

*BFR Health Assessment No. 012/2006.*

**BfR recommends provisional daily upper intake level and a guidance value for morphine in poppy seeds**

Poppy seeds are increasingly sold as food. Harvesting may damage seed capsules and contaminate the seeds with opium alkaloids e.g. morphine. Toxic effects can be expected if doses exceed 6.3 µg morphine per kg body weight per day. Seeds should be contaminated with less than 4 µg per gramme.

Metabolites of opium consumed legitimately as poppy seeds can be detected in urine samples.

*Committee on Toxicity Statement 2006/10*

**The Tolerable Daily Intake (TDI) for Perfluorooctanoic Acid (PFOA)**

PFOA is primarily used as an emulsifier in industrial applications, for example in the production of fluoropolymers such as polytetrafluoroethylene (PTFE).

The estimated average and high level adult intakes of PFOA from the whole diet in 2004 were 0.001-0.07 µg/kg bw/day and 0.003-0.1 µg/kg bw/day (range of lower to upper bound figures), respectively. Estimated high level dietary intake for toddlers was 0.01-0.3 µg/kg bw/day (range of lower to upper bound figures). These estimated intakes of PFOA from the diet are below the TDI recommended by the COT.

COT recommends a TDI of 3 µg/kg bw/day be established, based on the range of effects on the liver, kidney, haematological and immune systems. COT considers that the TDI is adequate to protect against other potential effects, such as cancer.

[Editor's note: Perfluorooctanoic acid (PFOA) is a persistent pollutant readily absorbed into the body, but poorly eliminated and is detectable in human serum in the general population. It has an effect on birth weight in mice.]

*Committee on Toxicity Statement 2006/09*

**The Tolerable Daily Intake (TDI) for Perfluorooctane sulfonate (PFOS)**

PFOS has excellent surfactant properties widely used in the manufacture of plastics, electronics, textile, and consumer material in the apparel, leather, and upholstery industries and was once common in fire extinguishing foams.

In 2000 3M announced the voluntary cessation of production of PFOS and chemically-related substances due to reports of persistence and widespread exposure of wildlife and humans.

The estimated average and high level adult intakes of PFOS from the whole diet in 2004 were 0.01-0.1 µg/kg bw/day and 0.03-0.2 µg/kg bw/day (range of lower to upper bound figures), respectively. The highest estimated high level dietary intake was 0.1-0.5 µg/kg bw/day (range of lower to upper bound figure) for 1.5-2.5 year olds.

COT recommend a TDI of 0.3 µg/kg bw/day be provisionally proposed for PFOS.

*University of Teesside Project Code: N05070*

**A systematic review of the effect of nutrition, diet and dietary change on learning, education and performance of children of relevance to UK schools**

The findings from this review suggest there is insufficient evidence to identify any effect of nutrition, diet and dietary change on learning, education or performance of school aged children from the developed world. The study included an assessment of research into breakfast before school [cognitive and behavioural], sugar [behaviour], fish oil supplements and vitamin supplements [IQ].

