Late gestation diet supplementation of tall oil fatty acid and resin acid increases sow colostrum IgG content, piglet colostrum intake and modulates sow gut microbiota

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Supplementary Table S1 Chemical composition of sow gestation and lactation diet.

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| **Herd 1 and Herd 2** | | |
| **Raw material (%)** | **Lactation diet** | **Gestation diet** |
| Dehulled oats | 25.81 | 2 |
| Wheat | 20 | 5 |
| Oats | 13.4 | 19.31 |
| Wheat feed meal | 8 | 7 |
| Barley | 8 | 21.5 |
| Soyabean meal | 8 | 4.2 |
| Sugarbeet pulp | 3 | 5 |
| Sunflower meal | 3 | 2 |
| Wheat bran | 3 | 15 |
| Vegetable oils and fatty acids | 2.7 | 0.5 |
| Premixes | 1.83 | 1.76 |
| Calcium carbonate | 1.31 | 1.51 |
| Amino acids | 0.8 | 0.31 |
| Monocalcium phosphate | 0.66 | 0.3 |
| Salt | 0.49 | 0.25 |
| Oat hull meal | - | 9 |
| Molasses | - | 2 |
| Pea | - | 2 |
| Feed fiber | - | 1 |
| Sodiumbicarbonate | - | 0.36 |
| Analysis (per kg) | | |
| DM (g) | 875 | 875 |
| Crude protein (g) | 158 | 128 |
| Crude fat (g) | 62 | 35 |
| Crude fiber (g) | 56 | 100 |
| Ash (g) | 61 | 62 |
| Methionine (g) | 3.1 | 2.1 |
| Lysine (g) | 9.6 | 6.5 |
| Calcium (g) | 9.5 | 7.5 |
| Phosphorus (g) | 6.1 | 5.3 |
| Sodium (g) | 2 | 2.3 |
| NE (MJ) | 10.1 | 8\* |
| \*Treatment diet added with RAC was 0.11 MJ per daily feed | | |
| **Herd 3** | | |
| **Raw material (%)** | **Lactation diet** | **Gestation diet** |
| Sugarbeet pulp | 2 | 6 |
| CCM (corn-cob-mix) | 2.5 | 2.5 |
| Chips\* | 3 | 3 |
| Barley | 15 | 27.5 |
| Cookie mix\* | 2.5 | - |
| Limestone | 1.36 | 0.88 |
| Linseed extract | 0.5 | 0.5 |
| Maize | 7.5 | 6 |
| Molasses | 2 | 2 |
| Salt | 0.42 | 0.16 |
| Vegetable oil | 1.7 | 0.5 |
| Palm kernel extract | 2 | 5.4 |
| Rapeseed extract | 2.5 | 4.5 |
| Soybeans | 2.5 | - |
| Soy hulls | 2 | 6 |
| Soybean meal | 6.6 | 1.4 |
| Sugar | 0.88 | - |
| Wheat | 21.72 | 12.5 |
| Wheat middling | 17.5 | 14.8 |
| Vinasse | 1 | 3 |
| Fish oil | 0.3 | 0.25 |
| Sunflower seed extract | 2 | 2 |
| Premix | 2.52 | 1.11 |
| Analysis (per kg) | | |
| DM (g) | 880 | 873.7 |
| Ash (g) | 64.9 | 52.4 |
| Crude protein (g) | 150.2 | 130.4 |
| Crude fat (g) | 57.7 | 41.5 |
| Crude fiber (g) | 60.5 | 86.7 |
| Lysine (g) | 8.5 | 5.9 |
| Methionine (g) | 2.8 | 2.2 |
| Calcium (g) | 9.2 | 6.1 |
| Phosphorus (g) | 5.9 | 4.7 |
| Sodium (g) | 2.4 | 2.1 |
| NE (MJ) | 9.32 | 8.57 |

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| Analysis (per kg) | Chips | Cookie mix |
| Ash, g | 32.00 | 44.00 |
| DM, g | 961.00 | 913.00 |
| Crude fiber, g | 12.00 | 34.00 |
| Crude protein, g | 48.00 | 105.00 |
| Crude fat, g | 281.00 | 109.00 |
| Sugar, g | 12.00 | 184.00 |
| Moisture, g | 39.00 | 87.00 |
| Starch, g | 466.00 | 317.00 |
| NE (MJ) | 21.4 | 15.7 |

\*Composition of Chips and cookie mix

RAC = resin acid-enriched composition.

NE = net energy.