Performance of weanling piglets offered low, medium or high lactose diets supplemented with a seaweed extract from *Laminaria* spp.

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A 3 x 4 factorial experiment was conducted to investigate the interaction between different levels of lactose (L) (60 (low) vs. 150 (medium) vs. 250 (high) g/kg) and seaweed extract (SE) (0 vs. 1 vs. 2 vs. 4 g/kg) on growth performance and nutrient digestibility of weanling pigs. 384 piglets (24 doa, 5 kgs lwt) were blocked on the basis of lwt and assigned to one of 12 dietary treatments (n=8) for 21 d post weaning. There was a L x SE interaction ($P<0.05$) in average daily gain (ADG) and food conversion ratio (FCR) from day 0 to 21. At the low and medium level of L there was an increase in ADG as the level of SE increased to 2 g/kg ($P<0.05$). However, at the high level of L there was no further response in ADG as the level of SE increased above 1 g/kg ($P<0.05$). At the low level of L there was an improvement in FCR as the levels of SE increased to 4 g/kg ($P<0.01$). At the medium level of L there was an improvement in FCR as SE increased to 2 g/kg. However, there was no effect of SE on FCR at the high levels of lactose. There was a linear increase in average daily feed intake from d 0-21 ($P<0.05$) as levels of SE increased. In conclusion, pigs responded differently to the inclusion levels of SE at each level of L supplementation. The inclusion of a SE in piglet diets may reduce the need for high L diets and alleviate some of the common problems that occur post weaning.

Influence of use of by-products from bio-fuel production in feeds for growing-finishing pigs

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With an increasing production of bio-fuel (biodiesel and bio-ethanol) there is an increasing output of the by-products rapeseed-meal (RSM), distillers dried grain solubles (DDGS) and rapeseed-cake (RSC) in case of direct use of rapeseed oil in engines. The feed quality of rapeseed-meal is mostly equal and well documented in feed tables whereas rapeseed-cake differs in the content of ether extract and the feed value of DDGS is depending on the grain used and a lot of technical processes. In a trial with 100 growing-finishing pigs (50 females and 50 castrated males) from 35 kg live weight (LW) up to slaughtering (115 kg LW) the by-products RSM, DDGS, RSC as well as a combination of RSM plus DDGS have been tested in comparison to soybean-meal (SBM). A commercial hybrid (BHZP) was used. Feed was offered in mash form ad libitum as well as drinking water. The mean daily weight gain was 973 g/day and do not differ significantly ($p > 0.05$) between groups from 940 g/day up to 1010 g/day from the start up to the end of the trial. The mean feed intake was 2.69 kg/day up to 2.83 kg/day ($p > 0.05$). Also the slaughtering parameters showed no significant ($p > 0.05$) differences between the groups. Mean lean meat percentage was between 54.4% and 55.7% and the mean backfat thickness between 25.1 cm and 29.0 cm. From these data it can be concluded that the tested by-products may be included into diets for growing-finishing pigs, also at high production standard.

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