

Summary of Consolidated Report

Perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA) and perfluorohexane sulfonate (PFHxS) belong to a group of compounds referred to as per- and poly-fluoroalkylated (PFAS) substances.

The use of these chemicals in firefighting foams has led to contamination in some Australian locations.

The Australian Department of Health asked Food Standards Australia New Zealand (FSANZ) to review interim health based guidance values (HBGVs) for PFOS and PFOA developed by the Environmental Health Standing Committee (enHealth)¹—a subcommittee of the Australian Health Protection Principal Committee. FSANZ also reviewed PFHxS, providing advice about potential dietary risks associated with food and considered risk management options.

FSANZ looked at comprehensive international assessments on the health effects of PFAS and recommended tolerable daily intakes (TDIs) of 20 ng/kg bw/day for PFOS and 160 ng/kg bw/day for PFOA.² There was not enough information to establish a TDI for PFHxS.

There is very little data on the occurrence of these compounds in the general food supply so it not possible to calculate dietary exposure for the general Australian population. However, based on the data that is available and a literature review, dietary exposure to PFOS, PFOA and PFHxS from the general food supply is likely to be low.

People consuming certain foods sourced from or near contaminated sites may reach the TDI for PFOS and PFOS/PFHxS combined when they consume their usual amounts of that food but not for PFOA. Foods that result in the greatest potential exposure include cattle meat, rabbit meat, milk, offal and some vegetables. However, there are data limitations, so FSANZ's conclusions are highly conservative. It is also extremely unlikely that the specific foods consumed (e.g. milk and milk products) over a period would all be sourced locally from a contaminated site.

FSANZ considered a range of regulatory and non-regulatory options in parallel with at-site risk management measures by other commonwealth and state and territory jurisdictions to manage and potentially reduce dietary exposure of PFAS.

Whilst there are insufficient data to recommend a regulatory approach and set maximum limits in the Food Standards Code, FSANZ proposed trigger points for investigation for PFOS + PFHxS combined and PFOA. These trigger points could be employed by state and territory food jurisdictions when analysing PFAS in foods to identify when further investigation of a food may be required. For example, when levels of PFAS in analysed foods exceed specific values (trigger points) further investigations or risk management action may be required but this would be dependent on the relevant jurisdiction and the specific issues at the particular site.

¹ Enhealth adopted the 2008 European Food Safety Authority (EFSA) human health reference values for two PFAS chemicals, perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) and set interim Health Based Guidance Values (HBGVs).

² These values are lower than the EFSA TDIs of 150 and 1,500 ng/kg bw/day, respectively.