

Supplemental Table S1. cDNA synthesis thermal cycling conditions

Settings	Temperature (°C)	Time (min)
Step 1	25	10
Step 2	37	120
Step 3	85	5
Step 4	4	⊙

Supplemental Table S2. RT-PCR thermal cycling conditions

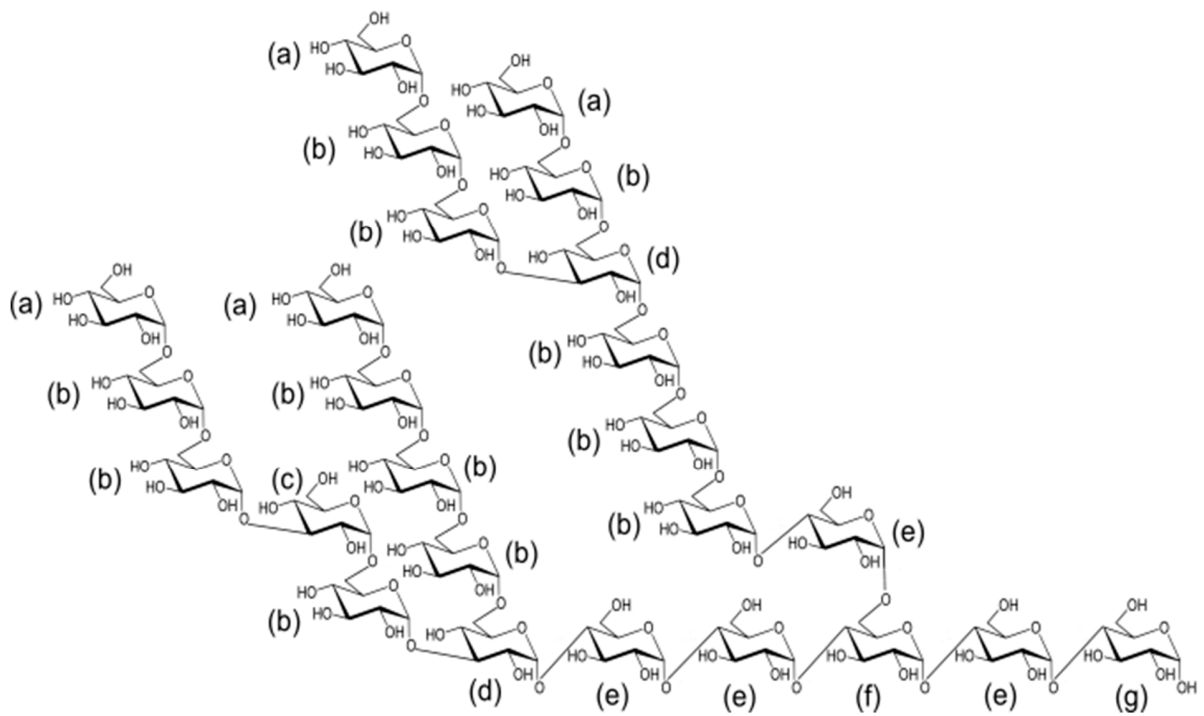
Step	Temperature (°C)	Time (s)
Denaturation	95	15
Annealing	56	15
Extension	72	30

Supplemental Table S3. Primer sequences used in this study for tight junction analysis.

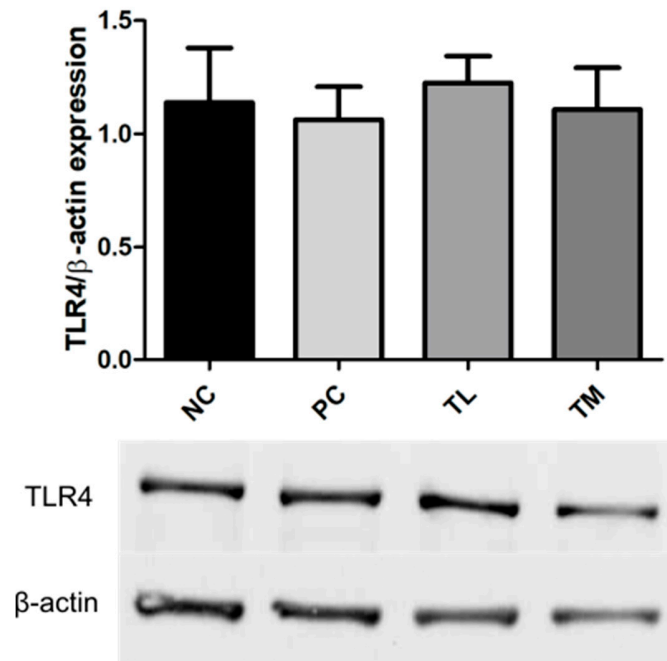
Mouse gene	Forward primer sequence (5'-3')	Reverse Primer Sequence (5'-3')
GAPDH	AACTTTGGCATTGTGGAAGG	GGATGCAGGGATGATGTTCT
Claudin 2	GGCTGTTAGGCACATCCAT	TGGCACCAACATAGGAACTC
Claudin 3	AAGCCGAATGGACAAAGAA	CTGGCAAGTAGCTGCAGTG
Claudin 4	CGCTACTCTTGCCATTACG	ACTCAGCACACCATGACTTG
Occludin	AAGTCAACACCTCTGGTGCC	TCATAGTGGTCAGGGTCCGT
JAM-A	ACCCTCCCTCCTTTCTTAC	CTAGGACTCTTGCCCAATCC
ZO-1	AGGACACCAAAGCATGTGAG	GGCATTCTGCTGGTTACA
Mucin 2	CGACACCAGGGATTTTCGCTTAAT	CACTTCCACCCTCCCGGCAAAC
Mucin 4	CTCCAAGAAATGTAGTGGCTTTCAG	CACGGTCTTGGGCTGGAGTA

Supplemental Table S4. Primers used in PCR analysis of microbiota analysis.

Bacteria	Forward primer (5'-3')	Reverse primer (5'-3')	Product (bp)	Accession No.
<i>B. bifidum</i>	cgtcgccttcttctctctct	tctcaagagctcgtaggcg	137	EF417563
<i>L. casei</i>	tcgtgtcgtgagatgttggg	accttctccggttgtcac	113	EU715321
<i>E. coli</i>	gtcacggcaacaatgctgt	atggccacaacaacgaaagc	173	D78167
<i>C. difficile</i>	gacccgatgatagcccttcc	ggtgcgatagtcctgttcc	146	HF930131
<i>B. fragilis</i>	gtagagtcatcccttcgcg	agaactcgacaaccgggac	104	CR626927
Eubacteria	actcctacgggaggcagcag	attaccgcggctgctgg	200	Walter, J., et al., 2006



Supplemental Figure S1. Putative structure of isomaltodextrin, an α -glucan resistant to digestion. (a) Nonreducing end α -D-Glc; (b) 1,6-linked α -D-Glc; (c) 1,3-linked α -D-Glc; (d) 1,3,6-linked α -D-Glc; (e) 1,4-linked α -D-Glc; (f) 1,4,6-linked α -D-Glc; (g) reducing end α -D-Glc.



Supplemental Figure S2. Effect of IMD on TLR4 expression in white adipose tissue of mice with LPS-induced chronic inflammation, as determined by western blot. Results are expressed as mean \pm SEM for $n = 6$ samples per group. Differences in means were considered statistically significant for $p < 0.05$.