

Table S1. Ingredients and composition of NFD and HFD

	NFD	HFD
Fish meal <sup>*)</sup>	100.0	100.0
Casein	76.0	76.0
Gelatin	19.0	19.0
Corn starch	237.7	4.8
Soybean oil	68.0	170.0
Soybean meal	120.0	120.0
Cottonseed meal	150.0	150.0
Rapeseed meal	150.0	150.0
Vitamin premix <sup>‡)</sup>	5.0	5.0
Mineral premix <sup>§)</sup>	5.0	5.0
Choline chloride	5.0	5.0
Vitamin C phosphateester	2.0	2.0
Ca(H <sub>2</sub> PO <sub>4</sub> ) <sub>2</sub>	15.0	15.0
α -cellulose	47.3	178.2
Total	1000.0	1000.0
Crude protein	326.8	328.7
Crude lipid	80.7	184.1
Gross energy(KJ/g diet)	147.7	150.5

\*American Seafood, purchased from Coland Feed Co. Ltd. Wuhan, P. R. China. Chemical composition: moisture: 4.26%; crude protein: 68.97% of dry matter; crude lipid: 8.97%; ash: 12.15%.

‡Vitamin premix(mg/kg dry diet):V<sub>A</sub> 10, V<sub>D</sub> 0.05 ,V<sub>E</sub> 400, V<sub>K</sub> 40, V<sub>B1</sub> 50, V<sub>B2</sub> 200 ,V<sub>B3</sub> 500, V<sub>B6</sub> 50, V<sub>B7</sub> 5, V<sub>B11</sub> 15, V<sub>B12</sub> 0.1 ,V<sub>C</sub>1000, inositol 2000, choline 5000.

§Mineral premix(mg/kg dry diet): FeSO<sub>4</sub>·7H<sub>2</sub>O 372, CuSO<sub>4</sub>·5H<sub>2</sub>O 25, ZnSO<sub>4</sub>·7H<sub>2</sub>O 120, MnSO<sub>4</sub>·H<sub>2</sub>O 5, MgSO<sub>4</sub> 2475, NaCl 1875, KH<sub>2</sub>PO<sub>4</sub> 1000, Ca (H<sub>2</sub>PO<sub>4</sub>)<sub>2</sub> 2500.