

YOUNG PIGS SHOW DIETARY PREFERENCES FOR TRYPTOPHAN

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Summary: A choice feeding trial was carried out over a period of 6 weeks to investigate, whether piglets show preferences for diets with various tryptophan (Trp) concentrations and whether these preferences change with time. Piglets were randomly subdivided into 6 groups of 8 pigs each. Three reference groups (treatments (treat) 1 to 3) were fed either 0.09 % Trp, 0.16 % Trp or 0.24 % Trp diets. Three other groups had the choice from 2 diets containing 0.09 or 0.16 % Trp (treat 4), 0.09 or 0.24 % Trp (treat 5), or 0.16 % or 0.24 % Trp (treat 6). Piglets of treat 4 and 5 selected equal amounts of both diets on offer at random at the start of the experiment. Over the time course of the experiment, they developed a preference for the respective diet higher in Trp concentration and consumed almost exclusively this diet at the end of the experiment. On the contrary, animals given the choice of 0.16 and 0.24 % Trp diets consumed approximately equal amounts of both diets throughout the experiment. It is concluded that piglets are able to distinguish between diets with various Trp concentrations and that dietary selection is linked to the piglet's requirement.

Key words: dietary selection, tryptophan, piglets.