

Certified Organic Poultry Production

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What is “organic”?

“Organic agriculture is an ecological production management system that promotes and enhances biodiversity, biological cycles and soil biological activity. It is based on minimal use of off-farm inputs and on management practices that restore, maintain and enhance ecological harmony.” (National Organic Standards Board, April 1995).

Why an organic standard?

“National standards for organic food production were designed to bring about a greater uniformity in the production, manufacture, and marketing of organic products. With a national standard, consumers across the country can go into any store and have full confidence that any food product labeled as “organic” meets a consistent standard, no matter where it was made.” (Federal Register, March 13, 2000).



Background of the National Organic Plan

In 1990, the Organic Foods Production Act (OFPA) was adopted as Title XXI of the 1990 Farm Bill. The goal of the OFPA was to establish national standards for the production and handling of foods labeled as “organic”. Prior to the OFPA both private and state agencies served to certify producers and handlers, but there was no consistent or enforceable set of standards. The OFPA was created in response to the demands of both consumers and organic producers.

The OFPA outlined the formation of the National Organic Program (NOP) within the USDA's Agricultural Marketing Service (AMS) to establish the standards for the production, processing, handling and certification of organic products. The USDA oversees the NOP and its related agencies.

The OFPA mandated the formation of the National Organic Standards Board (NOSB), whose function is to advise the Secretary of Agriculture in setting standards for the National Organic Program. The Secretary has the final authority in determining the regulations after considering the recommendations of the NOSB. The NOSB is also authorized to organize technical advisory panels to make recommendations regarding the inclusion of materials allowed for use in organic production into the national list. The NOSB is a 15-member citizen board, with each member being appointed by the USDA and the Secretary of Agriculture. The NOSB includes 3 environmentalist representatives, 4 organic farmers/ranchers, 3 consumer representatives, 1 organic retailer, 2 organic processors, 1 scientist, and 1 certifying agent. The NOSB is challenged with developing the recommendations based on sound science and inputs through public comments.

On December 16, 1997 the Federal Register published the first draft of the proposed rule for the implementation of organic standards. The response to this proposed rule was unprecedented in terms of the magnitude of public comments received by the USDA. During the comment period of nearly 5 months, the USDA received 275,603 specific public comments regarding how the regulations should be revised and rewritten. There were three key areas in the proposed rule that generated considerable controversy and prompted the USDA to make preliminary changes to the rule. These changes were the USDA's agreement to not allow irradiation, genetically modified organisms or sewage sludge in organic production. The decision to not allow genetic engineering in the production of organic foods and ingredients was based on this overwhelming public opposition to its use although the USDA acknowledged that there was no scientific evidence that its use presents unacceptable risks to the environment or human health. Over the next 2 years the USDA, made several more revisions to the proposed rule, with the "final" proposed rule being published on March 13, 2000.

This detailed regulation (in the form of a proposed rule) published in March, 2000 continued to generate considerable public response. During the 90-day comment period, 40,774 public comments were submitted to the USDA. These comments were considered during the preparation of the final rule, which was published on December 21, 2000. This ruling was considered to be a landmark step for the organic industry. The organic regulations went into effect on April 21, 2001, with full implementation effective on October 21, 2002. This 18-month implementation period allowed all participants in the organic industry adequate time to develop programs in compliance with the regulations prior to its full implementation.

What is in the NOP regulations?

This program established national standards for the production and handling of organically produced products, including a National List of substances approved for and

prohibited from use in organic production. This final rule established a national-level accreditation program to be administered by the AMS for state agencies and private persons who want to be accredited as certifying agents. Under the program, certifying agents will certify production and handling operations in compliance with the requirements of this regulation and initiate compliance actions to enforce program requirements. This final rule also established the requirements for labeling products as organic and containing organic ingredients, in addition to regulations concerning the importation of organic agricultural products from foreign countries.

All regulations within the NOP must be complied with when an operation commits to developing an organic plan for the production of poultry products. The production and handling standards outlined in the NOP address organic livestock management and the ingredients that may be used in the production of organic livestock. As a general rule, all natural (non-synthetic) substances are allowed in organic production and all synthetic substances are prohibited. The National List of Approved Synthetic and Prohibited Non-Synthetic Substances, a section in the regulations, contains exceptions to this general rule.

Poultry raised in an organic operation must be fed 100% organic feed, given access to the outdoors, and given no antibiotics or other medications. Additionally, most conventional feed additives are also prohibited under the rules of the regulation.

Requirement for 100% Organic Feed

The NOP states in section §205.237 (Livestock Feed) that:

(a) The producer of an organic livestock operation must provide livestock with a total feed ration comprised of agricultural products, including pasture and forage, that are organically produced and, if applicable, organically handled: Except, That, non-synthetic substances and synthetic substances allowed under §205.603 may be used as feed additives and supplements.

(b) The producer of an organic operation must not:

- (1) Use animal drugs, including hormones, to promote growth;*
- (2) Provide feed supplements or additives in amounts above those needed for adequate nutrition and health maintenance for the species at its specific stage of life;*
- (3) Feed plastic pellets for roughage*
- (4) Feed formulas containing urea or manure;*
- (5) Feed mammalian or poultry slaughter by-products to mammals or poultry; or*
- (6) Use feed, feed additives, and feed supplements in violation of the Federal Food, Drug, and Cosmetic Act.*

The above section citation makes reference to sections §205.600-607, in which the National List of Allowed and Prohibited Substances is established. Section §205.600 lists the evaluation criteria for allowed and prohibited substances, methods, and ingredients.

Section §205.600

The following criteria will be utilized in the evaluation of substances or ingredients for the organic production and handling sections of the National List:

(a) Synthetic and non-synthetic substances considered for inclusion on or deletion from the National List of allowed and prohibited substances will be evaluated using the criteria specified in the Act.

(b) In addition to the criteria set forth in the Act, any synthetic substance used as a processing aid or adjuvant will be evaluated against the following criteria:

(1) The substance cannot be produced from a natural source and there are no organic substitutes;

(2) The substances manufacture, use, and disposal do not have adverse effects on the environment and are done in a manner compatible with organic handling;

(3) The nutritional quality of the food is maintained when the substance is used, and the substance, itself, or its breakdown products do not have an adverse effect on human health as defined by applicable Federal regulations;

(4) The substances primary use is not as a preservative or to recreate or improve flavors, colors, textures, or nutritive value lost during processing, except where the replacement of nutrients is required by law;

(5) The substance is generally recognized as safe (GRAS) by the Food and Drug Administration (FDA) when used in accordance with the FDA's good manufacturing practices (GMP) and contains no residues of heavy metals or other contaminants in excess of tolerances set by the FDA;

(6) The substance is essential for the handling of organically produced agricultural products.

One additional requirement with the NOP significantly impacts the selection of feed ingredients. This reference restricts the use of genetically modified organisms in organic agricultural operations. Section §205.105 states:

To be sold or labeled as "100 percent organic," "organic," or "made with organic," the product must be produced and handled without the use of:

(e) Excluded methods, except for vaccines: Provided, that the vaccines are produced in accordance with §205.600(a).

The “Excluded Methods” referenced above are defined in section §205.2 as:
A variety of methods used to genetically modify organisms of influence their growth and development by means that are not possible under natural conditions and are not considered compatible with organic production. Such methods include cell fusion, microencapsulation and microencapsulation, and recombinant DNA technology (including gene deletion, gene doubling, introducing a foreign gene, and changing the positions of genes when achieved by recombinant DNA technology). Such methods do not include the use of traditional breeding, conjugation, fermentation, hybridization, in vitro fertilization, or tissue culture.

These three section citations outline the basic criteria utilized in selecting ingredients to be allowed in the feed for organic poultry production. Individual ingredients and additives must comply with these regulations before they can be utilized in the feed. In general, ingredients must be GRAS, natural (non-synthetic), plant derived and non-GMO. Potential ingredients are reviewed and evaluated by the organic producer and forwarded to their certification agent for inclusion in their organic plan. Only following the approval of the certification agent can the new ingredients be used in the organic feeds.

The NOP established the regulations for individual ingredients to be used (or prohibited) in organic production, but makes no attempt to regulate proprietary blends of ingredients that might serve as potential ingredients. For this reason, many ingredients are referred to the Organic Materials Review Institute (OMRI) for review and inclusion on the “OMRI List”. OMRI is a non-profit organization that provides an independent review of materials and compatible processes allowed to produce, process, and handle organic food and fiber. Once an ingredient (or blend of ingredients) is “OMRI listed”, most certification agencies allow its inclusion in an operation organic plan.

There has been considerable concern generated following the implementation on the NOP in the Fall of 2002 regarding the availability of certified organic ingredients in the U.S. In response to industry challenges, language in the 2002 Farm Bill and a provision inserted into the Omnibus Appropriations Act of 2003, the USDA initiated a survey that evaluated both the availability and relative cost of organic ingredients for poultry production.

This study “Organic Feed for Poultry & Livestock: Availability and Prices”, utilized the resources of the Agricultural Marketing Service (AMS), the Economic Research Service (ERS), the National Agricultural Statistics Service (NASS), and the World Agricultural Outlook Board (WAOB). Some of the information summarized by the AMS was based on crop acreage surveys conducted by Iowa State University, North Carolina State University and Cornell University. There were two conclusions generated by the study. One was that “ample acreage is available to provide more than enough feed grains to meet the needs of organic livestock and broiler producers.” The second conclusion was in response to a challenge that prices for organic poultry should not be more than double the price of feed for conventional poultry production. The USDA study concluded that “with limited exceptions, particularly if identity-preserved grain premiums are included, prices for organic poultry rations are not more than twice the prices of conventional

poultry feed rations.” The fundamental for this second conclusion was the comparison of organic ingredients with similar non-GMO, identity-preserved ingredients and not with conventional ingredients. Any suggested revision to the “100% organic feed rule” would still require compliance with the regulation’s prohibition of any GMO ingredients.

Requirement for Access to the Outdoors

The NOP states in section §205.239 (Livestock Living Conditions) that:

(a) The producer of an organic livestock operation must establish and maintain livestock living conditions which accommodate the health and natural behavior of the animals, including:

(1) Access to the outdoors, shade, shelter, exercise areas, fresh air, and direct sunlight suitable to the species, its stage of production, the climate, and the environment.

In accordance with this regulation, organic producers are required to balance the accommodation of an animal’s health and natural behavior while ensuring the animal’s health, safety or well-being is not jeopardized. Access to the outdoors simply means that a producer must provide the poultry with an opportunity to exit the primary growing structure. It does not require a producer to comply with any specific space or stocking density requirement. Neither does the requirement mandate that the entire flock have access to the outdoors at any one time nor does it supersede the producer’s responsibility for providing living conditions that accommodate livestock safety, health or well-being.

At times during the production cycle, it may be necessary for the producer to temporarily bypass this access to the outdoors requirement. For example, historical weather data could be used to justify temporary confinement (without outdoor access) during certain months of the year to ensure an animal’s health, safety and well-being. The conditions that result in the temporary confinement should be documented with historical data, research literature and/or producer experience with the species being produced. A specific example for poultry would be that a producer could limit access to the outdoors until sufficient feathering has occurred, thus practicing humane animal management practices. Another exception to the regulation would be that a producer could use personal experience supported with research data to provide temporary confinement during peak waterfowl migration periods in order to reduce exposure of the animals to potential disease vectors.

Requirement Prohibiting Animal Medications

Again, the NOP states in section §205.237 (Livestock Feed) that:

(b) The producer of an organic operation must not:

(1) Use animal drugs, including hormones, to promote growth;

The impact of this section in the regulation on organic poultry production will depend upon the operation’s production plan and the disease challenge present in the region where the poultry are being produced. Obviously, introducing organic poultry production into a geographical area which has demonstrated significant disease challenges for

conventional poultry might prove to be overwhelmingly difficult. There are no approved medications that can be administered to poultry succumbing to a disease challenge. The regulations prohibit the use of hormones, antibiotics and other medications in poultry production for the purpose of stimulating the growth of the animals. Although, should a medication be used to restore an animal to health, that animal cannot be used for organic production or sold as organically produced.

Summary

In a 2002 presentation to the Ohio State University College of Food, Agricultural and Environmental Sciences, the Secretary of Agriculture Ann Veneman made the following statement in response to a question concerning developing agricultural technologies. “On the organic side, we are seeing an increase in organic production of agricultural products—a growing segment of agriculture, I think maybe 9 or 10 percent of the market now. And that is growing every year. But we’re seeing also the opportunities for more and more niche kind markets.”

Organic poultry production is certainly targets a specific niche market. Playing in the arena of organic poultry is not for every operation and producer. The regulations are numerous and often open to considerable interpretation. Achieving success in the production of organic poultry will depend on a producer’s ability to develop a successful organic production plan and then implement that plan.

References

- Federal Register. Department of Agriculture, Agricultural Marketing Service, 7 CFR Part 205, National Organic Program; Proposed Rule, March 13, 2000.
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