Use of phase feeding in combination with split gender grouping for pigs

Elizabeth Magowan
Agri-Food and Biosciences Institute, Hillsborough, Co. Down BT26 6DR, UK.

**Message**
- Boar performance (ADG and FCR) was superior to that of gilts
- However, the use of a two phase dietary regime did not affect boar or gilt performance compared with when a single diet was offered between 45 and 120 kg

**Introduction**
- Phase feeding is commonly used to reduce N excretion and feed costs during the finish period
- Split gender grouping often aids the marketing of pigs
- The effect of split gender grouping in combination with phase feeding is largely unknown
- Furthermore, the use of phase feeding specifically for fast growing boars is underinvestigated

**Aim**
To investigate any additional benefits of phase feeding by also adopting a split gender grouping practice

**Materials and Methods**
- Over 8 replicates (8 time periods)
  - 480 (PIC 337) finishing pigs were grouped in pens of 10 between 45 and 120 kg
  - Treatments were arranged in a 2 x 3 factorial design

<table>
<thead>
<tr>
<th>2 feeding regimes:</th>
<th>3 group gender structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Two phase feeding</td>
<td>a) All boars</td>
</tr>
<tr>
<td>b) Single diet</td>
<td>b) All gilts</td>
</tr>
<tr>
<td>c) 50:50 mix of boars + gilts</td>
<td></td>
</tr>
</tbody>
</table>

**Diets:**

<table>
<thead>
<tr>
<th></th>
<th>Diet 1</th>
<th>Diet 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE (MJ/kg)</td>
<td>13.5</td>
<td>13.5</td>
</tr>
<tr>
<td>CP (g/kg)</td>
<td>18.0</td>
<td>16.7</td>
</tr>
<tr>
<td>Lysine (g/kg)</td>
<td>9.8</td>
<td>8.0</td>
</tr>
<tr>
<td>Offered between in single diet</td>
<td>45-120kg</td>
<td>-</td>
</tr>
<tr>
<td>Offered between in two phase regime</td>
<td>45-80kg</td>
<td>80-120kg</td>
</tr>
</tbody>
</table>

**Results**
- No significant interaction (P>0.05) between dietary regime and group gender structure

**Conclusions**
- Pig performance was equally as good using a two phase regime as a single diet
- Overall boar performance was superior to that of gilts but it was not negatively affected by the use of a diet with lowered CP and Lysine in the late finishing stages
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