

## *Supplementary Material*

**Supplemental Table S1. Composition of the basal and experimental diets provided to rats before and during DSS treatment to induce ulcerative colitis**

Ingredient	Basal	Quercetin	Chlorogenic Acid
		%	
Dextrose <sup>1</sup>	51.06	50.61	51.01
Casein <sup>1</sup>	22.35	22.35	22.35
DL-methionine <sup>1</sup>	0.34	0.34	0.34
Mineral mix <sup>1</sup>	3.91	3.91	3.91
Vitamin mix <sup>1</sup>	1.12	1.12	1.12
Choline bitartrate <sup>1</sup>	0.22	0.22	0.22
Pectin <sup>2</sup>	6.00	6.00	6.00
Corn oil <sup>3</sup>	15.00	15.00	15.00
Quercetin <sup>4</sup>	-	0.45	-
Chlorogenic acid <sup>4</sup>	-	-	0.05

<sup>1</sup> Harlan, Madison, WI

<sup>2</sup> Gum Tech, Tuscon, AZ

<sup>3</sup> DYETS, Bethlehem, PA

<sup>4</sup> Sigma, St. Louis, MO

**Supplemental Table S2.** Fecal SCFA of control or DSS-treated rats consuming a basal diet or diets containing quercetin or chlorogenic acid<sup>1</sup>

SCFA	<u>Basal Diet</u>		<u>Quercetin Diet</u>		<u>Chlorogenic Acid Diet</u>	
	Control	DSS	Control	DSS	Control	DSS
<i>(<math>\mu\text{mol/g dry weight feces}</math>)</i>						
<i>Post DSS-3</i>						
Acetic	24.9 $\pm$ 5.1 <sup>a</sup>	73.4 $\pm$ 4.8 <sup>c</sup>	22.4 $\pm$ 5.1 <sup>a</sup>	53.4 $\pm$ 4.6 <sup>b</sup>	23.3 $\pm$ 4.8 <sup>a</sup>	74.0 $\pm$ 4.8 <sup>c</sup>
Butyric	7.9 $\pm$ 1.7 <sup>a</sup>	17.7 $\pm$ 1.6 <sup>b</sup>	8.9 $\pm$ 1.7 <sup>a</sup>	13.9 $\pm$ 1.5 <sup>b</sup>	8.3 $\pm$ 1.6 <sup>a</sup>	15.1 $\pm$ 1.6 <sup>b</sup>
Total SCFA	47.1 $\pm$ 7.7 <sup>a</sup>	120.4 $\pm$ 7.3 <sup>c</sup>	44.5 $\pm$ 7.7 <sup>a</sup>	90.8 $\pm$ 6.9 <sup>b</sup>	45.8 $\pm$ 7.3 <sup>a</sup>	118.1 $\pm$ 7.3 <sup>c</sup>
<i>Final recovery period</i>						
Acetic	23.2 $\pm$ 3.6 <sup>a</sup>	38.5 $\pm$ 3.2 <sup>b</sup>	24.7 $\pm$ 3.6 <sup>a</sup>	45.5 $\pm$ 3.4 <sup>b</sup>	20.9 $\pm$ 3.8 <sup>a</sup>	45.4 $\pm$ 3.2 <sup>b</sup>
Butyric	8.0 $\pm$ 0.9 <sup>a</sup>	10.8 $\pm$ 0.8 <sup>bc</sup>	9.6 $\pm$ 0.9 <sup>ab</sup>	13.1 $\pm$ 0.8 <sup>c</sup>	8.0 $\pm$ 0.9 <sup>a</sup>	11.0 $\pm$ 0.8 <sup>bc</sup>
Total SCFA	44.7 $\pm$ 6.1 <sup>a</sup>	72.7 $\pm$ 5.5 <sup>b</sup>	48.3 $\pm$ 6.1 <sup>a</sup>	82.6 $\pm$ 5.8 <sup>b</sup>	42.2 $\pm$ 6.5 <sup>a</sup>	82.7 $\pm$ 5.5 <sup>b</sup>
%						
<i>Post DSS-3</i>						
Acetic	52.3 $\pm$ 1.5 <sup>a</sup>	60.7 $\pm$ 1.4 <sup>bc</sup>	50.5 $\pm$ 1.5 <sup>a</sup>	57.6 $\pm$ 1.4 <sup>b</sup>	50.8 $\pm$ 1.4 <sup>a</sup>	62.6 $\pm$ 1.4 <sup>c</sup>
Butyric	17.4 $\pm$ 1.0 <sup>bc</sup>	14.3 $\pm$ 1.0 <sup>a</sup>	19.9 $\pm$ 1.0 <sup>c</sup>	15.3 $\pm$ 1.0 <sup>ab</sup>	18.2 $\pm$ 1.0 <sup>c</sup>	12.8 $\pm$ 1.0 <sup>a</sup>
<i>Final recovery period</i>						
Acetic	51.5 $\pm$ 1.2 <sup>ab</sup>	52.6 $\pm$ 1.1 <sup>abc</sup>	50.5 $\pm$ 1.2 <sup>a</sup>	55.1 $\pm$ 1.2 <sup>bc</sup>	49.6 $\pm$ 1.3 <sup>a</sup>	54.7 $\pm$ 1.1 <sup>c</sup>
Butyric	18.2 $\pm$ 0.8 <sup>a</sup>	14.9 $\pm$ 0.8 <sup>b</sup>	20.2 $\pm$ 0.8 <sup>a</sup>	15.9 $\pm$ 0.8 <sup>b</sup>	18.9 $\pm$ 0.8 <sup>a</sup>	13.7 $\pm$ 0.8 <sup>b</sup>

<sup>1</sup> Values are LS means  $\pm$  SEM. Means without a common superscript differ ( $p < 0.05$ ). n=8-11 rats/group.