**Table S1.** The composition of the autoclavable standard pellet feeds for mice in control group (Information was provided by Specialty Feeds, Glen Forrest, West Australia).

|  |  |
| --- | --- |
| Nutrients | Composition (per kg diet)\* |
| Crude protein | 194 g |
| Fat | 48 g |
| Polysaccharides | 151.3 g |
| Crude fibre | 51 g |
| Digestible energy | 14.0 MJ |
| Total Vitamins |  |
| Vitamin A (Retinol) | 19500 IU |
| Vitamin B1 (Thiamine) | 80 mg |
| Vitamin B2 (Riboflavin) | 30 mg |
| Vitamin B6 (Pryridoxine) | 28 mg |
| Vitamin B12 (Cyancobalamin) | 150 µg |
| Vitamin C (Ascorbic acid) | 20.0 mg |
| Vitamin D (Cholecalciferol) | 2000 IU |
| Vitamin E (α-Tocopherol acetate) | 110 mg |
| Vitamin K (Menadione) | 20 mg |
| Niacin (Nicotinic acid) | 145 mg |
| Pantothenic acid | 60 mg |
| Biotin | 410 µg |
| Folic acid | 5.0 mg |
| Choline | 1600 mg |
| Amino Acid |  |
| Valine | 8.7 g |
| Leucine | 14.0 g |
| Isoleucine | 8.0 g |
| Threonine | 7.0 g |
| Methionine | 3.0 g |
| Cystine | 3.0 g |
| Lysine | 9.0 g |
| Phenylanine | 9.0 g |
| Tyrosine | 5.0 g |
| Tryptophan | 2.0 g |
| Fatty Acid Composition |  |
| Myristic acid | 0.3 g |
| Palmitic acid | 5.0 g |
| Stearic acid | 1.4 g |
| Palmitoleic acid | 0.1 g |
| Oleic acid | 19.0 g |
| Gadoleic acid | 0.3 g |
| Linoleic acid | 13.0 g |
| α-Linolenic acid | 3.0 g |
| Arachadonic acid | 0.1 g |
| Eicosapentaenoic acid (EPA) | 0.2 g |
| Docosahexaenoic acid (DHA) | 0.5 g |
| Total Minerals |  |
| Calcium | 7.80 g |
| Phosphorous  | 7.00 g |
| Magnesium | 2.00 g |
| Sodium | 2.00 g |
| Potassium | 7.00 g |
| Sulphur | 2.00 g |
| Iron | 590 mg |
| Copper  | 24 mg |
| Iodine | 0.5 mg |
| Manganese | 115 mg |
| Cobalt | 1.0 mg |
| Zinc | 90 mg |
| Molybdenum | 1.2 mg |
| Selenium | 0.4 mg |
| Cadmium | 0.04 mg |

The test diets were by fortifying above standard pellet feed with palm olein (POo), chemical interesterified palm olein (IPOo) and soybean oil (SOY) at oil composition of 150 g/kg diet. The resultant digestible energy was 20 MJ/kg after fortification. The total fatty acid composition and positional fatty acids at *sn*-1, 3 and *sn*-2 positions of test oils were shown in Table 1 and Table 2 (in text), respectively.

\*All nutritional parameters of the diet meet or exceed the National Research Council (NRC) guidelines for mice. The formulation is designed to be fed *ad-lib* to rodents of all ages. (Specialty Feeds, Glen Forrest, West Australia)

A fixed formula using the following ingredients: Wheat, barley, lupins, soya meal, fish meal, mixed vegetable oils, canola oil, salt, calcium carbonate, dicalcium phosphate, magnesium oxide and a Vitamin and trace mineral premixed with cereal grain based diet.