

Frequently asked questions on Aspartame

3 February 2025

Who are foodwatch, Yuka and La Ligue contre le Cancer?

foodwatch is an independent non-profit consumer organisation that fights for safe, healthy and affordable food for all people. We give consumers a loud voice, speak up for transparency in the food sector and defend our right to food that harms neither people nor the environment. By conducting research, exposing scandals, mobilising consumers and lobbying governments, foodwatch provides an important counterweight to the power of the food industry.

[Yuka](#) is a 100% independent mobile app that analyzes the impact of food and cosmetic products on health. By scanning the barcode of a product, the application allows you to access the details of the product's composition and in return indicates a color-coded rating ranging from green to red. The app now has 65 million users in 12 different countries. The aim is to help consumers make more conscious choices, but also to encourage manufacturers to improve the composition of their products.

[La Ligue contre le Cancer](#) (The French Cancer League) is the biggest French independent non-profit association fighting against cancer. It comprises of 103 chapters present all over the French national and overseas territories. It provides advice, support and information to cancer patients and their relatives. It promotes policies for better cancer prevention, early detection and care as well as independent cancer research.

What is aspartame?

Aspartame is a low-calorie artificial food additive used as a sweetener, which consists of a white, odourless powder¹. It is widely used in 'light' or 'zero' products, such as soft drinks, desserts, sweets, dairy products, chewing gum, energy-reduced and weight control products, and as a table-top sweetener.²

What's wrong with aspartame?

¹ https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/factsheetaspartame.pdf

² https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/factsheetaspartame.pdf

Over the last 40 years, numerous scientific studies (see links to major ones further below) have associated exposure to aspartame to various health disorders, including increased risk of cancer, type 2 diabetes, cardiovascular diseases, and more recently, impacts on the microbiome, bacteria in our gut that is vital for maintaining good health.

When it comes to cancer, in July 2023, the WHO's International Agency of Research on Cancer (IARC) released their hazard classification of aspartame as a [possible carcinogenic agent](#) to humans (category 2B). The full monograph supporting this classification was made publicly available in April 2024. According to foodwatch, Yuka, and La Ligue contre le Cancer, this classification as a possible carcinogen should trigger an EU ban of the additive, based on the precautionary approach that is enshrined in the EU Treaties and the EU General Food Law.

Which products contain aspartame?

It is estimated to be used as a sugar substitute in thousands of food products worldwide – between 2,500 food and drink products in Europe and 5,000 products globally.³ According to Euromonitor data, in Western European Countries, soft drinks accounted for 94% of the total consumption of the substance in 2023, including cola drinks or non-cola carbonates such as tonic drinks, or energy drinks.

The application Yuka allows consumers to track aspartame's potential presence in the ingredients of the food items they buy.

How do I recognise aspartame?

In the European Union, aspartame is coded as E number E951. If it is used in a food or beverage, it must be listed in the ingredients list. On the label, the term 'sweetener' should be followed by 'aspartame' or 'E951'. For foods and beverages containing one or more sweeteners, the technical name of the food (the one written in small above the ingredients list) will also include 'with sweetener(s)' or 'with sugar(s) and sweetener(s)'. Products with aspartame must carry a warning message about phenylalanine. That is one breakdown product of aspartame, dangerous for people with the genetic disorder phenylketonuria (PKU).

³ 2021, Landrigan, P.J., Straif, K. Aspartame and cancer – new evidence for causation. Environ Health 20, 42 (2021). <https://doi.org/10.1186/s12940-021-00725-y>

What does the IARC classification actually mean?

The [WHO's International Agency of Research on Cancer \(IARC\)](#) is the international gold standard when it comes to the scientific study of cancer-causing agents. IARC's Monographs identify environmental substances that constitute carcinogenic hazards to humans through an independent and comprehensive review of all the publicly available literature at the date of the assessment.

The classification system includes four categories:

1 – Carcinogenic to humans: for instance, currently, tobacco smoking, solar radiation, consumption of alcoholic beverages, consumption of processed meat, ionizing radiation;

2A – Probably carcinogenic to humans: for instance, currently, emissions from high temperature frying, DDT, consumption of red meat, night shift work;

2B – Possibly carcinogenic to humans: for instance, currently, gasoline engine exhaust, occupational exposure as a hairdresser or barber, lead, aspartame.

3 – Not classifiable as to its carcinogenicity to humans: for instance, coffee drinking, crude oil, mercury, paracetamol.

Aspartame was evaluated as part of IARC's cancer working group preparing the 134th Monograph. It concludes on a classification as a possible carcinogen (Category 2B) based on "limited evidence" for cancer in humans, in experimental animal and regarding the mechanisms of action. In simple language, this means that the currently available scientific literature (human studies, animal studies and mechanistic data) provides some evidence about the possible carcinogenic properties of aspartame, but it does not yet allow a complete understanding of the conditions under which such properties may manifest themselves. Nor does it fully explain the mechanism(s) through which such properties may act in humans.

The fact that experts disagreed on the sufficiency level of the animal studies for the purpose of classification, with a minority supporting that the available data supports a 2A rather than a 2B classification, is important – especially because past authoritative studies already highlighted the possible link between the substance and cancer causation and that this

potential property already caused controversial debates during the last EU renewal of the substance in 2013.

On the contrary, the aspartame risk assessment of the Joint FAO-WHO Expert Committee on Food Additives (JECFA) downplays health risks by dismissing independent studies and relying on outdated industry research, maintaining a high acceptable daily intake. EU regulators should not base their assessment on this flawed evaluation.

According to foodwatch, Yuka, and La Ligue contre le Cancer, these findings call for a precautionary ban of the additive at the EU level.

What can I do as a consumer?

As a consumer, there are several ways for you to take action:

foodwatch, Yuka and La Ligue contre le Cancer respect that food choices are personal choices. However, we also want consumers to be safe. The current authorisation process of additives has important loopholes, including because additives are assessed individually. In your daily life, you are not exposed to only one additive, but rather to combinations of them in products that you consume. The long-term cocktail effects of this combination are not considered in the regulatory assessments of the substances. For that reason, you may prefer to opt, where possible, for foods that are fresh, simple, and minimally processed. Additives can be hard to detect, because the labelling is not always transparent i.e. not all additives are written as an 'E' number. Therefore, keep things as simple as possible – fewer ingredients, fewer additives.

By using the Yuka application, consumers can be immediately alerted of the presence of aspartame in a product. As a result, 95% of the app's users report having stopped buying products containing controversial additives thanks to Yuka.

Furthermore, Yuka has recently introduced a feature that allows users to go even further by calling-out brands using high-risk additives, including aspartame. Users can reach out to brands via email or publicly on social media using pre-filled messages. This feature is currently available in France and the United States but is expected to gradually expand to other countries.

You can support the mobilisation efforts of foodwatch, Yuka and La Ligue contre le Cancer to demand reforms in the EU food system, by signing our joint petition asking for a precautionary ban of aspartame, and by supporting the work of our organisations to promote improvements towards a more protective regulation of food additives.

foodwatch-petition "No to aspartame in our food and drink!"

- [English](#)
- [French](#)
- [German](#)
- [Dutch](#)
- [Spanish](#)
- [Italian](#)

How are food additives authorised in the EU?

EU [Regulation 1333/2008](#) sets out the conditions under which food additives should be authorised in the EU. According to Article 6.1, an additive can only be included in the list of permitted additives if it fulfils the following criteria:

- It does not, on the basis of the scientific evidence available, pose a safety concern to the health of the consumer at the level of use proposed;
- There is a reasonable technological need that cannot be achieved by other economically and technologically practicable means; and
- Its use does not mislead the consumer.

European Food Safety Authority (EFSA) is mandated to evaluate the safety of additives before they can be used in products in the EU. The process is very slow and regularly encounters severe delays. EFSA was supposed to carry out re-evaluations of all food additives that were already permitted for use prior to 20 January 2009 by 2020 – a deadline that was not met. At the time of writing, the agency claims to have re-evaluated [70% of the 315 additives](#) that were approved in the EU before January 2009.

Other important loopholes include:

- The lack of deadlines for re-evaluations for substances allowed on the market after 2009;
- The high reliance of safety studies provided directly by industry players with a commercial interest in the outcome of the evaluation process in a context of a lack of resources of EFSA and the food safety authorities;
- The failure to take into account the reality of our exposure to multiple additives at the same time through food products. In fact, the typical ultra-processed food products that include additives will regularly include several of them, but their cocktail effect is not taken into account in their assessment and in the establishment of so-called safe levels of exposure.

When will the EU authorisation of aspartame be reviewed?

At the time of writing, there is no deadline by which the EU authorities are bound to review aspartame's authorisation for its use as food additive. According to foodwatch, Yuka and La Ligue contre le Cancer the recent IARC classification as a possible carcinogen should trigger a precautionary ban.

The last evaluation of aspartame dates back 2013 and was already controversial at the time. Major independent studies showing the carcinogenicity potential of the substance at low doses were not taken into account in the process, despite their concerning findings. This raised many questions about the EU authorities' approach to the evaluation of health risks (see for example presentations from a [public EFSA consultation meeting](#) that took place in April 2013 [here](#) and [here](#)).

Since then, the earlier independent findings on carcinogenicity have been [confirmed through independent re-analysis](#) and new scientific studies have been produced (see non-exhaustive list below). This has strengthened concerns for health, including potential cancer associations, and IARC's classification of aspartame as a possible carcinogenic agent adds to this body of evidence. Therefore, foodwatch, Yuka and La Ligue contre le Cancer consider that the EFSA opinion on the safety of Aspartame is outdated, and so is the acceptably daily intake (ADI) it recommends.

In a letter to foodwatch, EFSA has indicated that they currently do not plan to do a new assessment of aspartame, but that they will take into account all relevant recent scientific

elements in the ongoing reassessment of the salt of aspartame-acesulfame (E962) and that in this context, it might be possible to revise the acceptable daily intake of aspartame if there is solid evidence to do so. foodwatch, Yuka, and La Ligue contre le Cancer now ask authorities to release this evaluation as soon as possible and to take into account all independent scientific evidence available for both the salt of aspartame and aspartame itself in the course of its preparation. In the meantime, we still call for a precautionary ban of aspartame.

Is that OK if I only drink one glass of soda with aspartame from time to time?

foodwatch, Yuka and La Ligue contre le Cancer do not make judgements or specific recommendations regarding individual consumption patterns. We believe that it is the responsibility of public authorities to guarantee that every food product on the stores' shelves is safe for consumers to use.

It is important to stress that you will not suffer immediate health effects if you drink one glass of soda with aspartame. The scientific literature available points to potential chronic health effects as a result of long-term consumption of aspartame. Having said that, the doses at which some effects have been observed by independent researchers (e.g. in the 2022 INSERM's Nutrinet Santé epidemiology cohorts) are lower than the recommended intakes of the European Food Safety Agency (EFSA). This is why foodwatch, Yuka and La Ligue contre le cancer is calling for a precautionary ban of the substance.

Where can I find the results of the European poll made in 7 countries on aspartame?

The full results of the poll on food additives, including aspartame, are available here: https://www.foodwatch.org/fileadmin/-INT/additives/2025-02-04_foodwatch-report-aspartame.pdf

Sources:

Some recent important studies on the associations between aspartame exposure and cancer risk (full list available in our detailed Q&A):

> 2024, WHO International Agency for Research on Cancer (IARC), Aspartame, Methyleugenol, and Isoeugenol, IARC Monographs on the Identification of Carcinogenic Hazards to Humans

Volume 134, [IARC Publications Website - Aspartame, Methyleugenol, and Isoeugenol \(who.int\)](#)

- A summary is available in The Lancet Oncology, [Carcinogenicity of aspartame, methyleugenol, and isoeugenol - The Lancet Oncology](#)

> 2022, [Artificial sweeteners and cancer risk: Results from the NutriNet-Santé population-based cohort study](#) (full study), [Artificial Sweeteners: Possible Link to Increased Cancer Risk](#) (INSERM Press release)

> 2021, Landrigan, P.J., Straif, K. Aspartame and cancer – new evidence for causation. Environ Health 20, 42 (2021). <https://doi.org/10.1186/s12940-021-00725-y>

> 2014, [The carcinogenic effects of aspartame: The urgent need for regulatory re-evaluation](#)

> 2012, [Consumption of artificial sweetener– and sugar-containing soda and risk of lymphoma and leukaemia in men and women](#)

General Sources

> 2021, Center for Science in the Public Interest (CSPI), fact sheet, [Aspartame and Cancer: What is the Evidence?](#)

> 2024, U.S. Right to Know, [Aspartame: Decades of science point to serious health risks](#)

> EFSA, factsheet on aspartame,

https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/factsheetaspartame.pdf

> EFSA, information page on food additives, [Food additives | EFSA \(europa.eu\)](#)