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CAMELINA AND SAFFLOWER OIL - A FUNCTIONAL SUPPLEMENT IN THE PET FOOD

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Pet food has been one of the most attractive industries in the world for years, and it is slowly starting to develop and gain importance in our country as well. Besides the addition of raw materials of animal origin, more and more attention has been paid to functional supplements of plant origin that affect the health and welfare of animals. Vegetable oils are known as energy substances for animal nutrition thanks to their composition of essential fatty acids. They have a beneficial effect on metabolic processes and the general condition of the animal's body. They also affect the quality of skin and hair. In our country, the most frequently used oil cultures are soybean, sunflower, and rapeseed, as well as their by-products (cakes, meals). Other raw materials rich in oil, such as flax, pumpkin seeds, hazelnuts, and walnuts, are less represented. They are produced in small quantities and are mainly intended for human consumption. Also, these raw materials are more expensive because they are processed mainly in small-capacity plants. Wild flax, or camelina (*Camelina sativa*, L. Crantz.), is an oil crop from the Brassicaceae family, which was replaced by other oilseeds in the middle of the 20th century in most European countries. Several studies have shown that camelina oil has a significant role in the human body. It can reduce inflammatory processes due to its content of α -linolenic (omega-3) and linoleic (omega-6) fatty acids, as well as bioactive compounds such as tocopherol and phenol. There are several papers explaining the effects of flaxseed oil on dog nutrition, but in the form of a supplement, not an ingredient as an integral part of pet food (Burron et al., 2021). On the other hand, safflower (*Carthamus tinctorius* L.) from the family Asteraceae is a plant of the Mediterranean that originated in Egypt. It was transferred to England in the 16th century and spread to other areas. Safflower oil also has exceptional properties. The composition of safflower oil varies greatly, but 90% of the oil is oleic and linoleic acid. In the animal feed industry, there are no products that contain camelina or safflower oil, and especially not a combination of these two types of oil, so it is possible to produce pet food with the addition of camelina and safflower oil and put it on the market.

Key words: camelina, safflower, pet food, functional components

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