

PFAS in meat and meat products

PFAS (per- and polyfluorinated alkyl substances) often called “forever chemicals”, is a large class of chemicals receiving more and more attention. The group may consist of more than 9000 compounds and the exposure and effects caused is subject for intense research. Drinking water has commonly been studied, but to an increasing extent food and feed and soil as well. At the same time regulation has become more extensive and limit values have been lowered.

Regulation

Limit values for PFAS levels in food have been decided by the EU Commission and apply to animal foods such as meat, fish, crustaceans and eggs Regulation (EU) 2023/915). Limit values came into force on 1 Jan 2023 implying that food containing more PFAS than the limit value may not be sold.

The companies are responsible for ensuring that the limit values are not exceeded in their food. Authorities that inspect companies can decide that food must be removed from the market if it contains more PFAS than the limit value allows. The regulation contains limits for four individual PFAS and the sum of these. The substances are the same as the ones EFSA has established an intake value for (TWI).

Occurrence of PFAS

PFAS pollution is widespread and not at least local hotspots can have an impact on the food supply. For livestock both feed (incl grass) and water may be important routes of exposure. One example is Korsør in Denmark where very high levels were seen in meat from free grazing cattle near a fire training site. More indirectly, recent US cases point to contaminated sludge/biosolid fertilization as a potential source, an exposure that can have an impact on both dairy and meat production. Typically, offal such as liver have considerably higher levels than muscle meat. In addition, other feed can be of interest to analyze to ensure a safe supply.

PFAS in Food and Feed – Analytical Packages

Eurofins can analyse more than 40 PFAS in food and feed. This includes a large number of “regular” PFAS (PFOS, PFOA etc), so-called PreFOS (PFOS precursors) and “novel” PFAS such as GenX, (A)DONA, F-53B and PFECHS. Accreditation covers nearly 40 PFAS. The three main analytical packs offered covers a wide range of analytes. PFAS4 (PLW8F) can be used for direct comparison to limit values. PLW9Q includes the 22 PFAS which are regulated in Denmark e.g. for drinking water while our large screening pack (PLW8H) comprises 40+ compounds. For offal we recommend the following packages: PFAS 4 PLW9I, PFAS 30, PLW9H. The delivery time (TAT) is 14 cal days and express options are available.



Eurofins Food & Feed Testing's pesticide laboratory in Sweden has by Eurofins been appointed as Competence Center for PFAS testing for food in Europe. Eurofins in Lidköping (SE) started analyzing PFAS already at the beginning of the 2000s. After a break, the analysis was set up again in 2015 and since 2016 a large leading PFAS lab has been established.