



“Contains Natural or Artificial Flavours”

What You Need to Know

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From cookies to herbal teas to sausages, grocery store shelves are stocked with foods containing added flavours. What are added flavours? What are they doing in our food? And should we be putting flavoured products into our baskets or should we instead be leaving them on the shelves?

KINDS OF ADDED FLAVOURS

It is important to know the differences between natural and artificial flavours. But first it helps to understand how food processors design flavours. Flavour designers, also called flavourists, have a few options when flavouring, say, an ice cream. They can add pure vanilla extract (alcohol steeped with real vanilla pods from the vanilla orchid), but that's expensive. While vanilla beans naturally contain hundreds of different flavour chemicals that work together like instruments in a symphony to impart the flavour we recognize as vanilla, taste-testers report that vanillin is the most dominant of those flavour chemicals—the most vanilla-y of all the flavour chemicals in the vanilla bean. So flavourists can create a vanilla-like taste by simply adding vanillin.

Photo by Mikko Blaz, Dreamstime.com

Back to the difference between natural and artificial flavours: According to the U.S. Food and Drug Administration (FDA), natural flavours are "...the essential oil, oleoresin, essence or extractive, protein hydrolysate, distillate, or any product of roasting, heating or enzymolysis, which contains the flavoring constituents derived from a spice, fruit or fruit juice, vegetable or vegetable juice, edible yeast, herb, bark, bud, root, leaf or similar plant material, meat, seafood, poultry, eggs, dairy products, or fermentation products thereof..." and then added to another food.

The Canadian Food Inspection Agency (CFIA) has a broader definition: "Substances that impart flavours that have been derived from a plant or animal source may be claimed to be 'natural,' and artificial flavours are defined as having been 'obtained by chemical synthesis.'"

In effect, vanilla ice cream can be naturally flavoured with pure vanilla extract, but it can also be naturally flavoured with vanillin derived from wood pulp. (And if you were eating vanilla ice cream in the 1980s, the vanillin flavouring likely came from a pulp factory in Thorold, Ontario, the world's largest producer of vanillin at the time.) The key point here is that vanillin derived from wood pulp is chemically identical (also referred to as "nature identical") to vanillin found in vanilla beans; the molecules look and behave exactly the same.

Artificial flavours are chemicals derived from sources not listed in the FDA's requirements, above, or obtained by chemical synthesis. So vanillin synthesized from petrochemicals counts as an artificial flavour even though it has an identical chemical structure to the vanillin found in vanilla beans.

IS NATURAL BETTER THAN ARTIFICIAL?

How do we feel about natural and artificial flavours in our food? Consumers often appeal to healthfulness to answer this question; they permit only natural flavours in their shopping carts since they assume that natural foods are healthy and fake foods are unhealthy. But this reasoning doesn't go very far. Two vanillin molecules can be chemically identical, though one was distilled from an edible food and the other synthesized from petrochemicals in a laboratory. Since nothing in the flavour molecules per se makes one natural and the other unnatural, the difference becomes a question of origin: where did each molecule come from?

Once we start looking at origins, however, justifying natural over artificial flavours becomes tricky because sometimes it makes sense to prefer the artificial analogue over the natural compound. A case in point: flavourists can distill a creamy, coconut-like natural flavour from the Massoia tree, though this requires killing the tree, or they can synthesize unnatural substances in the laboratory to create a chemically identical artificial coconut flavour without killing any trees.

Unfortunately, food labels don't provide us with enough information to decide whether or not we approve of the sources of the added flavours contained in a given product. In fact, food processors often keep their

flavourant recipes secret or they buy pre-mixed flavour concoctions from specialty flavouring companies that are the ones keeping the recipe under wraps. You could always try asking a company where they source their flavourants, but even if you were to hear back from one company, you would have to do this for the whole array of flavoured foods you buy, making this an impractical solution.

WHY ADD FLAVOUR?

While our aversion to added flavours may stem from our inability to discern their sources and being uncomfortable with certain sources, another question raises further concerns: Why are food processors adding flavours in the first place? Isn't food flavourful enough? Here's a shortlist of reasons:

Added flavours make up for the naturally occurring flavours in a food that have degraded during processing or transport; at least that's the processor's intention. Note that the naturally occurring flavours in flavourant-free food often come from antioxidants that oxidize during transport and processing, leaving the food with less nutritional value. (Flavour is a great indicator of nutrition!) Flavourants can also smooth out natural variances in taste due to differences in growing conditions over place and time, allowing big brands to create products that taste the same whether they're produced in Ontario or in New Jersey, today or next year.

Producers sometimes add flavours to cover up unwanted tastes, like bitterness, which are side-effects of additives that extend shelf life, "improve" appearance, or "fortify" nutritional content. Flavourings might compensate for foods that are not flavourful in the first place, foods grown in unhealthy soil, harvested before ripe, bred for transportability instead of flavour, or lacking nutritious ingredients. Adding flavours is also a way to stick flavour into food without incurring the costs of flavourful food.

Whether these reasons for adding flavour bother you or not will depend on your views about health and the environment. For me, flavourants are a crutch supporting unsustainable, unhealthy, and low-quality food. Much of the processed food we see on grocery store shelves wouldn't be there if it weren't for flavourants; they wouldn't taste good enough to make it into production.

Unfortunately, ingredient labels rarely indicate why a particular flavour was added. Finding this out requires asking the food processor, which is, as I've already explained, impractical at best. Again, it seems we consumers aren't privy to the information we need to make judicious grocery decisions when it comes to flavouring agents.

WHAT CAN YOU DO?

When ingredient labels lack transparency, feeling helpless is a common response. But don't worry! There are ways you can still shop with assurance. Prioritize buying foods that are free of added flavours; no need to worry about flavourants if your food is free of both



"natural flavours" and "artificial flavours." If you're going to buy flavoured foods, choose ones with alcohol-based extracts and essential oils, which are natural flavours straightforwardly derived from the stated ingredients. For example, vanilla extract comes from vanilla beans soaked in alcohol, while bergamot oil comes from pressing bergamot-fruit peels, so buy products that state "pure vanilla extract" or "pure bergamot oil."

Another option is to purchase food products from local producers, many of whom sell directly at farmers' markets. They'll be able to tell you where their flavourants, if any, came from and why they were added. Check the labels on foods from smaller producers and you'll be happy to see that many contain no added flavours at all. Also bear in mind that buying organic processed foods is not a solution; flavouring agents of unknown sources can be contained in them, as well.

ADDED FLAVOURS CAN BE OKAY

Avoiding flavourants altogether might not make sense. In some cases, added flavours are probably acceptable to many people. They may have come to love the taste of peachy gummies and cherry lollipops. They might understand that our appetite for pure vanilla extract exceeds the world's sustainable production capacity, so vanillin will do. They may prefer to eat apple sauce with added flavours rather than letting unflavourful apples go to waste. They may feel comfortable with added flavours if they enhance flavours already present. The real issue, to me anyhow, arises when we don't know the sources of these flavours and we would not approve of them if we did, or when added flavourants are an accomplice to unsustainable, unhealthy, or low-quality food.

How can we tell at the grocery store whether we approve of the added flavours in the product we're holding? There is no sure way, but I suggest this approach: "Contains natural or artificial flavours" should

serve as a signal that the food we're holding wasn't flavourful enough for one reason or another before the flavourants were added. This should prompt us concerned eaters to wonder why. Although we might not be able to verify why flavours have been added, we can still make educated speculation. And the more we think, read, and talk about added flavours, the more informed our speculation will be.

QUALITY OF FLAVOUR

Ethics and health aside (if bracketing ethics and health is even possible when discussing food), food without added flavours tastes better. This is reason enough to pass up flavoured foods. As I explained earlier, food processors run taste tests to identify flavour markers—those flavours that play a pronounced role in the overall taste of a certain food. A strawberry-flavoured drink has a strawberryiness about it because it's concocted with what scientists have identified as a pre-vailing strawberry flavour chemical found in strawberries. But real strawberries have hundreds more chemicals that work together to sing the taste you can only get in the fruit itself. Fake strawberry, with only a few flavour chemicals, yields a flat flavour profile compared to real strawberry, which contains hundreds of flavour chemicals that yield a multi-layered, nuanced, and full-flavour experience.

"Whole flavours," as I like to call them, hit the spot and make you exclaim, "Wow!" They're deeply satisfying. Eat whole flavours. Crush up summer strawberries and add them to sparkling water. Your taste buds will thank you, and so will Ontario farmers. 🍓

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