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Make Your New Year's Resolution to Go All The Way: Exploring Developments in Organic Minor Ingredients

By Grace Marroquin and Sheila Linderman

The New Year is a great time to take a closer look at our goals and renew our dedication. For all of us in the organic processing world, one thing we need to ask ourselves is "am I as organic as I could be?" Whether your products are "certified organic" with 95 percent organic ingredients, or in the "made with organic" category, it should be the goal of every organic processor, and the organic industry as a whole, to take continual strides toward including as many organic ingredients as possible.

Today there are more minor organic ingredients than ever. Just five years ago, it was virtually impossible to find certified organic inulin, guar gum, lecithin or rosemary antioxidant, just to name a few. Today, a call to an organic supplier would probably illicit a response like, "how many tons do you need?" Some of the most recent developments have been in areas such as flavors, colors and functional processing aids, offering more ways to take products to a higher level of "organic-ness" than ever thought possible. Processors who keep pushing for better ingredient options, along with innovative ingredient manufactures, have been, and will continue to be, the catalysts for bringing new organic ingredients such as these to market.

Taking this step to be more organic is not only important to help move the organic movement forward, but it's also important to prove our authenticity to consumers. When the average consumer buys a certified organic product, he/she assumes that all the ingredients are organic, the consumer's knowledge of the regulations notwithstanding. As insiders, we understand the value, and even the necessity, of the 5 percent (what would baked goods be without baking powder?). However, it's important not to forget that consumers trust the makers of organic certified products to give them the most organic products possible. So then, why stop at just 95 percent or less when you can do better?

Organic Alternatives to Synthetics

When the framers of the National Organic Program (NOP) came up with the ingredients on the National List, all of which were put through rigorous tests and reviews, it was with the idea of providing processors with familiar tools. Without question, there would not be many processed products were it not for The National List. But a few years ago when the Harvey case was filed, threatening the use of synthetics of any kind, innovators rose to the challenge and began developing alternatives. Today, manufacturers have created many alternatives for ingredients that were thought to be irreplaceable including several of the synthetics allowed under 205.605(b). While it's true that there is no organic replacement—yet—for baking powder or baking soda, there are many organic ingredients that can be used instead of other allowed synthetics.

Take, for example, organic rice bran extract, which has multiple functions including replacing silicon dioxide in many formulations. This ingredient option not only increases the overall organic percentage of the finished product, but also makes a "cleaner," less "chemical" ingredient declaration that sits better with the consumer. In addition, the fact that it is an organic ingredient means that land had to be converted to organic agriculture in order to produce the raw materials. That, for many of us, is the ultimate goal.



Rudi's Organic is a role model for using as many organic ingredients as possible.

One specific company that has shown a high commitment to going as organic as possible is Rudi's Organic Bakery, which has gone from natural to organic versions of many processing aids, including using an organic pan release agent as well as an organic oil as a lubricant for their divider blades and plates. They are also using an organic mold inhibitor. Conventional processors use calcium propionate or potassium sorbate to inhibit mold and many in the organic world were using a natural cultured spelt flour (or fermented wheat starch), but Rudi's worked with their provider to create an organic cultured spelt flour.

Products like these came about not only from a commitment to organic, but an ability to think outside of the conventional processing tool box. Even though we can still use the synthetics listed, the National List should not be used as a crutch or a reason to stop at the minimum labeling requirements. A sampling of organic ingredients that function like some of the substances on 205.605, along with other organic minor ingredients to consider, can be found in Table 1, "What Organic Minor Ingredients Could You Incorporate?"

What Organic Minor Ingredients Could You Incorporate?	
ORGANIC INGREDIENT	FUNCTION(S); WHAT CAN BE REPLACED
Grape juice extract	Tartaric acid
Low-moisture potato starch	Desiccant; anti-caking agent for shredded cheese
Palm stearin	Prevents oils from separating in nut butters; confectionery coating; replaces shellac
Palm shortening	Replaces conventional shortenings in bakery applications while adding antioxidants (for rancidity control)
Pre-gelatinized waxy cornstarch	Disintegrant in tablets, replaces magnesium stearate
Fermented wheat starch	Source of calcium propionate, retards mold in baked goods
Rice extract	Emulsifier, replaces lecithin and may replace some mono- and di-glycerides
Rice bran extract	Dough conditioner, emulsifier, SiO ₂ replacement, emollient; release agent
Antioxidants from organic superfoods	Replace conventional tocopherols and antioxidants
Oil blends and oil derivatives	Release agents for nettings, deposited nuggets on belts (bakery applications), baking pans and dough dividers
Aroma chemicals	Replacements for conventional aroma chemicals used in the flavor and fragrance industries
Erythritol	Sugar substitute
Inulin	Can replace gluten for gluten-free foods, prebiotic and bifidus promoter, improves texture and mouth-feel of low-fat foods, enhances calcium absorption, reduces caloric content in foodstuffs, can be incorporated into low glycemic food for sustained energy release

Table 1

Flavors and Yeast: The Classification Conundrum

Flavors and yeast are two examples of ingredients that were put on the National List under 205.605 most likely because the framers of the NOP believed that organic versions could never exist. In order to be certified organic, an ingredient has to be defined as agricultural and cannot use synthetic materials in its method of production. Because of typical processing methods for yeast and flavors, it was believed at that time that these items could not be processed in such a way that would allow them to be certified organic and thus they ended up on the 605 list. Because of this classification question, they are still on 605 today even though there are hundreds of certified organic flavors and tons of certified organic yeast available. While certain groups are looking for ways to solve this classification problem, it's a highly complex issue that may take some time for the NOP to sort out. Until then, processors can choose to use the organic versions, even though they're not required to do so. For many processors, this is another step in their pursuit to offer the most organic option possible and appeal to the consumer demand for foods that are authentic.

In regards to flavors, organic flavor makers can make any profile you can find in natural versions, matching the flavor and performance in all beverages, ice creams, yogurts, teas and more. According to flavor experts, the only situation in which a natural flavor might be needed is in ultra high heat processing such as pasteurization. As for organic yeast, it can be used in place of the natural version in baked goods, as well as in fermented beverages such as beer and wine. Others are using it to give a savory flavor to products like soup and meat analogs.

Replacements for Non-Organic Items Listed on 205.606

The part of the National List that applies to processed food also includes Section 205.606, agricultural products that are not available as organic. This section, the expansion of which resulted from the Harvey ruling, currently has 38 items listed on it, and promises to include many, many more. Ingredient manufacturers should think of 205.606 as their customers' "organic wish list." Why? For one thing, these ingredients will be sunsetted off in a shorter time frame than the rest of the National List. Once they're gone, organic products that contain them will have to be relabeled as "made with organic." But, don't fret, many of these ingredients are already becoming available in organic. While the organic versions of some of these ingredients such as colors may require a little more creative formulating or perform slightly different than the conventional versions, they are still very effective and, to retain the "USDA Organic" seal, you must use the organic forms.

Here are some of the ingredients on the 606 list that have been developed in organic form:

- Cornstarch
- Gums (Arabic/acacia, guar, locust bean)
- Soy Lecithin
- Elderberry Juice Concentrate for Color
- Black Carrot Juice for Color
- Turmeric Extract for Color (water- and oil-soluble)
- Annatto Extract for Color (water- and oil-soluble)

Like inulin, which was unavailable in organic just a short time ago and is now available from multiple suppliers, it's likely that some innovators out there will make many more of the 205,606 ingredients available in organic before the sunset period is up. Because the 606 list is such an ever-evolving area, processors need to make a continuous effort to keep current and informed regarding the availability of new organic ingredients or else they may run into a few hiccups when it comes time to get their certification renewed. For some tips, see "Simple Steps to Source Minor Ingredients."

Conclusion: The Major Message About Minor Ingredients

The goal of the NOP has always been to use as many organic ingredients as possible. This should be the philosophy of the organic industry. We as an industry owe it to our customers and to ourselves to do the best we can. Our continued success depends on the consumer and on the farmer. By using as many organic ingredients as possible, we are ensuring our integrity as well as supporting sustainable farming. In striving for these goals, we will help ensure the health of our planet. And, by always innovating and raising the bar, we help ensure consumer confidence and loyalty. Everyone wins. So the only question that remains is, what steps are you going to take to be more organic this year?

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