

Summary of Dietary Exposure Assessment Report

FSANZ has calculated exposure to perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA) and perfluorohexane sulfonate (PFHxS) for people consuming individual foods sourced from or near areas contaminated with these chemicals.

The lack of data on the levels of these chemicals in the general food supply meant it was not possible to estimate dietary exposure for the general Australian population.

Contaminated sites

To assess exposure for people consuming foods sourced from or near areas contaminated with these chemicals, FSANZ used the most recent data on food consumption and combined it with data on the concentration of the chemicals in the foods. To ensure a high level of protection for consumers, FSANZ made some assumptions, including assigning a very low level of the chemicals to foods that had none of these chemicals detected in testing.

FSANZ calculated how much food a person could eat before reaching the relevant Tolerable Daily Intake (TDI) for PFOS and PFOA using reported concentration levels in foods from contaminated sites. If a calculated amount for a specified chemical/ food group combination is less than people normally eat then public advice on consuming these foods may be required.

For some foods, the amount of foods containing PFOS or PFOS and PFHxS at reported concentrations that a person could eat before reaching the TDI is lower than the amount an average Australian would typically consume. For example, for PFOS this occurred with cattle meat, rabbit meat, milk and offal and for some vegetables. However, FSANZ considered it extremely unlikely that a consumer would always source a specific food near a contaminated site. For example, milk does not normally come from just one animal. It generally comes from many animals and is mixed, homogenised, and then distributed through retail outlets.

PFOA has a higher TDI and the amount of food that a person could eat before reaching the TDI is much higher the amount people would normally eat.

Information from the most recent nutrition survey was used to determine what level of PFOS and PFHxS combined and PFOA in individual foods would trigger further investigation by authorities. Trigger points are the maximum concentration level of these chemicals that could be present in individual foods or food groups so even high consumers of these foods would not exceed the relevant TDI.

The proposed trigger points for PFOS, PFOS and PFHxS combined are lowest for milk. Trigger points are lower for fruit and vegetables than for fish, meat and eggs. Proposed trigger points for other seafood, honey and offal are substantially higher than for other commodities. For most foods, the proposed trigger points for PFOA levels are much higher than for PFOS for the same food, but like PFOS, proposed trigger points for investigation are lowest in milk, fruit and vegetables, fish and meat. For each chemical, the trigger points are lower for those foods that are usually eaten in larger amounts.