

Global POP: A global network of schools investigating environmental pollutants in fish from the Arctic and worldwide

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Principal objective

Engage youth in polar environmental issues and natural sciences through the participation in an international education project linking hands-on school activities and scientific research on environmental contaminants and potential health impact.

Sub-goals

1. Increase the interest for polar regions and the environment among young people, through active participation in an international science-based education project
2. Catch the interest of teenagers for natural sciences through hands-on activities based on scientific methods used to evaluate the presence of contaminants in fish from Arctic and worldwide
3. Enhance the understanding of transport, presence and effects of pollutants by comparing levels of dioxin-like compounds in fish from Arctic with other parts of the world
4. Encourage and facilitate communication between schools, and between schools and the research communities, in particular on polar

Project summary

One of the most important challenges in modern society is to inspire and recruit young scientists to study natural sciences at university level. There are, however, strong indications that practical involvements and hands-on experiences are important factors to engage youths.

One issue of importance today is to increase knowledge and consciousness about environmental issues, especially among teenagers. By allowing youths to participate with practical doing in a scientific project dealing with worldwide environmental spread of a major pollutant we hope to create both engagement and enthusiasm.

Approximately 400 schools from the Arctic and world-wide will be invited to participate in a global project that aim to collect data on the levels of dioxin and dioxin-like contaminants in locally caught fish used for human consumption.

Most national and international food authorities encourage people to eat more traditional food and in particular fish due to the total benefits. However, an insight into the levels of dioxin and dioxin-like compounds in fish on a global scale is still essential in order to evaluate whether international agreements and regulations have resulted in decreasing levels. This knowledge is also valuable in order to give well-balanced recommendations for fish

consumption in various areas of the world and the project will contribute substantially in this respect with a unique global dataset for dioxin-like levels in fish.

The students will gain experience in scientific fish sampling and reporting, and should also be able to discuss and evaluate sources and transport of toxic chemicals, and the potential health implications given the tolerable intake values of dioxins and dioxin-like compounds in fish muscle set by the European commission, World Health Organisation (WHO) and national authorities.