



Vanilla - Standards and Labeling **Vanilla 2015**

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For several decades there have been the same old discussions about how vanilla is labeled how it is being mislabeled, and how unethical interpretations are responsible for the ruin of civilization as we know it. Farmers are starving, lemurs are dying, and consumers are cheated. A lot of hyperbole. There is a lot of talk, but not much understanding. Isn't this really much ado about nothing? Probably not, but it definitely hasn't been of any benefit to the farmers, industry, consumers or lemurs. In fact, I'd argue that it has made things worse – but let's leave that for another time.

Not Today



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I am sorry if this is a disappointment, but another thing that we'll leave to another time is a review of all of the applicable regulations. John Hallagan did an excellent job of that at the last symposium – Vanilla 2013 and there is no way that I can compete with the job that he did. He showed us that it is very important to look beyond just the Vanilla Standard, and the labeling regulations – but to read all of the regulations, preambles, advisory opinions, and other regulatory guidance together, not selectively. This must be done through the lens of ensuring that the consumer is not misled, not with the intent of how we can prop up our individual marketing positions. I am convinced that all of the current contention about the label will go on far after vanilla has been destroyed. If we want to resolve these issues, we need substantive, meaningful discussions to clear up the so-called grey areas and deal with the real problems. But that also is not for today. So what is?



Is there anyone who believes that you can add
vanillin not derived from vanilla to a vanilla
extract and still be able to call it vanilla extract?

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So, let me ask you all some questions. Is there anyone who believes that you can add vanillin not derived from vanilla to a vanilla extract and still be able to call it vanilla extract? If so, raise your hand.



Is there anyone who believes that you can add
that product to ice cream and still call it Vanilla
Ice Cream?

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Is there anyone who believes that you can add that product to ice cream and still
call it Vanilla Ice Cream?



Is there anyone who believes that you can add
any flavor ingredient not derived from vanilla
that tastes like vanilla to an ice cream and still
call it Vanilla Ice Cream?

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Is there anyone who believes that you can add any flavor ingredient not derived from vanilla that tastes like vanilla to an ice cream and still call it Vanilla Ice Cream? Great, we have agreement. We have just put to rest many of the discussions of the past. One could only hope that we could end there. But we can't.

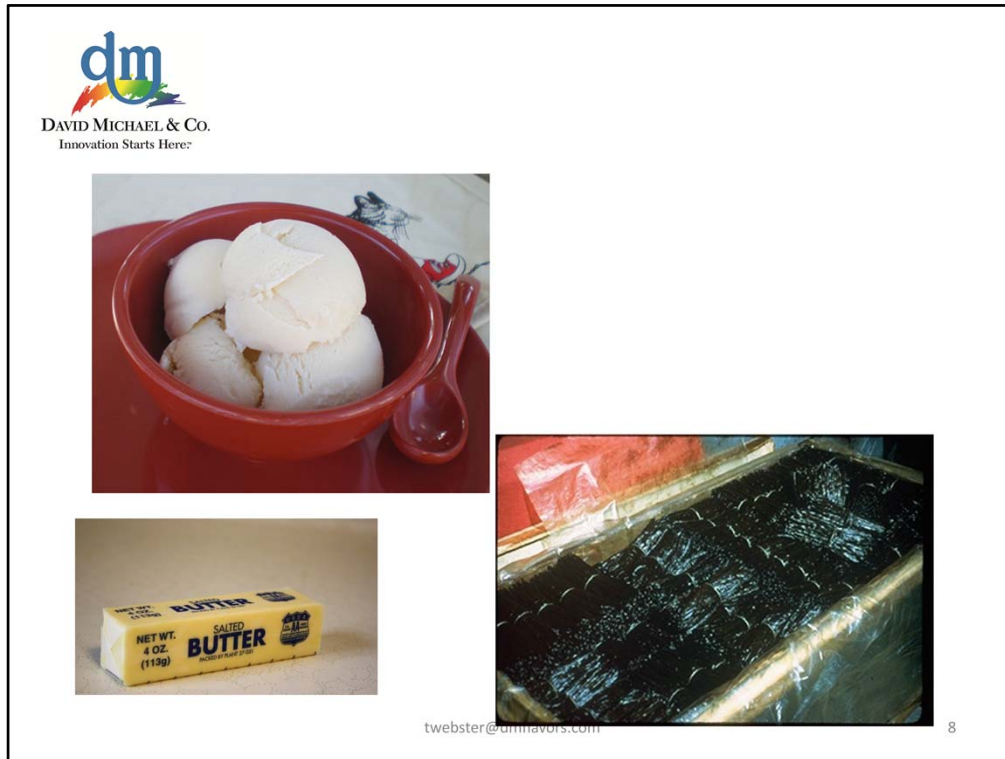


Is there anyone who believes that you cannot
not add a flavor that does not taste like vanilla
and is not derived from vanilla to an ice cream
and still call it vanilla ice cream?

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Ah some hands. The regulations are clear that you can. The problem is that the regulations are not so precise in helping us determine when you can.




You can add a butterfat flavor to a reduced fat ice cream without affecting its labeling. But what about other flavors? How about masking flavors that could be used to mitigate off-notes? The question is simple, "does the added flavor taste like vanilla or make it appear that more vanilla is present than was actually added?" The answer is pretty simple in the creation phase. It just gets difficult in the enforcement.

A flavor chemist knows why he is adding a particular flavor ingredient. If it is to modify the base flavors, or round off, give a different cast, etc. they know. If they are boosting the vanilla flavor, they know. If they don't, they aren't very good. So it comes down to ethics.



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NHDC

IOFI



May 13, 2013

Information: Information Letter #1514

Topic: Flavoring Properties (FPMs)

On May 13, 2013, the IOFI Board approved industry guidance for the use of Flavoring Properties (FPMs) with modifying properties (MPs). Based on the work of the IOFI Sensory and Advisory Committee (SAC), the guidance is available at the IOFI Member Portal (http://www.iofi.org/MemberPortal/MemberDocuments/IOFI_SAC_FPMs_Guidance.pdf).

The guidance clarifies FPM terminology, identifies acceptable uses in line with the Codex Alimentarius Guidelines for the Use of Flavorings (CAC/GL 23-2008, also included as Annex C1 in the IOFI Code of Practice), and offers points to consider when labeling these materials for sale and transport.

In the future, IOFI will produce training and education materials on the subject, as well as a Sensory Science Paper. Both will incorporate information from the FPM Science Committee Sensory Data Task Force, expected later this year.

Intended Audience: All IOFI members.

Background: In its definition section the Codex Alimentarius Guidelines on the Use of Flavorings (CAC/GL 23-2008) specifies that "Flavorings are products that are added to food to impart, modify, or enhance the flavor of food..." (See Codex Guidelines for the complete text of the definition). The definition also states that "Flavorings are products that are added to food to impart, modify, or enhance the flavor of food..." (See Codex Guidelines for the complete text of the definition). The definition also states that "Flavorings are products that are added to food to impart, modify, or enhance the flavor of food..." (See Codex Guidelines for the complete text of the definition).

Requested Action: IOFI members, who do not have access to the IOFI Member Portal, are invited to request a username and password at the website to access the IOFI Member Portal (<http://www.iofi.org/MemberPortal>).

For further information: If you have any questions, please contact the IOFI secretariat.

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This dilemma is actually the same as what we are facing in the flavor modifier/dual use ingredient issue. Ingredients such as NHDC (Neohesperidine Dihydrochalcone) can be legitimately used as a flavor and as a sweetener. When it is added at low levels to a fruit flavor like strawberry, it adds the impression of freshness – a flavor. At higher levels, it makes the product sweeter – a sweetener. FEMA and IOFI are addressing this and have published sensory protocols to help determine the effects. The protocols seem to be just extension of what the Commissioner laid down in the 1983 advisory opinion. If we want to add authority our characterizing determinations, perhaps we should bring in the sensory scientists to develop a similar protocol for characterizing vanilla flavor. I don't think that is necessary because I believe that rationale and ethical people will come to rational and ethical decisions when they understand the reality.



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But in the end, paraphrasing Taylor Swift, “Cheaters gonna cheat”.

We can go on about this for many hours. Actually we have for many years and have not changed much. And even if it was resolved, I doubt that it would change current practice. In the meantime, this dialog has diverted our attention from a much more serious breach of the vanilla standards.

21 CFR 169

- Vanilla beans = “the properly cured and dried fruit pods of *Vanilla planifolia* Andrews and of *Vanilla tahitensis* Moore”.
- Vanilla constituent = the total sapid and odorous principles extractable from vanilla beans.
- properly cured and dried = traditional in the 1960’s

21 CFR 169 defines vanilla beans as “the properly cured and dried fruit pods of *Vanilla planifolia* Andrews and of *Vanilla tahitensis* Moore”. The regulation also defines a “vanilla constituent” as the total sapid and odorous principles extractable from vanilla beans. Why is this a big deal? While the primary purpose of the standards were to deal with adulteration, the attention to species, moisture content, total odorous and sapid principals, and properly cured fruit shows that there was equal concern over what could qualify as vanilla suitable for use in food. What this means is that if an extract is made from improperly cured beans, or contains less than the total sapid and odorous principles of a properly cured bean – it is adulterated.

The standards were promulgated in the 1960’s and the curing process was that ripe fruit was picked, washed, then cured and dried under the sun to a moisture content of approximately 25%. The result was a beautiful, wonderfully fragrant, delicious bean that established vanilla as the world’s preeminent flavor. The standard’s intent is to ensure this exquisite quality and to ensure the correct quantity of flavor constituents made into the extract. This is evidenced by the requirement specifying that if the moisture content is greater than 25%, more beans must be used to make it equivalent to 25%. It is pretty safe to say that not much vanilla in the market today has been produced in that manner.

So the standards pretty much dictate that a bean must essentially be cured in the traditional manner in order to be considered “vanilla”. And we know that modern

vanilla curing, processing, etc. has changed since the 60's. Some of the changes are probably OK, but some of the practices that have been introduced in the last few years are problematic. And what are those problems?

Problems

- *Immature beans*
- *Vacuum packed green or partially cured beans*
- *Extraction of less than fully cured or otherwise treated fruit.*

Immature beans: It is obvious that immature beans will not generate the same flavor constituents that mature beans do when they are cured. There is no other purpose for vanilla extract in food other than to contribute flavor and the consumer has a certain expectation of what that flavor should be. Immature beans do not deliver the flavor anticipated by the standards.

Vacuum packed green or partially cured beans: We all know the quality associated with the practice of vacuum packing uncured beans. Lower vanillin and phenolic off-notes are clear evidence that the fruit has not been properly cured and thus does not meet the standard.

Extraction of less than fully cured or otherwise treated fruit. Subjecting the green fruit to processes significantly different than those anticipated by the standard when it was written in the 1960's results in a product that is not vanilla. Most of these processes are specifically designed to result in a flavor profile that is different than traditional, e.g. increased vanillin.

In addition to these, there are quick-curing and other new innovations. I don't think there was any intent in the regulations to prevent improvements to the curing process. Having had the pleasure of meeting some of the people that were involved in its creation, I am pretty sure of that. But I am equally sure that they intended to protect the integrity and quality of vanilla.

- If the chemical composition of the odorous and sapid constituents are significantly different than traditional cure , the fruit does not meet the Standard of Identity, nor will the resulting extract.

The question that confronts us is how to distinguish between improvement and deviation from the standard. I propose that it is when the chemical composition of the sapid and odorous constituents is significantly different than that of traditionally cured fruit; the product is no longer vanilla.

The primary purpose of the vanilla standards is to ensure that when a product is called vanilla extract it is made from those properly cured, mature beans. Vanilla is the only flavoring with a federal standard of identity because it is one of the world's most prized flavor profiles, and the one most likely to be adulterated. If we are truly committed to the sustainability and credibility of this industry, we need to move beyond the semantical dissertations about legitimate WONF's and address the real adulteration in our supply chain.

EASY QUESTIONS?

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