

1 Supplementary Tables

2 Supplementary Table S1. Composition of experimental diets.

Diet/	Chow diet (Control)	High sucrose diet (HSD)
Ingredient	gm	gm
Casein	200	200
Corn Starch	397.486	97.486
Maltodextrin	132	132
Sucrose	100	400
Soybean Oil	70	70
Cellulose	50	50
Minerals	35	35
Vitamin Mix	10	10
L-Cystine	3	3
Choline	2.5	2.5
Bitartrate	2.5	2.5
TBHQ	0.014	0.014
Sodium chloride	0	0
Total	1000	1000

3 Chow diet: a purified feed (AIN-93G) for rodent laboratory animals issued by the

4 American Nutrition Society.

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7 **Supplementary Table S2. Primers used for transcriptomic analysis**

Primers	Forward	Reverse
GAPHD	ATTGTCAGCAATGCATCCTG	ATGGACTGTGGTCATGAGCC
MUC2	GCTGACGAGTGGTTGGTGAATG	GATGAGGTGGCAGACAGGAGAC+
Claudin3	CATCGGCAGCAGCATCATCAC□	ACGATGGTGATCTTGGCCTTGGp
ZO-1	GACCTTGAGCAGCCGTCATA	CCGTAGGCGATGGTCATAGTT
Ocludin	CAGCCTTCTGCTTCATCG	GTCGGGTTCACTCCCATTA
Reg3γ	AAGCTTCCTTCCTGTCCTCC	TCCACCTCTGTTGGGTTTCAT
Reg3β	GGCTTCATTCTTGTCTCCA	TCCACCTCCATTGGGTTCT
Caspase-1	CAAGGTGATCATTATTCAGGCATG	CAATGAAAAGTGAGCCCCTGA
Caspase-8	AACTGGGCAGTGAAGACCTG.	CCCACCGACTGATGTGGAAA
Caspase-11	AAGCTGATGCTGTCAAGCTG	ATGATTGTTGCACCTTCAGGA

8