



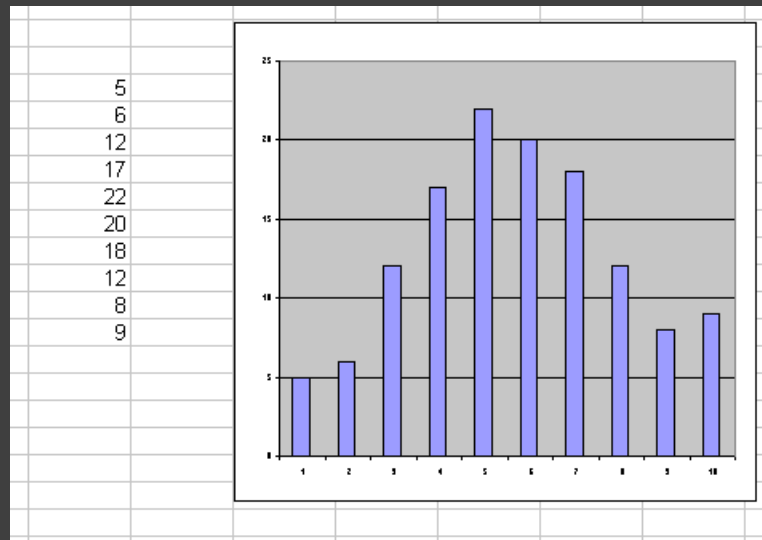
Protocol for the Sampling and Pre-treatment of National Samples within the UNEP Capacity Building Project 2016- 2019

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Objectives

1. Identify and understand possible differences between the analytical methods for persistent organic pollutants (POPs) used in the participating countries and the reference laboratories
2. In addition: gather information on levels and geographical trends of POPs per continent



Principle

- Analysis of identical sample in participating country and reference laboratory
- Homogeneity/comparability
- Avoid contamination
- Participating countries are free in their selection of samples
- However, we will ask for one matrix to be sampled in all countries
- Reference laboratory will analyze sample as received



Selection of Samples

- Ca. 10 samples per country
- Fish will be the mandatory matrix
- Other matrices possible are: soil, sediment, eggs, butter, fish oil, milk powder, beans, water, indoor air or dust, and others

Contamination

- During pre-treatment, either filleting, homogenization, or freeze-drying: avoid contamination of the sample
- Contamination can easily occur through dust, plastics, paper, dirty knives, etc.



Fish sample



- Pooled sample (5-25 fishes)
- Wild fish, not from farm or shop
- Record details of sampling location
- Fillet, homogenize muscle tissue and split into two parts
- Send deep frozen
- Or: freeze-dry and split and send
- Minimum sample size 100g (minimum ca. 1 g lipid)

Sediment or soil

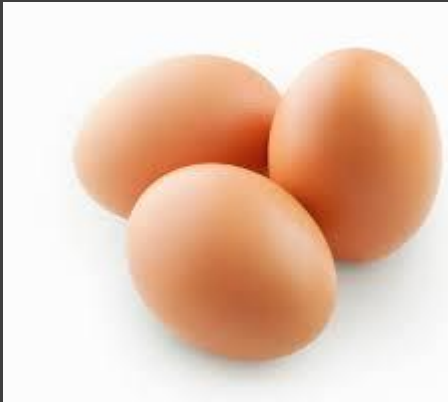
- Preferably a minimum of 1 gram organic carbon (no sandy sample)
- Sieve if necessary (remove larger particles)
- Dry, homogenize, split and send



Other samples



- No: rice, corn, vegetables, rice straw, yam,....
- These often do not contain measurable POP levels
- Reasonable quantity that allows the analysis in at duplicate or triplicate in each sub-sample.
- Homogeneity and avoiding contamination are key issues



Dispatch

- Send in glass jars with screw caps (water for PFOS in polypropylene jars)
- Pack them well!
- Use courier
- Accompanying letters for transport are available
- Inform reference lab when they can expect the sample

