

## Organic Dairy Production in Ontario

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Organic dairy production is a system of farm design and management practices for producing milk, yogurt, cheese, cream and other dairy products without the use of pesticides, synthetic fertilizers or antibiotics. For some producers, organic dairy production can be a good fit. There are many factors to consider before making the transition to organic dairy production, including current and future milk demand, standards, certification requirements, production costs and lifestyle goals.

### ORGANIC DAIRY CERTIFICATION

For dairy products to be sold as organic, producers must be certified as organic. In 2020, Dairy Farmers of Ontario (DFO) reported that there were 80 organic producers supplying approximately 37 million L of milk. Basic certification requirements include:

- managing crop and pasture land without the use of synthetic fertilizers, genetically engineered (modified) organisms (GMOs), fungicides, herbicides or insecticides for three consecutive years
- maintaining accurate records for crop production practices, including machinery usage and cleaning, rented land and storage
- providing a comprehensive history of all land to be certified
- feeding 100% organic rations to cows and replacement heifers (with certain exceptions, such as minerals and essential ingredients that cannot be sourced as organic)

- avoiding the use of antibiotics or synthetic hormones — under the supervision of a veterinarian, antibiotic use is permitted twice a year per cow, but the withdrawal period must be extended; vaccination, vitamins and electrolytes are allowed.
- providing access to certified organic grazing land throughout the growing season, weather permitting. During the grazing season, pasture must provide at least 30% of the total forage dry matter intake. The animal should have access to the outside throughout the year.

Before transitioning to organic production, contact an accredited certifying body and obtain the current certification requirements.

The period of time it takes to switch a dairy operation from conventional dairy production to organic dairy production is called the transition period. How long this takes depends on factors such as cow herd size, the size of the land base and previous farming practices. Complete organic certification generally requires a mandatory year of transition for the herd and pasture — the farm is operated as an organic dairy operation for one full year before it is certified. During the transition period, the cows are kept according to organic production standards, but the dairy products produced from this herd cannot be marketed as organic until the farm receives certification. In

addition, the hay, pasture and other fields for feed crops must have been managed as organic for a minimum of 3 years on top of the mandatory 1 year of transition period.

The Canadian Food Inspection Agency administers legislation that regulates certified organic agricultural production in Canada. This legislation defines production practices that are acceptable in an organic system. Products that meet all of the applicable national organic standards may be eligible for certification by an approved third-party certification body, and sold as “Certified Organic.” Canadian standards for organic agriculture have been developed by the Canadian General Standards Board (CGSB), Figure 1. Dairy Farmers of Ontario also has an organic milk marketing policy that sets out the terms and conditions upon which DFO shall allocate the available organic milk supply to certified organic processors.

The document [Organic Production Systems: General principles and management standards](#) is revised periodically. It can be found on the Canadian Food Inspection Agency website. It is important to consult the latest version to ensure that farming methods used meet the standards.



**Figure 1.** Canada organic logo.

## COMMON ORGANIC DAIRY PRODUCTION REQUIREMENTS

Efficient organic farming requires a different production strategy that includes pasture, a high-forage diet and a limited role for grains and other concentrates. Most purchased feeds must be certified organic. For this reason, managing an organic operation can require more labour and a certain level of commitment to the operation and to organic principles.

### Forage and pasture

In an organic dairy operation, all cows should have daily free access to pasture, paddocks or runways. Throughout the growing season, cows must be able to graze outdoors. At least 30% of their forage dry matter requirement must come from pasture, Figures 2 and 3. Throughout the year, at least 60% of dry matter in daily rations shall consist of hay, fodder that is fresh or dried, or ensiled forage (e.g., fermented grass, legumes and corn plants). When ensiled corn is fed, unless there is analysis to the contrary, it shall be considered 40% grain/60% forage.



**Figure 2.** Throughout the growing season, organic dairy cows must graze outdoors.

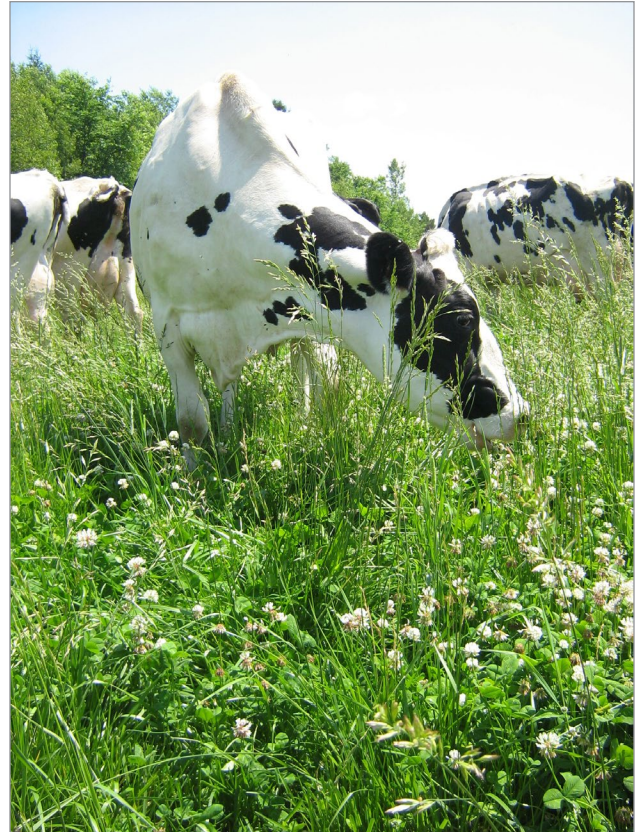
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## Housing conditions

Housing for cows must provide minimal stress in a facility that meets their normal socialization, feeding and living behaviours. The housing system should consist of a comfortably equipped stall with soft floors, sufficient space, adequate floor traction, proper ventilation and access to the outdoors. Dairy housing must also be clean, dry and provide protection from the elements. Tie stalls in existing dairy barns may be used for lactating dairy cows, and for a period of 1 month for the training of heifers raised in loose housing. Tie stalls are prohibited in new construction and major renovations. All use of tie stalls will be phased out of organic dairy production by December 2030. By December 2020, if tie stalls are used, dairy cows shall have an exercise period at least twice a week (preferably every day).

## Feed and water

There are special requirements for feed and water provided to organic dairy cows. To satisfy their nutritional requirements and ruminant behaviour, they must eat a balanced organic feed ration free of any antibiotics, hormones, chemically extracted or genetically engineered components, or substances that are synthetically preserved or coloured. The feed must consist of substances that are necessary and essential for maintaining the cows' health, including large amounts of high-quality roughage. All ingredients used must be certified as organic and approved for use by an accredited certifying body. Livestock of all ages shall have access to clean, fresh water on demand.



**Figure 3.** Organic cows eat a balanced organic feed ration.

## Health care

As with conventional milk production, organic dairy cows must receive proper health care to maintain animal health and prevent disease. Hormones for reproductive difficulties are prohibited, and cows with continued mastitis problems should be culled from the organic herd.

Should preventive health measures fail and cows become sick or injured, chemical treatments are allowed, subject to the standards and approval of a certifying body. Antibiotics and other chemical therapies can be used for treatment, but the milk from the treated cows will require a minimum withdrawal period equivalent to double the label requirement or 30 days (whichever is longer) before the milk from the treated cows can be considered and marketed as organic again.

As in conventional dairy, the welfare of the animal always comes first. Organic standards forbid the withholding of any type of animal health treatment, even if they are not acceptable under organic production. Animals that must be treated with products that are not approved for organic production must be removed from the organic herd.

### ORGANIC DAIRY PRODUCTION COSTS

The cost of transition to an organic dairy designation depends on numerous factors, including the number of cows, feed costs and expenses. Once certified, an organic farm may be inspected annually to ensure that it is maintaining organic production standards.

Table 1 lists additional annual expenses that can be expected for an average-size operation of 58 cows. Generally, feeding an organic dairy herd costs more, since organic feeds are often more expensive than conventional. During the transition period, the cost of production will increase without corresponding increased revenues until the farm becomes fully certified. Once the farm is certified, organic milk may only be a part of the total milk marketed by the farm, depending on the amount sold as organic to the consumer by the Dairy Farmers of Ontario (DFO).

Higher organic dairy production costs can be offset through increased revenue as Ontario organic producers receive a premium of \$28.49 per hectolitre of milk sold as organic. (January 2019)

**Table 1.** Additional Expenses for an Organic Operation

Expense	Cost
Annual certification fee	± \$1,000
Additional paperwork ±50 hr/yr	± \$750
Additional barn work ± 25 hr/yr	± \$375
<b>Total per cow per day</b>	<b>\$0.10</b>

Source: Organic Meadow Coop, 2008.

### SUMMARY

Changing to organic dairy production requires commitment. When deciding whether to switch to organic dairy production, be aware of what's involved. Take the time to thoroughly research the requirements and plan the transition. The changes required will vary from farm to farm. Develop a detailed plan that outlines the necessary steps for your operation.

### FOR MORE INFORMATION

Additional information is available on the OMAFRA website at [ontario.ca/organic](http://ontario.ca/organic) in factsheets:

- *Starting an Organic Farm*
- *Transition to Organic Crop Production*

#### Dairy Farmers of Ontario

E-mail: [questions@milk.org](mailto:questions@milk.org)

Website: [www.milk.org](http://www.milk.org)

#### Canadian Food Inspection Agency

Website: [www.inspection.gc.ca](http://www.inspection.gc.ca)

#### Organic Meadow Coop

E-mail: [info@organicmeadow.com](mailto:info@organicmeadow.com)

Website: [www.organicmeadow.com](http://www.organicmeadow.com)

#### Harmony Organic Inc.

E-mail: [harmonyorganic@cyg.net](mailto:harmonyorganic@cyg.net)

Website: [www.harmonyorganic.ca](http://www.harmonyorganic.ca)

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## REFERENCES

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- Government of Canada. Organic Production Systems: general principles and management standards. 2020. [http://publications.gc.ca/collections/collection\\_2020/ongc-cgsb/P29-32-310-2020-eng.pdf](http://publications.gc.ca/collections/collection_2020/ongc-cgsb/P29-32-310-2020-eng.pdf)
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