

Organic Dairies in the United States

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Defining Organic

In recent years marketing strategies focusing on organic food production have alienated conventional agriculture by condemning conventional practices. However, neither organic nor conventional management systems are inherently good or bad. Many best management practices are followed by both organic and conventional dairies. Farmers might choose to raise an organic herd because it fits their lifestyle and beliefs or because they see a niche market and production opportunity. Organic products and milk from organically managed dairy animals occupy a niche market that is considered by some individuals to be a healthier alternative to conventional products and animal management practices. In 2016, the United States was home to roughly 2,500 organic dairy farms located mainly in New York (486), Wisconsin (455), and Pennsylvania (303) (AgMRC). Only one organic dairy remained in Tennessee as of 2020.

Organic certified dairies are managed according to strict guidelines set by the USDA. Management of calves, kids and lambs born into and intended to enter the organic herd must begin during gestation of the mother. An adult dairy animal can enter an organic herd if it has been managed by the organic standards for a minimum of one year before their milk can be sold with an organic label. Dairies managed organically are required to maintain meticulous records of what is fed, receipts of feeds bought, housing, health and vaccination records, and the number of animals and their condition. All of these must be kept easily accessible for USDA organic inspectors at all times. For more information on USDA organic standards, reach out to your [county Extension agent](#), [state dairy Extension specialist](#), or read the following resources: [USDA summary](#) or [USDA Organic regulations](#). The USDA Organic standards cover nutrition, healthcare and management, housing and environment, and processing of animals sold as organic, and the management of a split operation of both organically and non-organically raised dairy animals. This article will focus on three of the 10 main topics outlined in [Subpart C](#): feed, healthcare and housing.

Feeding

Pastures and grazing play a major role in organic cattle diets. Pastures must be managed in compliance with organic standards, considered certified organic and provide adequate nutritional value as a feedstuff. Starting at six months old, dairy animals must be provided with pasture access a minimum of 120 days a year during the grazing season. For Tennessee, the potential grazing season in a typical year is 200 to 240 days, from late March to mid to late October. Animals six months or older must consume 30 percent of their overall diet during the grazing season from pasture. The other 70 percent of the animal's diet may be an organic total feed ration formulated to meet the animal's nutritional needs or can be individually fed feed components like grains to meet the nutrient demands of lactation and pregnancy. A total feed ration can consist of pasture, corn silage, haylage, hays and some grains. All feeds included must be certified organic.

Feed must be handled according to organic standards for supplements and additives described on the national list ([Subpart G](#)). Feeds cannot be treated with traditional herbicides, pesticides or fertilizers. Certain synthetic compounds can be used as herbicides within the guidelines. A complete list of what can and cannot be used is available at [ecfr.gov](#). Animal manure can be applied as a fertilizer.

Organic certifiers must approve substances not currently on the organic list, such as FDA-approved minerals and vitamins, other supplements, or consumables listed in the Association of American Feed Control Officials (AAFCO) guidelines before they can be fed to organic cows. [Tennessee regulatory contacts](#) for AAFCO are available online. Organic cows may not be fed feedstuffs with urea or manure mixed in or directly fed any mammal or poultry byproducts (e.g., animal fats or rendered products); however, they can consume fishmeal. All supplements and additives must only be fed to meet animal requirements. Mineral oil cannot be fed alone or as part of any other feed. Other feed ingredients like molasses, soybean oil and roughages must be certified organic. No genetically modified organisms or synthetic preservatives can be fed. *Note: This list does not indicate that these products are fed to conventionally raised cattle.

Health Management

An organic dairy farm must adhere to specific health management practices when caring for their herd. They should make a conscious effort to meet nutritional needs through organic forage and feed and provide a healthy and low-stress environment. Animals should have the opportunity for exercise and freedom of movement. See below for a quick list of Do's and Don'ts from the [National Organic Program's Livestock Health Care Practice Standard](#):

Do:

- Select cattle breeds which are suitable for the geographical region and resistant to diseases and parasites prevalent in the area.
- Follow careful and consistent sanitation.
- Use vaccines.
- Administer parasiticides in emergencies or acute/dangerously high parasite loads.
- Give oxytocin to treat specific post-calving conditions.

Don't:

- Use antibiotics or other unapproved medications.
- Withhold antibiotics or other treatments to maintain organic status.
- Administer medication without an illness requiring that medication.
- Use hormones to promote growth.
- Conduct unnecessary medical procedures, such as tail docking.
- Give oxytocin as part of a routine or a long-term treatment.

If the combination of preventative measures – vaccines, sanitation, breed selection, etc. – is not enough to prevent illness, producers may take veterinary recommendations for medications to the certifier for approval. Establishing a strong Veterinary-Client Patient Relationship (VCPR) is highly recommended for all farmers. If an organic dairy animal needs antibiotics or unapproved medications and there are no other alternatives available, she must be removed from the herd immediately because her milk can no longer be sold as organic. Similarly, parasiticides can only be used in extreme cases when preventative measures have not been enough. If treatment is deemed necessary during lactation, milk from animals treated with a parasiticide cannot be labeled organic for the two days following treatment in dairy cattle or the thirty-six days following treatment in other dairy species such as sheep or goats. Parasiticides may not be used in the last third of gestation, which would be the last three months for dairy cattle. The only synthetic dewormers allowed currently are moxidectin and fenbendazole.

Housing

Organic dairy housing must allow the animal to be free to perform natural behaviors such as standing, walking, lying, drinking and eating. Barns must provide adequate ventilation, clean water and sanitary resting areas. For example, straw bedding must be certified organic and must comply with all the feed requirements mentioned above. They must have outdoor access year-round; this outdoor area must include enough room to exercise and have shaded areas and direct sunlight areas. Additionally, they must have an area with a shelter of some kind. Adult animals can be confined to a barn for a maximum of one week at the end of lactation, three weeks before, and one week after parturition. Cows must not have restrictions on their ability to lay down or walk freely during confinement. Exceptions are temporary confinement because of inclement weather, conditions where health and safety could be jeopardized, contaminated soil or water, treatment of injury or illness, or 4-H or youth projects. Young and adult animals cannot be confined in a way that prevents lying, standing, fully extending limbs and moving freely (USDA, 2021). They must have free access in and out of the yard, feedlot or feed pad. The feed yards, pads and lots must be large enough not to cause crowding or food competition among the herd. Manure must be managed in a way that does not contaminate crops, soil or water. Lumber cannot be treated in any way if the animal will have contact with it. The only exception to this rule is if the farm was converted to organic after being in operation. The guidelines do not mention anything about sourcing sawdust or shavings. Roughages (straw) may be used as bedding provided they are produced organically.

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This article outlined some of the USDA qualifications and guidelines for keeping an organic herd, but it is by no means the full list. For more information, contact your [county Extension agent](#) or Liz Eckelkamp at eeckelka@utk.edu or 865-974-8167. More resources are also available on the [UT Dairy](#) website.

Follow the links below for the full list of USDA Organic guidelines and the
USDA Organic Guideline Summary.

[Electronic Code of Federal Regulations Title 7: Agriculture: Part 205 – National Organic Program.](#)

[USDA AMS, National Organic Program and Northeast Organic Farming Association of Vermont.
Guidelines for Organic Certification of Dairy Livestock.](#)



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