

Health risks from PFOS and PFOA in food are unlikely according to the scientific knowledge currently available

BfR Opinion No. 004/2009, 11 September 2008

In 2006 individual fish samples were found to have elevated levels of perfluorinated surfactants (PS). Consequently, in the following two years certain foods were examined for their levels of PS within the framework of the nationwide monitoring plan and special monitoring programmes of the federal states. These data were collected by the Federal Office of Consumer Protection and Food Safety (BVL) and made available to the Federal Institute for Risk Assessment (BfR). BfR has now evaluated the data submitted regarding health risks for consumers. However, the data only cover selected foods and the random samples are not representative. Hence they do not constitute the foundation for a reliable estimation of the health risk from the consumption of all foods.

PS is the name given to a group of industrial chemicals which are intermediate products or auxiliary substances in production, and degradation products of certain fluorine compounds. They are used in numerous consumer products for instance in water-repellent, stain-resistant and grease-repellent finishes to carpets, clothing or cooking utensils with a non-stick surface.

The main representatives of PSs are perfluorooctane sulphonate (PFOS) and perfluorooctanoic acid (PFOA). They are extremely stable and can be detected everywhere in the environment. PFOS can accumulate in the food chain. After absorption PFOS and PFOA remain for a long time in the human organism. Both substances have demonstrated hepatotoxic, carcinogenic and reprotoxic properties in animal experiments.

The result of the BfR evaluation was that, based on the latest scientific findings available, a health risk from the dietary intake of PFOS and PFOA is unlikely in conjunction with the levels in foods detected up to now. BfR is nonetheless of the opinion that the presence of PFOS in food should not be tolerated in the long-term. Based on the data available the main source of dietary intake of PFOS by consumers is saltwater or freshwater fish. According to the current knowledge available, more PFOS may be absorbed from food than PFOA. It is not yet clear which foods are the main contributors to PFOA intake. For both substances there are uncertainties about their toxic action, the level of dietary exposure and other possible sources of exposure. BfR recommends collecting representative data on PFOS and PFOA levels in food.

The full text of the Opinion in German can be accessed on

http://www.bfr.bund.de/cm/208/gesundheitliche_risiken_durch_pfos_und_pfoa_in_lebensmitt eln.pdf