

PFAS in egg and egg products

PFAS (per- and polyfluorinated alkyl substances) often called “forever chemicals”, is a large class of chemicals that may comprise more than 9000 compounds. The exposure and effects caused by these substances have received increasing attention. This applies to matrices such as drinking water, but also food, feed and soil have come more into focus. In parallel regulation has been broadened 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 can be found everywhere in nature which also will affect the food supply chain. With regards to poultry and egg both feed and water may be important. This has been shown for example in a Danish case where high levels were found in eggs from organic farms. Given content and composition fishmeal used in the feed turned out to be the likely source. Another case that has attracted attention is the PFAS concentrations detected in home-produced eggs near a fluorochemical plant in Flanders, Belgium leading to a government recommendation to stop consumption.

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. PLW7X includes the 22 PFAS which are regulated in Denmark e.g. for drinking water while our large screening pack (PLW8H) comprises 40+ compounds. The delivery time (TAT) is 14 cal days and express options are available.

All about PFAS: www.eurofins.se/about-pfas



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.