Definitions

In this guide

Inorganic mercury refers to mercury in its elemental form or as compounds that do not contain carbon. These are typically salts or oxides of mercury. Inorganic mercury includes elemental mercury (Hg^0), mercurous mercury ($Hg2^{2+}$) and mercuric mercury (Hg^{2+}). Mercurous mercury refers to mercury in its +1-oxidation state and exists as a dimeric ion whereas mercuric mercury refers to the element mercury in its +2-oxidation state and exists as a monomeric ion.

Organic mercury refers to organic mercury compounds that contain carbon atoms covalently bonded to mercury. These are typically formed when mercury combines with organic groups (like methyl or ethyl).

Benchmark-dose lower confidence limit (BMDL). The BMDL is the lower boundary of the confidence interval on the benchmark dose. The BMDL accounts for the uncertainty in the estimate of the dose response that is due to characteristics of the experimental design, such as sample size. The BMDL can be used as the point of departure for derivation of a health-based guidance value or a margin of exposure. Numbers in subscript after the BMDL such as BMDL05 or BMDL10 specify the lower confidence limit of the dose that causes a 5 % or 10 % change in the response rate.

No observed adverse effect level (NOAEL). The NOAEL is the greatest concentration or amount of a substance, found by experiment or observation, that causes no adverse alteration of morphology, functional capacity, growth, development or lifespan of the target organism distinguishable from those observed in normal (control) organisms of the same species and strain under the same defined conditions of exposure.

Health-based guidance value (HBGV). A numerical value derived by dividing a point of departure (a no observed adverse-effect level, benchmark dose or benchmark dose lower confidence limit) by a composite uncertainty factor to determine a level that can be ingested over a defined time period (e.g. lifetime or 24 h) without appreciable health risk.

Tolerable weekly intake (TWI). Estimated maximum amount of an agent, expressed on a body mass basis, to which each individual in a (sub)population may be exposed over a specified period without appreciable risk.

Provisional tolerable weekly intake (PTWI). The endpoint used by the Joint FAO/WHO Expert Committee on Food Additives for food contaminants such as metals and metalloids with cumulative properties. Its value represents permissible human weekly exposure to those contaminants unavoidably associated with the consumption of otherwise wholesome and nutritious foods.