

JECFA glossary of terms

- [IPCS Risk Assessment Terminology](#)

Follow this link for a complete list of IPCS/OECD Key generic terms used in Chemical Hazard/Risk Assessment and IPCS Glossary of key exposure assessment terminology.

TOXICOLOGICAL TERMS

ADI (Acceptable Daily Intake)

An estimate of the amount of a substance in food or drinking water, expressed on a body-weight basis, that can be ingested daily over a lifetime without appreciable risk (standard human = 60 kg). The ADI is listed in units of mg per kg of body weight.

Temporary ADI

Used by JECFA when data are sufficient to conclude that use of the substance is safe over the relatively short period of time required to generate and evaluate further safety data, but are insufficient to conclude that use of the substance is safe over a lifetime. A higher-than-normal safety factor is used when establishing a temporary ADI and an expiration date is established by which time appropriate data to resolve the safety issue should be submitted to JECFA. The temporary ADI is listed in units of mg per kg of body weight.

ADI "not specified" - food additives

A term applicable to a food substance of very low toxicity which, on the basis of the available data (chemical, biochemical, toxicological, and other), the total dietary intake of the substance arising from its use at the levels necessary to achieve the desired effect and from its acceptable background in food does not, in the opinion of JECFA, represent a hazard to health. For that reason, and for reasons stated in individual evaluations, the establishment of an acceptable daily intake expressed in numerical form is not deemed necessary. An additive meeting this criterion must be used within the bounds of good manufacturing practice, i.e., it should be technologically efficacious and should be used at the lowest level necessary to achieve this effect, it should not conceal inferior food quality or adulteration, and it should not create a nutritional imbalance.

ADI "not specified" - veterinary drugs

Available data on the toxicity and intake of the veterinary drug indicate a large margin of safety for consumption of residues in food when the drug is used according to good practice in the use of veterinary drugs. For that reason, and for the reasons stated in the individual evaluation, the Committee has concluded that use of the veterinary drug does not represent a dietary hazard to human health and that there is no need to specify a numerical ADI.

ADI "not limited"

A term no longer used by JECFA that has the same meaning as ADI "not specified".

Conditional ADI

A term no longer used by JECFA to signify a range above the "unconditional ADI" which may signify an acceptable intake when special problems, different patterns of dietary intake, and special groups of the population that may require consideration are taken into account.

No ADI allocated

There are various reasons for not allocating an ADI, ranging from a lack of information to data on adverse effects that call for advice that a food additive or veterinary drug should not be used at all. The report should be consulted to learn the reasons that an ADI was not allocated.

Acceptable

Flavouring agents: Used to describe flavouring agents that are of no safety concern at current levels of intake. If an ADI has been allocated to the agent, it is maintained unless otherwise indicated.

Enzyme preparations: Used to describe enzymes that are obtained from edible tissues of animals or plants commonly used as foods or are derived from microorganisms that are traditionally accepted as constituents of foods or are normally used in the preparation of foods. Such enzyme preparations are considered to be acceptable provided that satisfactory chemical and microbiological specifications can be established.

Food additives: Used on some occasions when present uses are not of toxicological concern or when intake is self-limiting for technological or organoleptic reasons.

Acceptable level of treatment

ADIs are expressed in terms of mg per kg of body weight per day. In certain cases, however, food additives are more appropriately limited by their levels of treatment. This situation occurs most frequently with flour treatment agents. It should be noted that the acceptable level of treatment is expressed as mg/kg of the commodity. This should not be confused with an ADI.

MTDI (Maximum Tolerable Daily Intake)

See PMTDI.

PMTDI (Provisional Maximum Tolerable Daily Intake)

The endpoint used for contaminants with no cumulative properties. Its value represents permissible human exposure as a result of the natural occurrence of the substance in food and in drinking-water. In the case of trace elements that are both essential nutrients and unavoidable constituents of food, a range is expressed, the lower value representing the level of essentiality and the upper value the PMTDI.

PTMI (Provisional Tolerable Monthly Intake)

An endpoint used for a food contaminant with cumulative properties that has a very long half-life in the human body. Its value represents permissible human monthly

exposure to a contaminant unavoidably associated with otherwise wholesome and nutritious foods.

PTWI (Provisional Tolerable Weekly Intake)

An endpoint used for food contaminants such as heavy metals with cumulative properties. Its value represents permissible human weekly exposure to those contaminants unavoidably associated with the consumption of otherwise wholesome and nutritious foods.

OTHER TERMS

MRL (Maximum Residue Limit)

The maximum concentration of residue resulting from the use of a veterinary drug (expressed in mg/kg or mg/kg on a fresh weight basis) that is acceptable in or on a food. It is based on the type and amount of residue considered to be without toxicological hazard for human health as expressed by the Acceptable Daily Intake (ADI), or on the basis of a temporary ADI that utilizes an additional safety factor. It also takes into account other relevant public health risks as well as food technological aspects and estimated food intakes. When establishing an MRL, consideration is also given to residues that occur in food of plant origin and/or the environment. Furthermore, the MRL may be reduced to be consistent with good practices in the use of veterinary drugs and to the extent that practical analytical methods are available.

The MRLs elaborated by JECFA are "recommended MRLs" that are forwarded to the Codex Committee on Residues of Veterinary Drugs in Foods (CCRVDF) for consideration. In this summary MRLs are expressed in terms of mg/kg tissue or mg/L milk.

Temporary MRL

Used by JECFA when a temporary ADI has been established and/or when it has been found necessary to provide time to generate and evaluate further data on the nature and quantitation of residues. In this summary temporary MRLs are expressed in terms of mg/kg tissue or mg/l milk.

MRL "not specified"

Available data on the identity and concentration of residues of the veterinary drug in animal tissues indicate a large margin of safety for consumption of residues in food when the drug is used according to good practice in the use of veterinary drugs. For that reason, and for the reasons stated in the individual evaluation, the Committee has concluded that the presence of drug residues in the named animal product does not present a health concern and that there is no need to specify a numerical MRL.

% T.O.S. (total organic solids)

$\% \text{ T.O.S.} = 100 - (A + W + D)$ where

A = % ash,

W = % water, and

D = % diluent and carrier.

The ADI is expressed in terms of mg T.O.S. per kg of body weight.