

Investigation of the effects of processing methods on dioxin content

Two fish processing factories have been chosen for the experiments with six samples:

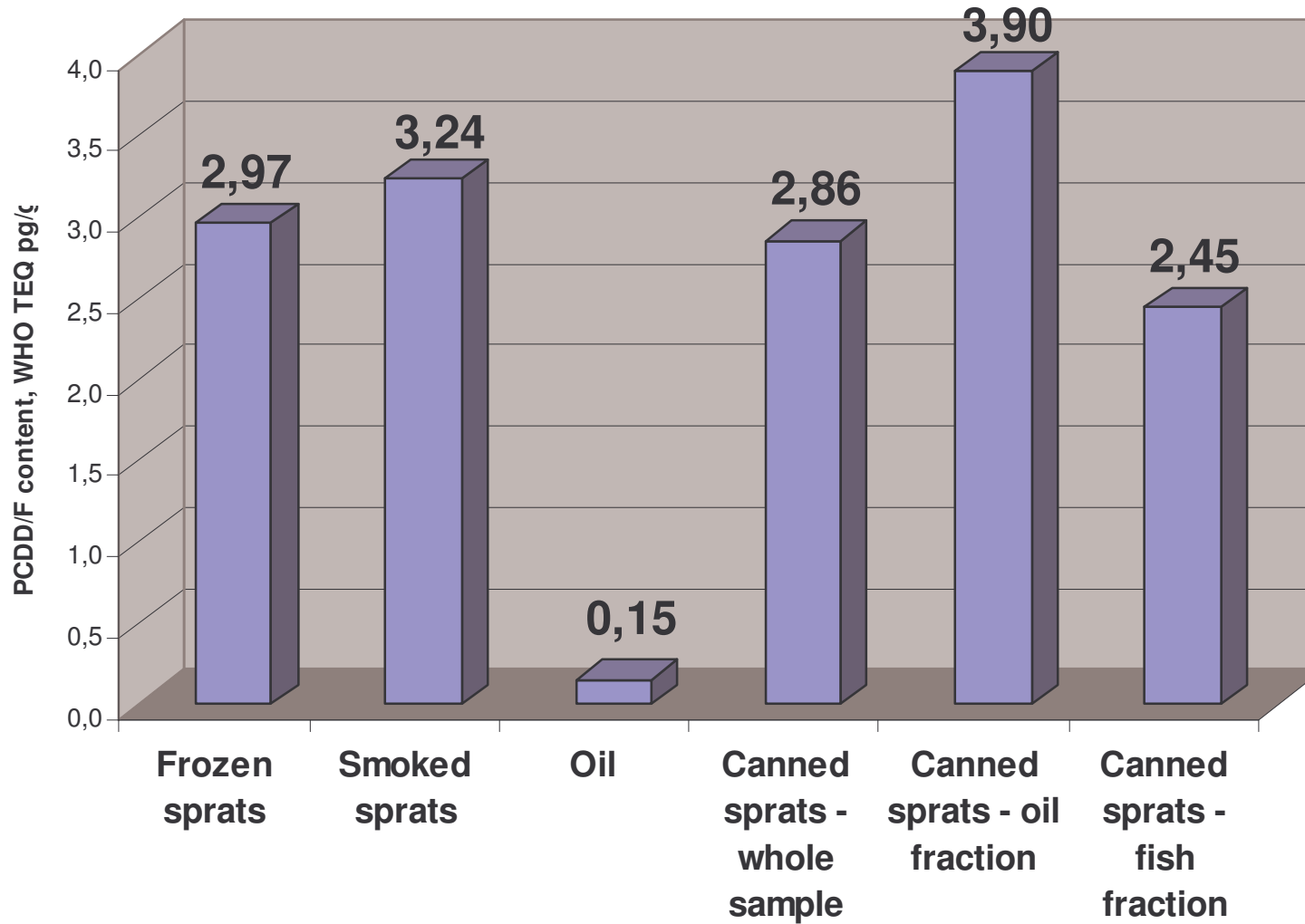
- frozen sprats used for production of canned fish “Sprats in oil”
- sprats after smoking
- oil used for production of canned fish
- canned fish “Sprats in oil” – whole sample
- canned fish “Sprats in oil” – oil fraction
- canned fish “Sprats in oil” – fish fraction

Main purposes of the project

Evaluation of the impact of technological processes on content of PCDD/F in Baltic sea and Riga Gulf sprats :

- To estimate the effect of smoking on PCDD/F concentration (possible diminishing of fat and moisture content)
- To evaluate the content of PCDD/F in ready-to-use products
- To estimate the transition of dioxins into the oil fraction of the canned fish

Changes of PCDD/F content during the production of canned fish



Main findings of the project

- In the process of smoking the concentration of PCDD/F in fish increases by 9% apparently due to the loss of water
- The concentration of PCDD/F in canned fish samples almost the same as in the raw sprats
- Due to the transfer of dioxins in oil fraction the concentration of PCDD/F in fish fraction of canned sprats is by 18% less than in raw sprats

Main findings of the project

The elevated level of octaCDD in canned fish has been revealed for one series of samples

