

Abstract

Polyfluoroalkyl substances (PFAS) is a group of over 4000 different chemicals considered persistent, toxic and bioaccumulating. The Swedish Food Agency employs a threshold for drinking water of 90 ng/l based on the European Food Safety Authority's (EFSA) value of tolerable daily intake (TDI) of 150 ng/kg bodyweight/day from 2008, which EFSA recently reduced to 0,63 ng/kg bodyweight/day. The Swedish Food Agency have not yet adjusted its threshold. This study examine the risks associated with PFAS, specifically: What is the daily PFAS-intake for an individual in Stockholm? Does PFAS remain in surface water? If the Swedish Food Agency were to follow the reduction proportionally to EFSA's new limit, what would an updated threshold value be and what regulations of PFAS are necessary? Our results suggest that the general population via food and water is exposed to concentrations more than twice as high as today's weekly limit, surface water analyses show that high concentrations of PFAS in surface water remains and a new threshold would result in a value of 0,38 ng/l. Our conclusions were that food is more important concerning the PFAS-intake than drinking water, and that further regulations are necessary in order to minimize risks to human health.