



OTA Fact Sheet on the National List

The USDA organic standards allow most natural substances in organic farming while prohibiting most synthetic substances. The National List—a component of the organic standards—lists the exceptions to this basic rule.

What is the National List?

The National List of Allowed and Prohibited Substances is the list of exceptions to the general requirement that natural materials are allowed and synthetic materials are prohibited. Examples of these exceptions include fish emulsion (allowed synthetic fertilizer), arsenic (prohibited natural pesticide), and baking soda (allowed synthetic food ingredient). Once an input has been added to the National List, the National Organic Standards Board must reevaluate it every five years to confirm that it continues to meet all required criteria set forth in the OFPA; this is referred to as the “sunset” review.

Why are there exceptions?

Organic production systems encourage a healthy environment with as few inputs as possible. The organic regulations require that organic operators employ cultural, biological and other management tools before using any material inputs — whether synthetic or natural. However, congress recognized that farmers and food manufacturers would need to have access to certain substances under certain circumstances.

The National List was meant to reflect this realistic approach to organic production. Therefore, some synthetics are allowed if the review process shows that they are:

- Not harmful to human health or the environment
- Necessary to production because of unavailability of natural products
- Consistent with organic ideals

Likewise, the National List provides a mechanism to prohibit natural materials that may be harmful to human health or the environment and inconsistent with organic ideals.

Who defines the National List?

The National Organic Standards Board (NOSB), a group of fifteen organic industry stakeholders appointed to advise the Secretary of Agriculture, is responsible for making recommendations on which inputs will be on the list. The Secretary of Agriculture makes the final determination. A detailed and scientific Technical Review (TR) is conducted for each input, and the board makes their recommendations based on seven review criteria:

- 1) Effect on human health.
- 2) Effect on the farm ecosystem.
- 3) Toxicity and mode of action.
- 4) Availability of effective alternatives.
- 5) Probability of environmental contamination during manufacture, use and disposal.
- 6) Potential for interactions with other materials used.
- 7) Overall compatibility with a system of sustainable agriculture.

How does the National List change?

In 1995, the NOSB completed a massive review of the inputs currently in use by organic producers, and those recommendations became the base for the National List. The process continues at each NOSB meeting, as new inputs are reviewed for inclusion or removal. Any business or person can petition inputs for review by the board. Inputs on the National List are reevaluated every 5 years to determine if the exception for their use is still warranted. This is called the Sunset Process. Changes to the National List, whether they are the addition of a new input or removal of an existing one, must be passed by two-thirds majority vote of NOSB members.

How Is The National List structured?

The National List is part of the national organic regulations available at www.ams.usda.gov/nop, and is divided into six parts:

1. Synthetic substances allowed for use in organic crop production (section 205.601). Examples: fish emulsion for fertilizer and newspapers for mulch.
2. Nonsynthetic substances prohibited for use in organic crop production (section 205.602) Examples: arsenic and strychnine.
3. Synthetic substances allowed for use in organic livestock production (section 205.603). Examples: aspirin for inflammation and iodine for teat dips
4. Nonsynthetic substances prohibited for use in organic livestock production (section 205.604). Example: strychnine.
5. Nonagricultural (nonorganic) substances allowed as ingredients in or on organic processed products (section 205.605). Examples: dairy cultures, yeast, baking soda
6. Nonorganically produced agricultural products allowed as ingredients in or on organic processed products (section 205.606) This sections lists the few ingredients which may be used in an organic product if an organic version is not commercially available. Examples: celery powder, kelp, dillweed oil.

These lists contain the only exceptions to the fundamental basis of the organic industry that organically grown and handled foods are produced solely with natural or organic inputs.

Why are there non-organic ingredients in some organic food?

If you were to make organic cookies at home you would use organic flour, sugar, oil, eggs, raisins, etc. But what about the baking powder and baking soda? Processors of many kinds of organic foods face the same dilemma. In addition, nutritional fortification with vitamins and minerals is sometimes required by regulation or professional guidelines. To accommodate the needs of food manufacturers and regulatory guidelines, the National List is home to the few synthetic processing aids and nonorganic ingredients that meet the criteria described above. These substances cannot constitute more than 5% of a finished product labeled as “organic” or more than 30% of a finished product labeled as “made with organic (specified food or food group(s)).” Only products that are composed entirely organic ingredients and processing aids may be identified as “100% organic.”

Criteria for non-organic ingredients added to processed foods

The NOP regulations outline additional strict qualities for synthetic ingredients included in organic foods:

1. It is impossible to produce the ingredient from a natural source and has no organic ingredients as substitutes.
2. Its manufacture, use, and disposal do not have adverse effects on the environment.
3. The nutritional quality of the food is maintained and the ingredient itself or its breakdown products do not have adverse effects on human health as defined by applicable Federal regulations.
4. Its primary purpose is not as a preservative or used only to recreate/improve flavors, colors, textures, or nutritive value lost during processing except in the latter case as required by law.
5. It is Generally Recognized as Safe (GRAS) by FDA when used in accordance with Good Manufacturing Practices (GMP) and contains no residues of heavy metals or other contaminants in excess of FDA tolerances.
6. Its use is compatible with the principles of organic handling.
7. There is no other way to produce a similar product without its use and it is used in the minimum quantity required to achieve the process.

Adding or removing listed inputs

Any individual or organization may submit a petition to amend the National List. The National Organic Standards Board (NOSB) reviews all petitions and makes formal recommendations to USDA. These recommendations serve as the basis for rulemaking actions.

[View Instructions and Guidelines on How to File a Petition](#)

Questions?

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