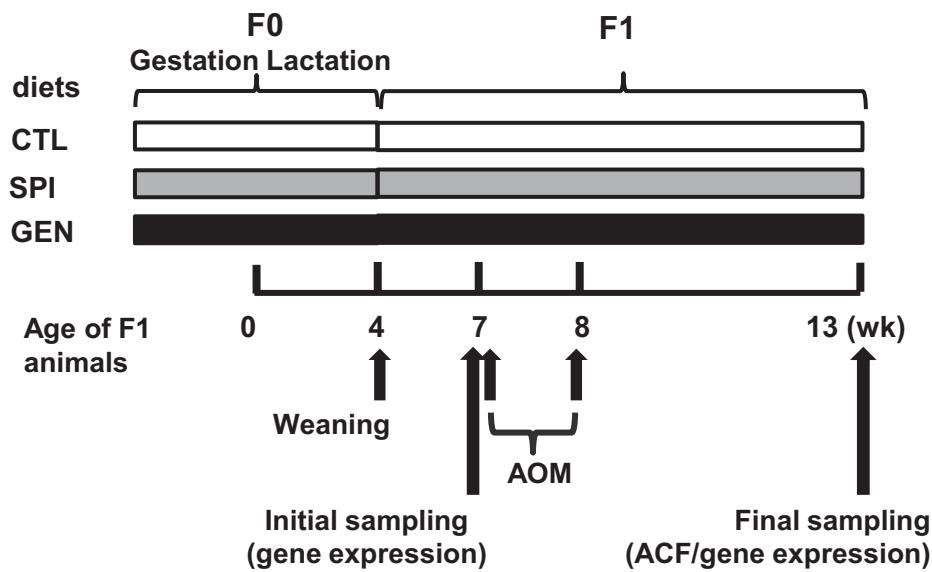
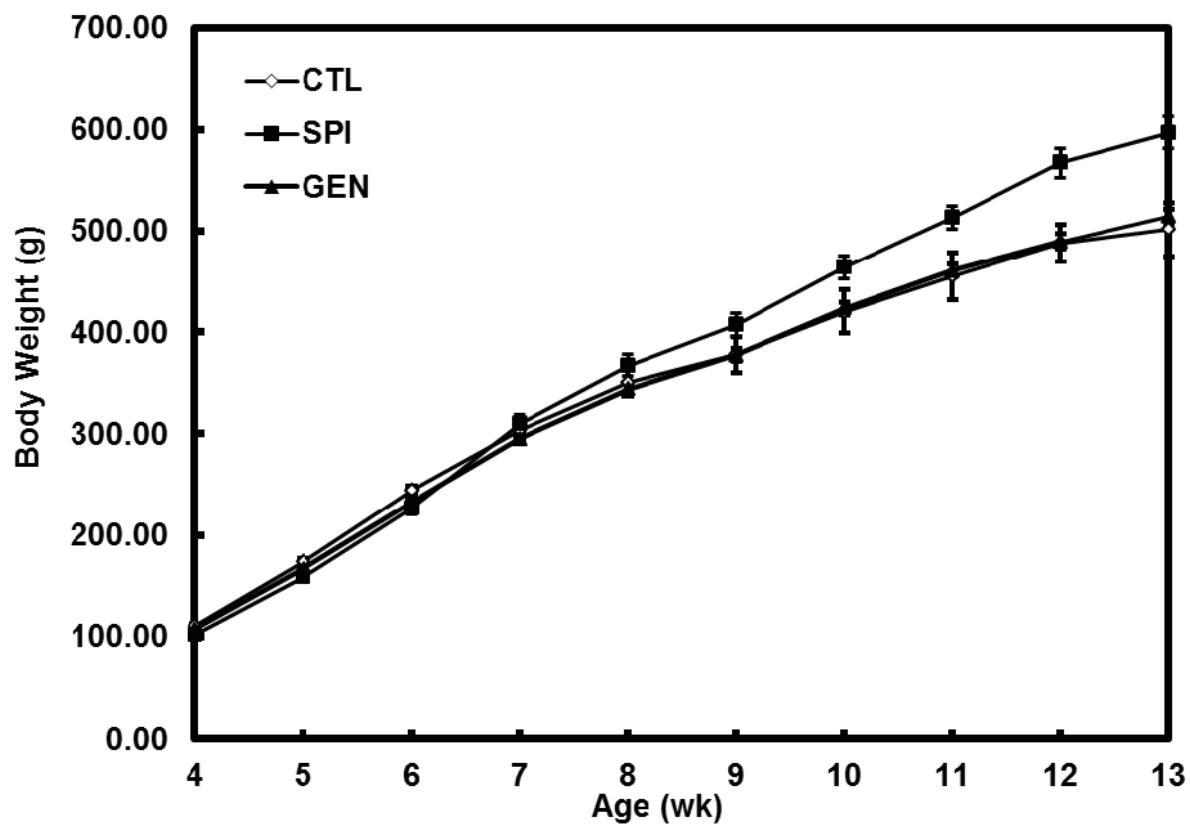


## Supplemental figure 1



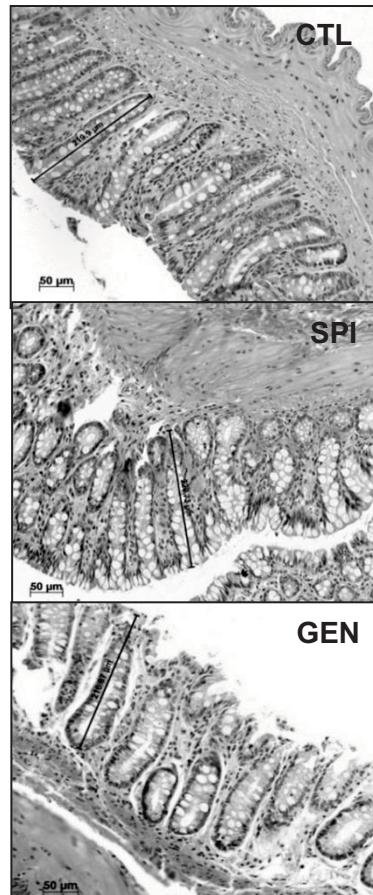
**Experimental design.** Pregnant Sprague-Dawley rats ( $F_0$ ) were separately fed CTL diet (0 mg of genistein /kg of diet), SPI diet (containing 140 mg of genistein /kg of diet), or genistein diet (140 mg of genistein /kg of diet) throughout gestational and lactating periods. After weaning, the male pups ( $F_1$ ) were continuously exposed to the same diet as their mother. AOM injections were performed once a week for 2 wk at wk 7. The initial sampling was performed before AOM injection at 7 wk. ACF data were collected at 13 wk.

## Supplemental figure 2



Body weight (g) of offspring rats fed on the control (CTL, 0 mg/kg of genistein), soy protein isolates (SPI, 140 mg/kg of genistein) and genistein (GEN, 140 mg/kg of genistein) diet. Data are means $\pm$ SEM.

## Supplement figure 3



Representative H&E staining of colon sections. The depth of crypt was measured as: CTL: 219.90  $\mu\text{m}$ ; SPI: 229.73  $\mu\text{m}$ ; GEN: 216.87  $\mu\text{m}$ . Scale: 50  $\mu\text{m}$ .

**Supplemental Table 1** Diet compositions

	CTL	Diet SPI	GEN
<b>Protein source</b> , % weight	Casein, 20	Soy protein isolate, 20	Casein, 20
<b>Fat</b> (corn oil), % weight	7	7	7
<b>Carbohydrate</b> , % weight	62.9	61.9	62.9
<b>Fiber</b> , % weight	5	5	5
<b>Metabolizable energy</b> (kJ/g)	15.7	15.7	15.7

**Supplemental Table 2** List of real time PCR primers for rat

Gene	Forward Primer (5'-3')	Reverse Primer (5'-3')	Ensembl Transcript ID
<i>Cyclin D1</i>	AGGGAGATTGTGCCATCCATGC	TCCCTCTCGCACTTCTGC	ENSRNOT00000028411
<i>c-Myc</i>	TGGAGTGAGAAGGGCTTGCCT	TGTTGGGTCAAGCGGGAGGAT	ENSRNOT0000006188
<i>Wnt1</i>	CCCCGTGACCTCTCTGTGTATCAC	TGAAGCCCAGGTGTGGTGGTT	ENSRNOT00000019641
<i>Wnt5a</i>	GCGTGGCTATGACCAGTTAAGA	TCCACAATCTCCGTGCACCTT	ENSRNOT00000021164
<i>Sfrp1</i>	TTAAGTGACGCTGGGTGGACTG	CCAAGAGCCAGGGTCATTACAC	ENSRNOT00000024128
<i>Sfrp2</i>	TGCCACGGCATCGAGTACCA	GCTCCAGCACCTCCTCATGGT	ENSRNOT00000012658
<i>Sfrp5</i>	GTGACCAAGATCTGTGCCAGTG	CGAAGTCGCTGGAGCACATCTG	ENSRNOT00000020182
<i>L7a</i>	GAGGCCAAAAAGGTGGTCAATCC	CCTGCCAATGCCGAAGTTCT	ENSRNOT0000006754