animals

MDPI

Article

Effects of Long-Term Dietary Protein Restriction on Intestinal Morphology, Digestive Enzymes, Gut Hormones, and Colonic Microbiota in Pigs

Defu Yu, Weiyun Zhu and Suqin Hang

Supplementary Materials:

Table S1. Primers used for bacterial DNA amplification for microbiota composition analysis.

Target Organisms	Primers [1]	Sequences (5′-3′)	Annealing Temperature (°C)
Total bacteria	Total-F	GTGSTGCAYGGYYGTCGTCA	60
	Total-R	ACGTCRTCCMCNCCTTCCTC	
Bacterodietes	Bac 964-F	GGARCATGTGGTTTAATTCGATGAT	60
	Bac 1060-R	AGCTGACGACAACCATGCAG	
Lactobacillus	Lac-F	AGCAGTAGGGAATCTTCCA	61
	Lac-R	ATTCCACCGCTACACATG	
Enterobacteriaceae	Eco-F	CATGCCGCGTGTATGAAGAA	59
	Eco-R	CGGGTAACGTCAATGAGCAAA	
Clostridium cluster XIV	Clo14-F	CGGTACCTGACTAAGAAGC	60
	Clo14-R	AGTTTYATTCTTGCGAACG	
Clostridium cluster IV	C. leptum-F	GCACAAGCAGTGGAGT	60
	C. leptum-R	CTTCCTCCGTTTTGTCAA	
Ruminococcus	Rum-F	CGAACGGAGATAATTTGAGTTTACTTAGG	60
	Rum-R	CGGTCTCTGTATGTTATGAGGTATTA CC	

[1] F: forward primer; R: reverse primer.

Table S2. Richness and diversity estimator of microbiota in the colonic luminal contents of pigs.

	NP	MP	LP	SEM	*p*-Value
Ace	423.48	422.91	365.44	34.363	0.633
Chao	427.92	431.93	367.67	25.114	0.673
Shannon	3.102	3.171	2.946	0.191	0.395
Simpson	0.141	0.142	0.171	0.018	0.795
Coverage	0.998	0.998	0.998	<0.001	0.503

NP: normal protein diets according to the National Research Council (NRC, 2012); MP: reduced protein by 3% compared to the NP diet supplemented with Lys, Met, Thr, and Trp; LP: reduced protein by 6% compared to the NP diet supplemented with Lys, Met, Thr, and Trp. SEM: standard error of the mean. [a,b,c] Mean values in the same row differ in significance ($p < 0.05$).