.87

PE: pomegranate extract; n= 6 Old 22 months' mice and n= 4 Supplemented Old 22 months' mice.

Table S3. Biochemical parameters in the blood of old mice with or without supplementation of pomegranate extract.

Biochemical parameters	Old 22 months		Old 22 months +PE		p-value
	Mean	SD	Mean	SD	
<b>Urea (mg/dl)</b>	58.51	34.18	62.40	14.21	0.83
<b>Bun</b>	27.66	15.76	31.42	7.78	0.63
<b>Alb (g/dl)</b>	3.15	0.42	3.64	0.47	0.09

<b>Cpk (mg/dl)</b>	3982.00	3257.00	7216.00	74445.00	0.92
<b>Alp (u/l)</b>	53.85	17.50	56.80	21.39	0.79
<b>Crea (u/l)</b>	0.45	0.19	0.53	0.21	0.49
<b>Alt (u/l)</b>	32.85	7.05	35.80	15.07	0.65
<b>Glu (mmol/l)</b>	163.85	58.93	185.60	61.04	0.54
<b>Tp (g/dl)</b>	4.11	1.02	5.02	0.61	0.11
<b>Lac (mmol/l)</b>	3.22	1.50	5.22	1.30	0.04*

PE: pomegranate extract;  $n= 7$  Old 22 months' mice and  $n= 5$  Supplemented Old 22 months' mice. \* $p < 0.05$

Table S4. Body composition of old mice with or without supplementation of pomegranate extract.

Body composition	Old 18 months		Old 22 months		Old 22 months + PE		<i>p</i> - value		
	Mean	SD	Mean	SD	Mean	SD	18mo vs 22mo	18mo vs 22mo + PE	22mo vs 22mo + PE
<b>BW</b>	35.42	3.51	35.05	1.24	35.63	3.59	0.68	0.98	0.74
<b>%FAT</b>	23.31	5.19	18.06	3.56	17.23	2.83	0.38	0.17	0.72
<b>%LEAN</b>	69.45	19.22	80.1	3.55	80.93	2.55	0.27	0.30	0.70
<b>BMC (g)</b>	0.90	0.09	0.79	0.05	0.78	0.09	0.10	0.09	0.94
<b>BMD (g/cm<sup>2</sup>)</b>	0.08	0.00	0.07	0.01	0.07	0.01	0.07	0.22	0.88
<b>Bone volume (cm<sup>3</sup>)</b>	0.28	0.03	0.25	0.02	0.19	0.12	0.09	0.23	0.33
<b>Bone area (cm<sup>2</sup>)</b>	11.91	0.78	11.31	0.27	11.98	1.35	0.12	0.64	0.31

PE: pomegranate extract; mo= months;  $n= 13$  Old 18 months' mice.  $n= 5$  Old 22 months' mice and  $n= 4$  Supplemented Old 22 months' mice.