**Supplemental table 1** Analyzed dietary vitamin D3 levels (IU/kg)1

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Item | Gestation | | | Lactation | Offspring | |
| LD | ND | HD | 28-90 d | 91-150 d |
| Formulated | 200 | 800 | 3200 | 800 | 1215 | 1215 |
| Analyzed | 202 | 803 | 3210 | 802 | 1218 | 1219 |

LD, low vitamin D3 group. ND, normal vitamin D3 group. HD, high vitamin D3 group.

1 Dietary vitamin D3 levels were analyzed by using a combination of HPLC and mass spectrometry.

**Supplemental table 2** Feed intake for sows and offspring pigs

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Item | Treatment | | | S.E.M. | Contrast | | |
| LD | ND | HD | Treatment | Linear | Quadratic |
| *Gestation sows (d 41 to birth)* | | | | | | | |
| *ADFI, kg* | 3.4 | 3.5 | 3.5 | 0.15 | 0.198 | 0.871 | 0.306 |
| Lactation sows (d 0 to d 28) | | | | | | | |
| *ADFI, kg* | 5.0 | 5.1 | 5.1 | 0.41 | 0.323 | 0.251 | 0.418 |
| Lactation piglets (d 0 to d 28, weaning) | | | | | | | |
| *ADFI, g* | 184 | 186 | 191 | 7.6 | 0.448 | 0.774 | 0.543 |
| *Growing piglets (d 28 to d 150)* | | | | | | | |
| *ADFI, kg* | 2.6 | 2.7 | 2.6 | 0.11 | 0.122 | 0.542 | 0.424 |

LD, low vitamin D3 group. ND, normal vitamin D3 group. HD, high vitamin D3 group. SEM, Standard error of the mean.

ADFI, average daily feed intake.