

ORGANIC FOOD PROCESSING BASICS

What does "organic" mean?



Organic is a guarantee about how an agricultural product was grown and handled before it reached the consumer. It's also a set of requirements for farmers who grow food and for processors who manufacture food products. Organic farmers use management systems that promote and enhance biodiversity, biological cycles, and soil biological activity. Organic processors maintain food's organic status by segregating it from synthetic and other prohibited materials, carefully tracking ingredients, and using detailed record keeping.

The United States Department of Agriculture's National Organic Program (NOP) oversees the national organic rule (7 CFR Part 205) that went into effect in 2002. The NOP establishes consistent national standards for organic production, facilitates interstate and international commerce, assures that organic food meets a consistent standard, and protects consumers from fraudulent organic claims. The federal organic rule is posted on the USDA web site: www.ams.usda.gov/nop

One component of the NOP's Final Rule important to food processors is the "National List of Allowed and Prohibited Substances." Although most natural materials are allowed in organic, this list details which synthetic products (processing aids, additives, etc.) may be used to make organic products. The list is available on the NOP web site. The Organic Materials Review Institute, www.omri.org, also publishes information on additives and processing aids by generic and brand names.

What is organic processing?

To use the term "organic" on a food product, the ingredients must be grown and the product manufactured according to the national standards specified by the NOP. "Handling" includes cooking, baking, curing, heating, drying, mixing, grinding, churning, separating, distilling, extracting, slaughtering, cutting, fermenting, eviscerating, preserving, dehydrating, freezing, chilling, or otherwise manufacturing, packaging, canning, jarring, or otherwise enclosing food in a container. If you do any of these things, you're a handler.

Both the ingredients and the facility where the food is processed must be certified organic. This means that buildings where ingredients are stored,

equipment, product packaging, and storage areas used for final products must all meet the NOP requirements.

Cleaning products and solvents must appear on the National List or must be completely rinsed away before organic production so that no residue on food contact surfaces will contaminate the final product. Pest management in organic operations is most often dealt with through preventive practices such as exclusion, sanitation, removal of pest habitat, management of environmental factors, mechanical or physical controls or lures/repellents (see section 205.271 of the NOP).

Organic and non-organic products may be produced in the same facility – this is known as a "split operation." Split operations must take measures to

prevent commingling and contamination of the organic ingredients and final products. Ingredient storage must be dedicated to organic or you must document that containers are clean before using them for organic. Synthetic fungicides, preservatives, and fumigants may not be used on packaging materials or storage areas and containers. Any containers that have been in contact with non-organic products or prohibited substances must be thoroughly cleaned so that they pose no risk of contaminating the organic product. The certification agency must approve finished product labels for compliance with the National Organic Standards before use.



What are the benefits to processors?

Organic is one of the fastest growing sectors of the food and agriculture industry in Minnesota, the nation, and abroad. With organic retail sales growing by about 20% per year, consumers have shown they are willing to pay premium prices for certified organic products. Large retail chains have responded to consumer demand by adding organic products and even “Organic” sections to their stores.

The organic market currently offers opportunities for businesses because of high consumer demand, less competition, and fewer of the slotting fees that the distribution system for conventionally produced goods requires.

Whether you are considering starting a new business, adding an organic line to your existing operation, or converting your entire operation to organic, this fast-growing market may provide an opportunity to improve your bottom line.

How do I get organic certification?

1. Application: The NOP requires that organic processing facilities be certified by a USDA-accredited certification agency. Each certifying agency has its own application package and sets its own fees. Applications are generally about 10 pages long. They ask the processor to provide a detailed organic handling system plan and require documents such as floor plans, flow diagrams, and sample labels. Section 205.201 of the NOP lists a plan’s necessary components:

- a description of practices and procedures to be performed and maintained;
- a list of all substances used in production or handling;
- a description of monitoring practices and procedures;
- a description of the record keeping system;
- a description of management practices and physical barriers established to prevent commingling or contamination; and
- any additional information required by the certifier.

The certifying agency reviews the application and works with the processor to make any necessary changes to the organic system plan.

2. Inspection: The agency assigns an inspector who reviews the application materials and facility records, then visits the plant for an on-site inspection, which generally takes 3 to 5 hours. Complete access to the production or handling operation, including any non-certified production and handling areas, is required. The inspector then completes an inspection report. The complete report usually consists of a document completed on-site and co-signed by the operator and the inspector, and another report completed by the inspector off-site.



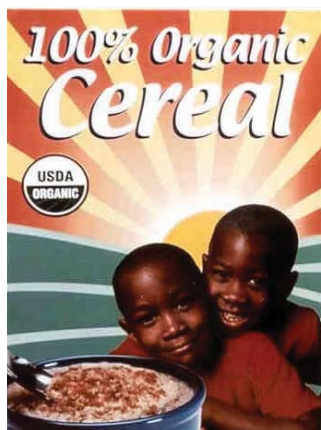
3. Review and Decision: The certifying agency reviews the inspection report. If the agency determines that the facility meets NOP requirements and is following its own organic handling plan (created in Step 1), certification is granted. Certification allows the use of the term “organic” and use of the USDA Organic seal. Continuation of certification requires updating records on file with the certifier, an annual on-site inspection, and renewal fees. The whole inspection process, from application to certification, generally takes at least 8 weeks depending on the availability of inspectors and the certifier’s workload. Records related to certification must be maintained for not less than 5 years.

How do I choose a certifying agency?

It is important to find a certifier you are comfortable working with. The Minnesota Department of Agriculture recommends that you contact several agencies. Ask about fee schedules (which can vary widely), services, and their policies about follow-up calls during the year. Each certifying agency is required to provide a list of its clients to the public. You may want to call certified organic processors in your industry and find out which agencies they are using. If you intend to sell to international markets, find out which certifier your foreign customer prefers. You can get a list of accredited certifiers at www.mda.state.mn.us/esap/organic.

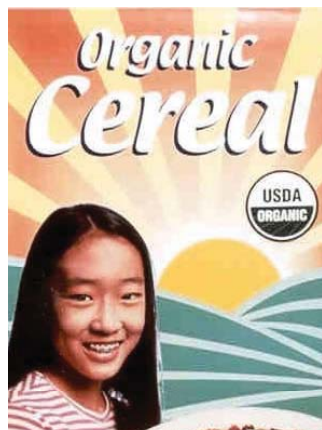
Labeling options

The NOP specifies four levels of labeling that may be used on retail packaging:



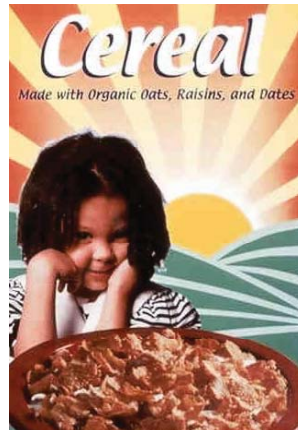
"100% organic"

If the final product contains only organically produced ingredients by weight or fluid volume (excluding water and salt), you may use the term "100% organic" or "organic". All processing aids must also be certified organic. The label **must** identify the certifying agency and all ingredients. You **may** display the USDA Organic and certifying agency seals.



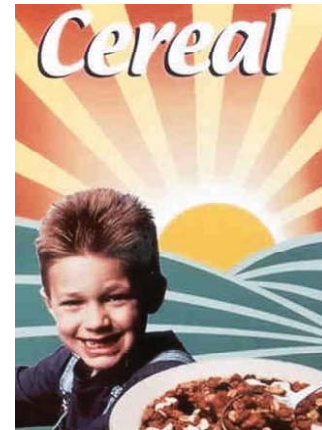
"Organic"

When the final product contains at least 95% organic ingredients by weight or fluid volume (excluding water and salt), you may use the term "organic". Agricultural ingredients must be organic if commercially available (e.g., you cannot use conventional vanilla simply because it's less expensive), and the product may not contain organic and non-organic forms of the same ingredient. All remaining ingredients and processing aids must follow the National List. The label **must** identify the certifying agency and **must** identify all organic ingredients in the ingredient statement (it is permissible to use an asterisk defined elsewhere on the package as meaning organically produced). You **may** display the USDA Organic and certifying agency seals.



"Made with organic ..."

When the final product contains at least 70% organic ingredients by weight or fluid volume (excluding water and salt), you may use the statement "Made with organic ____ (and specify up to 3 ingredients or food groups like sweeteners)." Conventional **agricultural** ingredients may be used in the remaining 30%, provided that they are not genetically engineered, irradiated, or grown using sewage sludge. All remaining **non-agricultural** ingredients must follow the National List. The name of the certifying agency **must** appear on the information panel and each organic ingredient must be identified in the ingredient list. You **may** list the total percentage of organic ingredients in the product and display the seal of the certifying agency on the information panel. The USDA Organic seal **must not** be used.



Less than 70%

Products containing less than 70% organic ingredients by weight (excluding water and salt) may only identify each organic ingredient on the ingredient list and identify the percentage of organic ingredients on the information panel. There are no restrictions on the non-organic ingredients. The USDA Organic seal and the seal of any certifying agency **must not** be displayed. **Processors that only handle product in this category do not have to be certified.**

The NOP describes the size of type and the locations where organic information may be placed on packaging in sections 205.303-305 and 205.307-309 of the NOP Final Rule. It is important for certifiers to review labeling and packaging before products enter the marketplace.



Photo Courtesy of Organic Trade Association, Geoffrey Wheeler

Case studies:

Country Choice

Country Choice, in Eden Prairie, Minnesota, entered the organic market in the late 1990s thinking it would be a good niche market for a small company. At the time, organics had limited consumer appeal and little attention from mainstream retailers. Ten years later, the company is benefiting from burgeoning consumer and retail interest in organic products. Country Choice's line of organic hot cereals and cookies are available throughout the U.S. and Canada in conventional grocery stores as well as natural food retailers. And with unprecedented levels of consumer interest, Country Choice's growth exceeds the organic industry's 20% annual growth rate. One of the company's biggest challenges is the supply chain. Organic source materials may sometimes be limited, which can lead to price fluctuation and margin pressure. Country Choice tries to reduce these potential problems by contracting some items in advance to set prices as much as possible.

Country Choice works closely with the Minnesota Department of Agriculture and the company's president, Chuck Enderson, is a member of the Minnesota Organic Advisory Task Force. Country Choice encourages Minnesota farmers to consider growing more organic products in order to meet the growing demand from customers.

Helios Nutrition, LLC

Helios Nutrition, LLC, in Sauk Centre, Minnesota, (also doing business as Pride of Main Street Dairy) produces organic kefir and milk. This company found an empty niche in the market and moved to fill it. Kefir, a cultured dairy drink similar to thin yogurt, is popular with ethnic Russians and health-conscious consumers. Helios introduced its product at national trade shows, where retailers expressed interest. Once the company had customers, distribution was easy to arrange. The business has grown at levels close to 20% per year.

Because Helios/Pride of Main Street has organic and non-organic operations, the plant uses dedicated storage tanks to prevent contamination and does organic processing as the first run of the day. President George Economy warns that although there are currently no slotting fees in the organic market, the large national organic distributors and retailers sometimes require "new product introduction fees" or "ad commitment fees" or require "free fills", which can impose additional costs on organic processors.

What are the concerns for processors?

- Careful recordkeeping is required – you must be willing and able to maintain the paperwork trail that ensures compliance with the NOP.
- Organic ingredients may be more costly than their conventional counterparts.
- Some organic ingredients may occasionally be in short supply. Contracting in advance with suppliers may be helpful because reformulating a product due to supply chain shortages can be difficult and costly. If the label states an ingredient is organic, it must be organic in all production runs. "Organic when available" is NOT an allowed labeling category.
- Extra time must be budgeted to train employees and contractors, such as truckers and pest control companies, on the importance of preventing commingling and contamination, especially if you also process non-organic products. Lack of proper training has been a source of noncompliance problems.
- Production of organic products can easily fit into a good Hazard Analysis and Critical Control Point (HACCP) plan. Documentation needed for organic products is similar to records that a sound recall program requires.

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www.mda.state.mn.us/esap/organic

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