



ASPARTAME

Aspartame (INS 951, E 951) is a dipeptide containing two amino acids, aspartic acid and phenylalanine, two building blocks of protein. The amino acids in aspartame are found naturally in most protein-containing foods, including meats, dairy products and vegetables.

Aspartame is approximately 200 times sweeter than sucrose.

Upon digestion, aspartame breaks down to phenylalanine, aspartic acid and a small amount of the organic compound methanol. Phenylalanine is an essential amino acid. Methanol is found naturally in the body and in many foods. The level of methanol in aspartame is insignificant compared to that found in many natural foods. For example, tomato juice contains six times as much methanol as a comparable serving of soft drink sweetened with aspartame.

At international level, the safety of aspartame was evaluated and confirmed by independent experts of the Joint FAO/WHO Expert Committee on Food Additives (JECFA) (2023). Similarly in the EU, the safety of aspartame was most recently re-evaluated by the experts of the European Food Safety Authority (EFSA) in December 2013. The Acceptable Daily Intake (ADI) for aspartame re-confirmed by both JECFA and EFSA is 40 mg/kg body weight.

In the EU, aspartame is approved for a variety of uses in foods, beverages and tabletop sweeteners under Annex II of Regulation 1333/2008.

In 2023 the International Agency for Research on Cancer (IARC) reviewed aspartame and citing "limited evidence" for carcinogenicity in humans, classified it as possibly carcinogenic to humans (Group 2B). IARC's conclusions were examined by JECFA in its 2023 evaluation of aspartame. JECFA found no concern for human health. Importantly, IARC is not a food safety body and its 2B classification does not consider intake levels nor actual risk, making an IARC review far less comprehensive than the thorough reviews conducted by food safety bodies like JECFA, and potentially confusing for consumers.

Aspartame is approved in more than 100 countries around the world including the USA, Canada, Australia and Japan.