

# THE FAT CONTENT OF ANIMAL FEED AND THE RELATIONSHIP WITH THE STUDY OF THE POSSIBILITY OF TRANSFER OF ORGANIC POLLUTANTS IN COW'S MILK

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## Abstract

*In the animal body, fats facilitate the absorption and accumulation of highly lipophilic organic pollutants. Considering that the presence of organic pollutants in the animal body is a result of the contamination of the administered feed, and considering that milk is a product with a high predisposition to the accumulation of organic pollutants, in order to evaluate the possibility of transfer and the incidence of organic pollutants, the purpose of this paper refers to the determination of the fat content of feed and milk as a preliminary step in the assessment of the possibility of identifying organic pollutants.*

*By means of the Soxhlet method procedures, the crude fat content was extracted from 21 feed samples and 4 cow's milk samples taken from three farms to be comparatively evaluated according to the incidence of organic pollutants found in the feed and milk samples within each.*

*The results obtained for the analyzed samples revealed an average crude fat content relative to DM between 0.79–4.64 % for feed and between 35.3–37.3 % for milk, on the F1 farm; 0.94–4.61 % for feed and 29.6 % for milk, on farm F2; 1.22–8.97 % for feed and 29.65 % for milk, on farm F3. Depending on the determined crude fat content, the possibility of identifying organic pollutants in the analyzed matrices from each farm was evaluated: F1–low (L); F2–medium (M); F3–high (H).*

**Keywords:** organic pollutants, feed, milk, fats