

Role of dietary fiber in piglets

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The inclusion of dietary fiber in post-weaning diets has been controversial since fiber can reduce feed intake and nutrient digestibility, thus increasing the risk of proliferation of pathogenic bacteria in the gastrointestinal tract (GIT). These controversial results are partly due to the lack of information regarding the functional effects of dietary fiber, such as modification of the physicochemical characteristics of the digesta or the fermentation characteristics of the different feedstuffs. Therefore, it is necessary to evaluate the fiber from a functional point of view instead of an analytical point of view.

From a functional point of view, dietary fiber can be classified as: inert fiber (ICHO) - carbohydrates that are not digested and are not fermentable in the GIT of piglets; and fermentable fiber (FCHO) - carbohydrates that are not digested but are fermented in the large intestine of piglets.

Based on SFR experience, it can be concluded that around weaning it is advisable to include moderate levels (50 to 80 g/kg) of ICHO fiber in the diet to (1) dilute the diet and avoid diarrhea due to the accumulation of undigested nutrients and (2) to help piglets restore the intestinal function fast. When the animals grow and increase the fermentable capacity, then fermentable fibre sources in the diet can be included.