

The background of the slide is a vertical strip on the left side containing a close-up of a sliced orange and a vanilla bean. The rest of the slide is white. A large, stylized graphic of a hand with its index finger pointing is overlaid on the white background. The hand is white with a thick red outline. The index finger is pointing towards the center of the slide, where the IOFI logo is located. The logo consists of a red circle containing the text "IOFI" in a bold, red, sans-serif font.

IOFI

**Introducing the
world of flavorings**

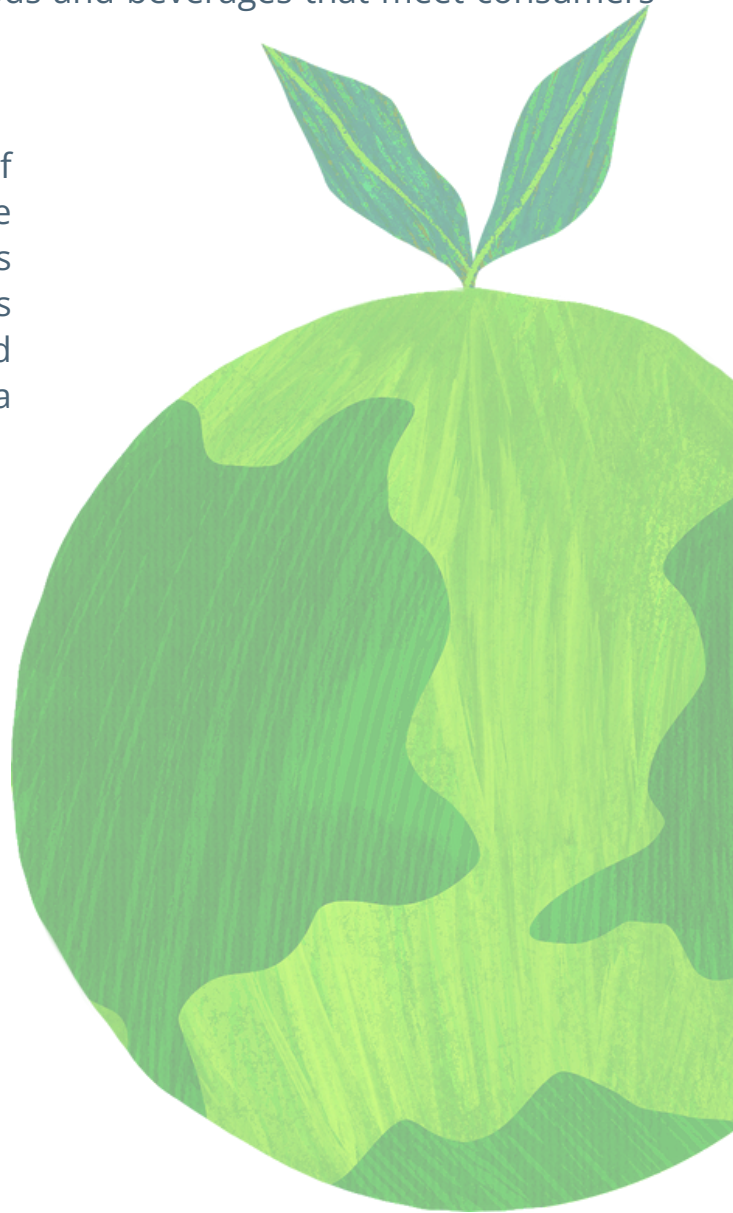
Taste is one of our basic senses and often one we feel most strongly about. Intrinsic to the human experience and intertwined with our cultural heritage, flavorings have a very long and rich history. Think about spices or essential oils, which have been used since ancient times.

There is a variety of tastes that we savor and enjoy every day in our foods and beverages. From the aromatic spices that add warmth to our meals to the refreshing essence of citrus in our beverages, nature provides a rich palette of flavors that delight our senses and enrich our food.

As our global population has grown and industrialization has advanced, the demand for food has skyrocketed. This development necessitated the creation of food ingredients that could capture the delightful flavors of nature while meeting the needs of modern lifestyles and satisfying a constantly growing demand. Today, innovative flavorings, which are products that are added to food to impart, modify, or enhance the flavor of food, make it possible to enjoy healthy, nutritious foods and beverages that meet consumers' taste experiences and cost expectations.

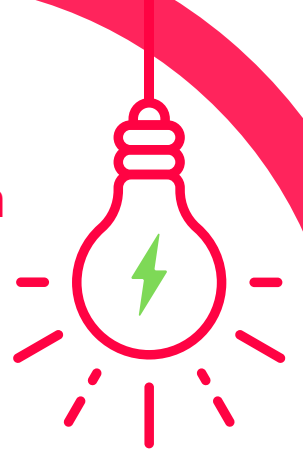
As global consumers become more conscious of the environmental impact of their choices, the role of highly innovative flavorings becomes crucial to sustainability. By capturing the tastes of nature, flavorings help preserve limited resources, drive cost efficiency, and support a more sustainable future for all.

Flavorings manufacturers strive for constant improvement in sustainable practices, focusing on responsible sourcing, and reducing the environmental impact of production. Constant carbon emission reduction, proper soil and water management, the respect of human rights are key drivers of sustainable business practices and the flavor industry is sharing best practices to improve the sustainability performance of the sector. Find out more on the IFRA-IOFI Sustainability Charter under [IFRA-IOFI Sustainability Charter](#)





A flavoring is an ingredient whose primary purpose is to provide great taste, bringing our senses to life



Most flavorings impart flavor by delivering distinct tastes and aromas that stimulate our senses. Flavorings are essential in a wide variety of products and are predominantly used in food and beverage applications, for example:



Beverages

Confectionery products



Dairy products

Ready-to-eat savouries and snacks



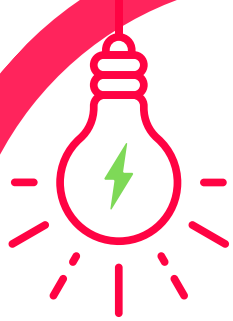
Plant-based meats and dairy alternatives



Did you know?

Flavorings are not only used in food and beverages; they are also used in oral care products, pharmaceuticals, as well as in pet food and animal feed.



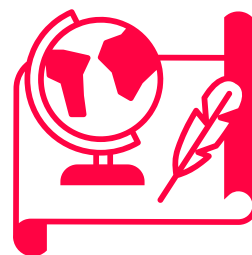


Facts about flavorings



Essential part of human food

They have been used since around 7000 BC, Ancient Greeks used pepper and cumin to season their food.



Present in nature

From herbs and spices to citrus fruits and vanilla beans, flavorings are found in nature around the world.

Small dose, big effect

Flavorings are highly concentrated and are therefore used at very low concentrations in the final applications.



Different flavorings categories

Natural flavorings: natural flavorings are derived from natural sources like spices, fruits, or vegetables, and can also come from herbs, barks, roots, and other plant materials. Additionally, they may originate from meat, seafood, poultry, eggs, and dairy products. These flavorings are a results of traditional food preparation processes including extraction, fermentation and distillation, which have been part of the food industry for centuries.

Synthetic flavorings: synthetic flavorings are essentially flavorings that do not qualify as natural. While the chemical compositions of natural and artificial flavorings may be quite similar or even identical, the key difference lies in their sources and processes. For instance, an artificial strawberry flavoring might contain the same chemical components as a natural strawberry flavoring, but these components are derived from different sources than strawberries or the manufacturing process may not be defined as natural.



Where science meets art

Several thousand flavoring substances are known, and up to a hundred different ones may be combined to create a specific compounded flavoring (strawberry flavoring, etc.). Each formula is a result of a complex creation process, which involves research and innovation as much as art.

The sense of smell, alongside taste, is one of the primary tools for any flavorist- a chemist specialized in flavoring development. Just like a good cook tastes their food to know what else it needs, a good flavorist tastes their creations to determine what's lacking.

Safety through science

The flavoring safety evaluation programs that are conducted around the world, including the FEMA GRAS evaluations (conducted by the FEMA Expert Panel), evaluations by the UN FAO/WHO Joint Expert Committee on Food Additives (JECFA), and evaluations by scientific panels at the European Food Safety Authority (EFSA) are largely harmonized in terms of the scientific approaches. As such, they function as a *de facto* global peer-review process, where their separate safety assessments provide cross-validation of safety findings for flavorings. Working in support of this, IOFI's proactive science program generates and provides key toxicological data. In essence, the work of the safety evaluation panels and the work of the flavor industry allows for a thorough and responsive consideration of the safety of flavorings, and maintains the integrity and safety of flavorings used globally in food and beverage products.

Where flavor supports health

Today, consumers are increasingly health-conscious and demands for plant-based meat and dairy alternatives and products with reduced fat, sugar, or salt are on the rise. Fortunately, there are flavoring ingredients with characteristics that can improve a consumer's experience of these 'lite' products. Such flavorings have little or no characteristic flavor of their own but are used, for example, to decrease bitterness, mask off-notes, and restore mouthfeel so that we can enjoy healthier products that still taste good.



Flavoring creation





Flavorings enable food enjoyment, contributing greatly to consumers satisfaction and provide numerous benefits:

Why do we use flavorings?

Taste & Aroma Drive Consumer Choices

Taste is the top driver behind consumer preferences. Flavorings offer uniqueness, authenticity, and sheer delight in a variety of products, often making healthier and more sustainable options appealing.

Supporting Healthier Eating

As demand grows for healthier foods, flavorings help overcome taste challenges by balancing the flavor of products with reduced sugar, fat, or salt, ensuring they remain tasty and enjoyable.

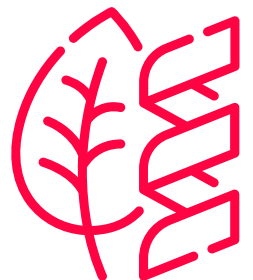


Supporting Sustainability

Flavorings help reduce environmental impacts by using sustainable production methods. For example, the use of biotechnology in producing vanilla flavorings from alternative raw materials can help reduce the pressure on nature (soil, water, etc.) where vanilla plantations are concentrated.

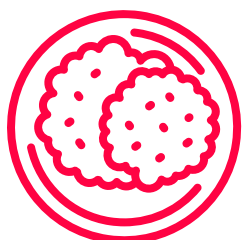
Enabling Alternative Protein Development

Flavorings are key in making alternative proteins taste more appealing and accessible, thus helping to meet the growing global demand for sustainable protein sources.



Appealing to people with impaired taste & smell

For those with sensory impairments, like older adults or individuals with anosmia, flavorings enhance the eating experience and can encourage greater food intake for health benefits.



Promoting cultural diversity

Flavorings support the creation of diverse, globally-inspired cuisines, catering to different regional tastes and preferences, and driving innovation in food offerings.



And more than that, flavorings are also highly innovative products that have a wide range of benefits in processing and food production, they contribute to:

Impart or modify

Flavorings deliver unique, authentic, and delightful taste experiences. They encourage healthier eating by making nutritious options more appealing and enable manufacturers to cater to diverse global cuisines.

Compensate

Flavorings restore flavors lost during processing, such as heat treatments that can diminish taste and aroma. They ensure consumers enjoy the full sensory experience they expect.

Standardize

Flavorings maintain consistent taste and quality, even in the face of seasonal variations, natural resource shortages, or climate-related challenges.

Mask and restore

Flavorings improve the sensory appeal of foods with reduced sugar, fat, or salt. They also cover undesirable off-notes and restore mouthfeel, ensuring taste remains a priority even in healthier alternatives.





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at
www.iofi.org_**

