

# Bad effects of fish meal in feed

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**In progeny feeding of all kinds of livestock there is a special problem in transit period or period, when feeding with mother's milk is starting to be replaced with industrial feed.** For this reason in feed of young animals there are included a protein resources with a great content of easy digestible proteins and perfect hygienic quality. In pigs feeding, as animal resource of proteins, mostly it's used fish meal.

This feed has a great biological value what is confirmed by great protein digestibility (more than 85%) and content of essential amino acids. Besides, it has a very high content of usable calcium and phosphorus. It contains vitamins A, D and B complex. Fish meal is characterized by high percentage of insoluble protein (60-75%) at paunch, that makes it very interesting feed for feeding high producing cows.

Besides all mentioned positive nutritive quality, fish meal has certain bad effects for which its use is questionable. Presence of disease like *Bovina spongiformna encephalopathy* - BSE i *paraplegia enzootica ovis* - SCREPI is consequence of use of feed of animal origin. Although fish meal, today, is the only feed of animal origin that is still permitted, the attitude versus this feed is changing.

Basic problems in use of fish meal, present at all other kinds of feeds of animal origin are varying quality caused by quality of basic materials it's made of. Microbiological malfunction is often seen, the most common is presence of bacteria *Salmonella spp.* i *E.coli*. Proteins are susceptible to deterioration. Retrogression of proteins (decarboxylation of amino acids) creates harmful products (NH<sub>3</sub>, histamin, muskarin, putrescine, cadaverine).

At over heating of fish meal, toxic substance called gyserosinis is created. Increased histamine can cause a injury of mucous membrane of stomach of poultry. A presence of gyserosine cause a significant injuries (ulceration) of mucous membrane of stomach of poultry which is manifested as bleeding and vomiting (Masumura i sar. 1981). In fish meal of bad quality it was found a presence of impurities, meal of meat of other animals, nitrogen from urea, send, etc.

A fish meal has a strong and specific smell that is transmitted to milk, eggs and meat.

**After all, the price of fish meal is too high.** Domestic production of fish meal, compared to needs, is extremely low, or doesn't exist, so great quantity of money is given for import of these products.

For this reason, in world and in our country, in past 10 years certain respectable companies are making attempt to create a alternative product which can be used as replacement for fish meal. One of these resources with high concentrate of proteins with great biological value, digestibility and adoption is **EKOFISH MEAL- herbal replacement for fish meal, produced in Fabric of oil and proteins BIOPROTEIN, Obrenovac.**