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Is Organic Milk Production Suited to Your Dairy Farm?

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There is no certified organic milk being produced in North Carolina. The feasibility of local production depends on several factors

- Consumers able and willing to buy
- Retailers willing to provide shelf space
- Dairy processors
- Dairy farmers with adequate milk
- Input suppliers and service providers

Consumer demand. There is growing demand for organic dairy products. Consumers are paying large premiums for organic dairy products and retail sales continue to grow, with no slowdown in sight. Right now, suppliers are rationing the grocery stores because of a shortage. As a consequence, raw organic milk brings a hefty premium over commodity milk. However, this is a specialty market and organic consumers have both a specific interest in healthy organic production methods and the income to be able to afford these higher prices. Eventually, as with all products, the growth in sales is likely to slow.

Retailers. Grocery stores, including mainstream supermarkets and specialty stores, have responded to consumer interest in organic foods. However, this is a specialty product and competition for shelf space is fierce so you will not find organic dairy products in all stores. There must be sufficient numbers of customers to make organic dairy products worthwhile.

Dairy Processors. Two North Carolina dairy processors are certified to process organic dairy products, Milkco in Asheville, owned by Ingles supermarkets, and the Harris-Teeter owned plant in High Point. At present, Milkco is processing fluid milk products using trucked in raw milk. Harris-Teeter stores are selling store brand organic fluid milk products co-packed in the Upper Mid-West. Nationally, the two main brands of fluid milk are "Organic Valley", a producer coop based in the Upper Midwest, and "Horizon" which is part of Dean Foods, the largest fluid milk processor in the country. Stonyfield Farm also produces organic dairy products, primarily yogurt, and is affiliated with the French company Groupe Danone.

Dairy Farmers with adequate milk. The market exists and is growing, creating an opportunity for North Carolina dairy farmers. However, many things must come together for local production to become a reality.

Milk processors want a certain minimum volume of milk to make processing it feasible, which means a number of dairy farmers must be involved and their production plans must

be coordinated, at least at the beginning. A 50,000 pound truckload every other day is a likely starting point. This represents the milk production from 400 to 500 cows.

There is little information available to demonstrate that organic production is feasible and profitable in this region. Rules governing organic production are strict, see below. These translate into higher costs of production and there are upfront costs incurred during the required transition period before a farm can be certified as organic. Challenges NC dairy farmers face include herd health and herd management practices under organic rules; the availability and cost of certified organic feeds and supplements; land management, crop production and pasture use; and getting and keeping organic certification.

The higher cost of feed ingredients is one major added cost but, in light of the price premiums for milk, these added costs by themselves are not expected to be high enough to reduce concentrate feeding. However, higher feed costs in combination with the pasture requirement and limitations on fertilization practices and weed control may lead to changes in the underlying economics of the feeding program for the milking cows and other animals. Limitations on varieties, fertilization practices and weed control are likely to cause lower crop yields in general. In combination, these factors may create incentives to change the types of forage crops produced and the acreage devoted to each. Overall, in light of these changes in diet, some reduction in milk production is likely.

Right now, raw organic milk is bringing hefty premium--up to 50% above the commodity milk mailbox price is reported in some areas. However, this premium must recover the costs incurred during the transition period and cover the higher cost of production once organic certification is obtained. The number of organically certified dairy farms in the nation is growing, which provides some support for the idea that this is a practical and profitable type of dairy farming, at least for some. Profit potential and cash flow feasibility depend on several factors and will vary from farm to farm. These include the farm layout and the availability of land for pasture, the history and current status of farm land because this affects the length of the transition period, and the land resource base because this affects the opportunities for feed production under the organic rules.

Input suppliers and service providers. There must be a reliable source of organic feed ingredients and this provides an opportunity for feed suppliers to serve dairy farmers needs. Producers will need technical information and support from industry and extension, including veterinary care, herd management, nutrition, agronomy, and business. At present, these supporting services are either rudimentary or do not exist.

There is little organic feed production in North Carolina but there are existing buyers and there seem to be opportunities for local farmers. There are initiatives under way to help row crop farmers decide if organic grains and oil seed production are feasible and profitable. There are few large animal veterinarians that are known to have an interest and expertise in health issues and treatment under organic rules.

The situation for farm production and the supporting industry is the classic "chicken and egg" syndrome. However, given the required transition period and with adequate publicity, it is likely the required products and services will be forthcoming if sufficient farmers commit to making the change to organic milk production.

A summary of some important rules of organic milk production. “Organic” has a specific legal meaning for farm products and organic products are regulated by the US Department of Agriculture. The rules requirements are complex and cover the materials and processes permitted in the production of certified organic crop and livestock products. In general, commercial fertilizers are banned in favor of nutrients provided through manures and composts. There is a list of approved soil amendments, and a limited amount of nitrogen is permitted. GMO varieties are banned, as are most pesticides.

For livestock there are additional regulations. All feed must be certified organic and animals must have unrestricted access to pasture. The rules on pasture use are under review and may change. It takes three years of compliance with the organic rules before land and the crops grown thereon can be brought from a state of non-compliance and be certified organic although, with sufficient records, fields may be certifiable retroactively. During the transition products cannot be sold as organic and do not earn price premiums.

There is a 12-month transition period for an existing dairy herd before milk can be sold as organic. During this time animals must be fed organic feed. Under the current rules you can feed 80% of the diet that is certified or qualifies as certified organic for 9 months and 100% certified feed for the last 90 days. This option expires for transitions starting on or after June 8, 2006, when the rules change to 100% organic feed for the full 12 months. However, for most farmers the land transition is likely to set the timetable.

Vaccination is permitted but most common medical treatments are prohibited, including antibiotics, hormones used for reproduction management and rBST. There are approved treatments by natural biological compounds. If approved treatments are ineffective then sick animals must receive unapproved treatments to satisfy animal welfare considerations. These animals must then be removed from the herd in order to maintain organic status.

Farms must be certified by (non-governmental) accredited agents. A written farm plan is required, there are record keeping requirements so farmers can document compliance during and after the transition, and there are annual inspections. The certifier charges a fee for the service. The required records should be discussed with the certifier in order to identify needed changes in the farm record keeping system.

One final issue for producers of commodity milk to consider is their comfort level with the underlying philosophy of organic production.

Additional Resources

- USDA has a National Organic Program web site with all the rules and requirements and a great deal of information: <http://www.ams.usda.gov.nop/indexNet.htm>
- Northeast Organic Dairy Producers Alliance: <http://www.nodpa.com/>
- The Midwest Organic and Sustainable Education Service: <http://www.mosesorganic.org/>

If you have questions, please contact me at the above address, by 'phone at (919) 515-5184 or by e-mail at geoff_benson@ncsu.edu or contact your local dairy extension agent.