

Consumer and Producer Guide to Organic and Natural Meats

Gregg Rentfrow, Department of Animal and Food Sciences

The U.S. consumer has more disposable income to spend on the safest, most abundant food supply in the entire world. Conventionally grown fruits, vegetables, and meats are safe, and the negative reports about their safety and impact on the environment have not been validated through research. Yet consumers are increasingly interested in organic and natural meats despite the premium that must be charged due to their added production costs. Organic meats are the fastest growing segment of the organic food market.

Once considered a small niche market and found only in farmers' markets and health food stores, organic and natural meats are becoming more mainstream. They are also one of the fastest growing segments of the food industry. According to market research conducted by *Packaged Facts*, Americans from 18 to 24 years of age are the largest consumers of organic and natural foods. These consumers want food items that are:

- friendly to the environment
- from humanely raised animals, free of chemical residues (pesticides, antibiotics, and growth promotants)
- locally grown and raised
- functional foods that promote health and help prevent disease.

Surprisingly, most of these individuals are located in the Midwest and western states. Since 1997, organic food products are growing at a rate of 17 to 20% annually, with meat sales predicted to reach \$8 billion in 2010. Currently, 22% of the most frequently purchased organic foods are meat items, whereas 73% of the organic food dollar is spent on organic fruits and vegetables.

Organic and Natural Meats

Organic and natural meats are distinctly different, although consumers sometimes confuse them as the same. Overall, natural meat production is more popular than organic meats.

Organic Meats

The Organic Foods Production Act was part of the 1990 Farm Bill, which laid the groundwork for guidelines of organically produced fruits, vegetables, dairy, and meats. The final organic standards were fully implemented in 2002, which spelled out criteria for the certification of organic foods. Organically raised meat and poultry items must meet the following basic criteria:

- livestock must be fed 100% organically grown feed (grains) and/or forage (pasture)
- no synthetic hormones or vaccinations
- no synthetic pesticides (herbicides or insecticides) on pastures
- no use of sewage sludge for fertilization of pastures
- no feeding of genetically modified grains
- no irradiation of final meat products.

These are just a few of the major criteria spelled out for production of organic meats. Organic farmers and producers must be certified through the USDA and are regularly inspected by a third-party organization or individuals who have been accredited by the USDA. Therefore, detailed records are needed for certification.

Once a product becomes certified as organic, the "USDA Organic" voluntary label may be displayed on the package. Those produc-



ers who choose not to use the label may use the term "organic" on the label.

Fresh meat items such as whole muscle cuts or ground meat are the largest form of organic meats. However, organic processed meat items such as organic hams and hot dogs are gaining popularity. Due to the inclusion of other products such as seasonings, these organic items are labeled differently from fresh meat items. The labeling requirements are as follows:

- **100% Organic:** Products with this label must contain only organically produced materials.
- **Organic:** Products with this label must contain at least 95% organic ingredients. Products in this category or the previous category may display the "USDA Organic" seal on the package.
- **Made with Organic Ingredients:** Products in this category contain between 70 to 95% organic ingredients and may list up to three of the organic materials on the principal display area.

Products with fewer than 70% organic ingredients cannot use the organic term on the label other than to identify specific organic ingredients.

Producers whose agricultural income is less than \$5,000 annually are exempt from certification. Livestock producers or meat processors who are interested in marketing or making organic meats can find more information at <http://www.ams.usda.gov/nosb>. Applications for organic livestock certification can be obtained from the Kentucky Department of Agriculture.

Natural Meats

Natural meat production is quickly becoming the most popular niche market in meat production. Currently, there is not a legal definition of "natural" from the USDA or the Food and Drug Administration

(FDA). However, the USDA-Food Safety and Inspection Service (FSIS) states that “natural may be used on products that do not contain any artificial ingredients or are minimally processed, such as those that are smoked, roasted, frozen, or ground.” Consumers need to ask their meat purveyor about its definition of natural.

The main selling point of any naturally raised meat product (beef, pork, or poultry) is the absence of sub-therapeutic antibiotics in the feed. Antibiotics are commonly fed to animals to promote growth and prevent disease. However, in the past 10 years, questions have been raised about feeding antibiotics to livestock and a theoretical link to antibiotic-resistant bacteria. Although this theory has not been proven, there are consumers seeking meat products in the marketplace that are produced from animals that have not been fed antibiotics. It should be noted that it is illegal in the United States for meat to contain antibiotic residues, and the USDA periodically tests for antibiotic residues.

In the past, natural meats were sold by the producer at farmers’ markets or marketed directly to local health food stores. Now large corporate food companies are introducing natural meat product lines into several local independently owned and corporately owned grocery stores. Further processed meat items, such as hot dogs, lunch meat, and hams, are being made from naturally raised animals. Furthermore, these processed meat items are being made without added nitrites or nitrates, which create the desirable pink color and flavor of cured meats. Nitrites or nitrates are also added to prevent the growth of *Clostridium botulinum*, the pathogen that causes botulism. To mimic the color and flavor of traditional cured meat, meat products without added nitrites may contain sea salt or vegetable purees that contain natural nitrites.

Natural Beef

Grass- and Forage-Fed Beef

Natural beef is the most popular form of natural meat production. Producers are marketing their beef as raised without antibiotics or added growth hormones and/or steroid implants. Some natural beef is marketed as “hormone free,” which is not an accurate statement because hormones occur naturally in the body and are needed for growth. The cattle used for natural beef can be fed grain or grass/forages that may not have been raised organically.

Another popular niche market in the beef industry is grass-fed or forage-fed beef. This market is targeted at consumers who believe that cattle should be fed only forages and are seeking the health benefits of grass-/forage-fed beef, which has slightly lower levels of saturated fat and slightly higher levels of omega-3 fatty acids. The grass or forage used to feed these cattle may not have been organically grown, and synthetic fertilizers or pesticides may have been used.

The beef from grass- or forage-fed cattle will have a different flavor from traditional grain-fed cattle, which may not be palatable to some consumers.

Currently, the USDA is in the process of re-defining the term grass- or forage-fed. Past definitions stated that forage-fed cattle must get 80% of their energy from forages, but the proposed definition may increase that number to 90%.

Currently, only 1% of the beef raised in the United States is considered grass- or forage-fed.

Natural Pork and Poultry

The natural pork and poultry market is not as large as the natural beef market; however, the natural poultry market is larger than the natural pork market. The absence of antibiotics and growth promotants is the main selling point for natural pork and poultry.

Another aspect of natural pork and poultry is the absence of animal by-products, such as meat and bone meal, from the feed. The feeding of animal by-products to beef was banned in 1997, but no such ban exists for pork and poultry.

Since there is no legal definition of “natural,” consumers may want to inquire about the exact criteria of the natural pork or poultry they are buying if the feeding of animal by-products is a concern. It should be noted that no link has been found between human health and feeding animal by-products to swine and poultry.

Another aspect of natural pork and poultry is how the animals were raised. Some natural pork and poultry items are often marketed as “pasture-raised pork,” “free-range chicken,” or “free roaming.” The majority of swine and poultry are humanely raised in confinement operations; however, some consumers want pork and poultry from animals that were not raised in confinement. Therefore, a pasture-raised, free-range, or free-roaming designation will satisfy those consumers’ needs.

Raised Locally

Meat designated as locally grown or raised is another growing segment of the meat niche market. Some consumers find comfort in knowing the person and the place where their food was produced. Typically, these meat products are marketed as “locally raised, natural beef” or “Kentucky-raised organic beef.” This type of marketing is a great way to promote local farms and locally produced products. However, the consumer should be aware that some products are simply labeled as locally grown or raised, and the animals may have been conventionally raised with growth promotants and fed antibiotics.

Cost of Production

Those livestock producers interested in organic or natural meat production should not enter into it lightly. The cost of production is considerably higher than normal meat production. The increase in costs can be associated with increased feed costs and the losses associated with decreased animal performance and/or death loss. Animals grow more slowly without the growth benefits of antibiotics and growth promotants. Therefore, the break-even costs for organic or naturally raised livestock is considerable higher. The increased costs of production will ultimately be passed on to consumers.

The price of meat from naturally raised animals can be 30% higher than conventionally raised meat, whereas organically raised meat items can cost 30 to 200% more. These two areas of meat production continue to grow, but livestock producers need to exercise caution when entering this marketplace.

Educational programs of Kentucky Cooperative Extension serve all people regardless of race, color, age, sex, religion, disability, or national origin. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, M. Scott Smith, Director of Cooperative Extension Service, University of Kentucky College of Agriculture, Lexington, and Kentucky State University, Frankfort. Copyright © 2006 for materials developed by University of Kentucky Cooperative Extension. This publication may be reproduced in portions or its entirety for educational or nonprofit purposes only. Permitted users shall give credit to the author(s) and include this copyright notice. Publications are also available on the World Wide Web at www.ca.uky.edu. Issued 10-2006