Sup Table 1. Macronutrient, vitamin and mineral content of the experimental diet

|  |  |  |  |
| --- | --- | --- | --- |
|   | 2018SC | TD.120604 | TD.120605 |
|   | **CU-group**  | **Cas-group**  | **Whey-group**  |
| **Energy (Kcal/g)** | 3.1 | 3.2 | 3.2 |
| **Carbohydrate (g/Kg)**  | 442 | 482 | 482 |
|   |   |   |   |
| **Protein (g/Kg)** |  |  |  |
| Whey  | - | - | 207\*\* |
| Casein  | - | 207\* | - |
| Crude Protein  | 186 | - | - |
|   |
| **Fat (g/Kg)\*** | 60 | 60 | 60 |
|   |   |   |   |
| **Fiber (cellulose) (g/Kg)** | 147 | 150 | 150 |
|   |   |   |   |
| **Minerals** |
| Calcium, g/kg | 10 | 10 | 10 |
| Phosphorus, g/kg | 7a | 4 | 3.8 |
| Sodium, g/kg | 2 | 2 | 2 |
| Potassium , g/kg | 6 | 7 | 7 |
| Chloride, g/kg | 4 | 3.1 | 3.1 |
| Magnesium, g/kg | 2 | 1 | 1 |
| Zinc, mg/kg | 70 | 70 | 70 |
| Manganese, mg/kg | 100 | 20 | 20 |
| Copper, mg/kg | 15 | 12 | 12 |
| Iodine, mg/kg | 6 | 0.4 | 0.4 |
| Iron, mg/kg | 200 | 71 | 71 |
| Selenium, mg/kg  | 0.23 | 0.29 | 0.29 |
|   |
| **Vitamins** |   |   |   |
|  A (IU/g) | 15 | 15 | 15 |
| B1 (thiamin), mg/kg | 17 | 20 | 20 |
| B2 (riboflavin), mg/kg | 15 | 22 | 22 |
| B3 (niacin), mg/kg | 70 | 99 | 99 |
| B6, mg/kg | 18 | 18 | 18 |
| B12, mg/kg | 0.08 | 0.03 | 0.03 |
| Cb, mg/kg | - | 1 | 1 |
| D, IU/g | 1.5 | 1.5 | 1.5 |
| E, mg/kg | 110 | 100 | 100 |
| Choline, mg/kg | 1200 | 1200 | 1200 |
| Biotine, mg/kg | 0.4 | 0.4 | 0.4 |
| Folic acid, mg/kg | 4 | 2 | 2 |
| K3, mg/kg | 50 | 50 | 50 |
| Panothenic acid | 33 | 60 | 60 |

a Phosphorus: in 2018 a portion of this P is unavailable because it is bound to phytate. That is not the case in the purified diets.

bThe vitamin premix that was used in the purified diets contains vitamin C, therefore, it is presented in the purified diets but not 2018; there is no requirement for vitamin C supplementation as rodents can synthesize it.

\*207 g of Casein translates to 180 g (For the most part, the remaining 13% (we figure 87% protein) is mostly water. There is some ash (i.e. primarily P in casein) and a little bit of fat.)

\*\*207 g of Whey translates to 180 g (the remaining 13% (we figure 87% protein) is mostly water.)