# IDF Position on the Codex General Standard for the Use of Dairy Terms Application to Cellular Agriculture Products and Ingredients

Consistent with the core principle of the Codex General Standard for the Use of Dairy Terms (GSUDT – CXS 206-1999), products derived from cellular agriculture may not use terms or designations reserved for products that are or are derived from milk and milk products.

**High Level IDF Principles:**

- IDF is committed to protecting dairy terms, elevating dairy products as a premium source of nutrition and providing accurate information to consumers on dairy's substantial health benefits.
- IDF strongly supports the consensus-based, international standardization efforts of the Codex Alimentarius and encourages adoption of or alignment with relevant Codex labelling standards when local, national, or regional labelling laws are established, amended or redrafted.
- The labelling of milk and milk products is governed by the Codex General Standard for the Use of Dairy Terms (CXS-206-1999, GSUDT). Other Codex standards, such as CXS 1-1985 (Codex General Standard for the labelling of Prepackaged Foods), may also be relevant.
- Labelling and marketing of products derived from cellular agriculture must align with the principles and restrictions within the Codex GSUDT.
- The GSUDT and its principles prevent consumer confusion between milk and milk products and other food products thereby protecting consumers and ensuring fair practices in trade.
- IDF recognises sector-wide interest in innovation and the role of new technologies to complement milk and milk products and meet growing population needs and new consumer segments.
- All products should be labelled in a manner that allows consumers to determine whether products contain allergens defined as in section 4.2.4 GSLPF[1], which should be read in conjunction with the GSUDT.

**Purpose of This Position Paper:**

- To provide a consistent IDF position, which is to be referenced whenever appropriate, that there is no basis in the GSUDT for cellular agriculture products to use dairy terms.
- To support IDF members with relevant national legislation to keep or advocate for the recognition and protection of dairy terms in the context of cellular agriculture products.
- To provide evidence and information to support the use of dairy terms for milk and milk products for IDF members in countries that are developing relevant national legislation for labelling/naming of cellular agriculture products.
- To inform legal and regulatory specialists in food companies and trade associations with consistent guidance from IDF.

(1) Codex General Standard for Labelling Prepackaged Foods

**Overview:**

Cellular agricultural technologies, defined by FAO as "the field of growing animal agricultural products directly from cell cultures instead of using livestock, and which has been referred to as cell-based foods, cell-cultured foods and cultivated meat,"[2] have progressed to commercial viability with individual cellular agriculture components beginning to appear on the market[3]. Other terms commonly used to describe cellular agricultural technologies in the marketplace though not endorsed by IDF include precision fermentation[4], cell culturing[5], plant molecular farming[6] and/or similar technologies.

IDF is neither opposed to these new technologies, collectively termed "cellular agricultural" for the purposes of this document, nor against the development of new or innovative products using them. However, these cellular agricultural products and ingredients must be labelled accurately according to local, national or regional law. Relevant international consensus standards should also be considered.

In the context of international standards, IDF notes the relevant work of the Codex Alimentarius Commission. Codex developed and adopted the Codex General Standard for the Use of Dairy Terms (GSUDT – CXS 206-1999). The GSUDT establishes a world-wide standard for the protection of dairy terms. It applies to the use of dairy terms in relation to foods to be offered to the consumer or for further processing.

IDF has published two Bulletins about the GSUDT (Bulletin of the IDF N° 507/2020 "The Codex General Standard for the Use of Dairy Terms – Its nature, intent and implications", replacing the previous Bulletin of the IDF N° 397/2005.; Bulletin of the IDF N° 521/2022 "Survey on the Implementation of the CAC GSUDT"), and the IDF Factsheet "The use of dairy terms for labelling and promotional information" (September, 2012), which enumerate how the GSUDT should be applied and how it has been implemented around the world. These Bulletins contain information that complements this position paper.

(2) FAO & WHO. 2023. Food safety aspects of cell-based food. Rome. https://doi.org/10.4060/cc4855en

(3) This document addresses only the issue of labelling and not the issues such as Novel Food or GMO

(4) Precision fermentation: Precision fermentation (PF) is a process used to make acellular foods or ingredients (like non-animal proteins or non-animal gelatine) without animals through fermentation using genetically engineered microorganisms like yeast, mold or bacteria. IDF does not endorse the use of the term "precision fermentation" in place of synthetic biology, but has included it in this paper as it is used in the marketplace.

(5) Cell culturing, Cell-based, and Cultivated Edible Products: are all terms for a process where cells of host organisms (animals, plants, microorganisms) are collected and utilized to produce foods or ingredients that would otherwise require the utilization of the animal or plant from which such products would be produced. Thus, in the context of milk, cell cultured products utilize cells from the mammary gland, encouraging them to divide/proliferate in a laboratory or bioreactor environment and triggering them (via components added to the growth medium) to start producing a desired edible product claimed to be chemically similar to milk or its constituent(s) produced with the involvement of animals.

(6) Plant molecular farming: Plant molecular farming (PMF) is a process where plants are genetically modified so that they produce specific proteins or other targeted molecules. Plants can be grown, produce harvested, and the desired proteins extracted and further processed. Research on this area has been occurring since the 1990s.

**GSUDT Overview**

**Aim:**

- Codex found it necessary to address the use of dairy terms in the GSUDT to avoid any confusion between milk and milk products and other food products in trade.
- The GSUDT provides international consensus-based definitions of milk and milk products as well as purposeful limitations on the use of designations, terms or other names which are reserved only for those products made from or containing milk and milk products.
- The importance of protecting the unique nutritional value of milk and milk products is recognized by the GSUDT[7] in the interests of producers and consumers and to facilitate fair trade practices. This protection of dairy terms ensures accurate and appropriate labelling (including promotional and advertising activities) and prevents the consumer from being misled.

**Scope of Protection:**

The following definitions are laid down in the GSUDT:

- "Dairy terms" means names, designations, symbols, pictorial or other devices which refer to or are suggestive, directly or indirectly, of milk and milk products (sec. 2.6 GSUDT).
- "Milk" is the normal mammary secretion of milking animals obtained from one or more milkings without either addition to it or extraction from it, intended for consumption as liquid milk or for further processing (sec. 2.1) [8].
- "Milk product" is a product obtained by any processing of milk, which may contain food additives, and other ingredients functionally necessary for the processing (sec. 2.2).
- "Composite milk product" is a product of which the milk, milk products or milk constituents are an essential part in terms of quantity in the final product, as consumed provided that the constituents not derived from milk are not intended to take the place in part or in whole of any milk constituent (sec. 2.3).

With the introduction of cellular agricultural technologies to produce ingredients and foods, it is necessary to recall that the definition of milk in the GSUDT refers to "normal mammary secretion of milking animals obtained from one or more milkings…".[9] This means that products that are not "normal mammary secretions" obtained by milking animals do not fit the definition of milk found in the GSUDT. The products obtained without milking animals do not fit the definition of 'milk' in GSUDT. Similarly, food products that do not contain milk or milk products or meet the definition of composite milk products (footnote referencing section 5.2. Bulletin of the IDF N° 507/2020) would not meet the specifications of the GSUDT to be labelled as milk or milk products.

(7) See discussion on page 7 of Bulletin of the IDF N° 507/ 2020

(8) The scope of the term "Milk" is further defined by IDF in Bulletin of the IDF N° 507/2020, section 5.2 as "The mammary secretion of any mammal that is subjected to milking is covered by this definition. Such animals include cows, ewes, goats, buffaloes, camels, yaks, zebu, reindeer, llamas, mares, etc.). It is the interpretation of IDF that this does not include human breastmilk as the Codex Standard for Infant Formula and Formulas for Special Medical Purposes Intended for Infants (CXS 72-1981) specifically refers to "human milk" and "breastmilk" which it differentiates from "milk of cows or other animals or a mixture thereof" (see sections 1.1, 2.1.1 and 3.1.1 of CXS 71-1981).

(9) CXS 206-1999.

Furthermore Section 4 of the GSUDT covers explicitly the use of names of milk products in Codex Commodity Standards[10]. Only a food complying with the provisions in a Codex standard for a milk product may be named as specified in the Codex standard for the product concerned (sec. 4.3.1). That means that names such as "cheese" (CXS 283-1978), "cream" (CXS 288-1976), "fermented milk" (CXS 243-2003), etc. are protected and can only be applied to milk products.

The GSUDT applies - according to the clear wording in secs. 2.2, 2.3 and 4.6.3 - to all milk constituents regardless of whether these are subject to a Codex standard (e.g. the Codex Standards for "Edible Casein Products" (CXS 290-1995), "Whey Powders" (CXS 289-1995), "Dairy Permeate Powders" (CXS 331-2017) etc.) or not (e.g. such as ß-lactoglobulin).[11]

According to section 4.6.3 of the GSUDT, for a product which is not milk, a milk product or a composite milk product, no label, commercial document, publicity material or any form of point-of-sale presentation shall be used which claims, implies or suggests that the product is milk, a milk product or a composite milk product, or which refers to one or more of these products. This means that any reference to a milk product is prohibited, even if the name used does not imply or suggest that the product is a milk product. Also, the addition of descriptors to inform the consumer that the ingredient or final product does not come from milk as defined in in the GSUDT has no influence on the prohibition.

Even if complex edible products resembling milk, milk products, and composite milk products are made more widely available, the right of consumers to accurate information on nature of the foods they consume, including its method of production, cannot be compromised. This situation necessitates that products and ingredients obtained through cellular agricultural technologies are clearly distinguishable from milk and milk products by the consumer.

(10) Complete list of Codex Dairy Standards, see the Bulletin of the IDF N° 507/2020 Annex 2.
(11) It is the interpretation of IDF that the GSUDT protects constituents found in milk. Regarding milk constituents that are also naturally occurring in other secretions or tissues (excluding those obtained through cellular agricultural techniques to replace milk constituents), the GSUDT does not preclude the use of established scientific terms provided this does not mislead the consumer.