Introduction

The demand by consumers for organic foods has grown tremendously since the coinage of the term by J.I. Rodale, a Pennsylvania farmer, in 1942. Numerous food manufacturers have developed and are marketing organic processed products and several retail markets specialize in the sale of “organic” products to today’s consumers. According to the Organic Trade Association, the availability of organic products has grown 20 percent each year since 1990 with the number of organic farms reaching over 12,000 today, most of them small-scale producers. The United States Department of Agriculture (USDA) estimates that the value of retail sales of organic foods in 1999 was approximately $6 billion. Organic cash retail sales are predicted to reach $8 billion by the year 2010 with products ranging from food to clothing to pet food items. According to a recent USDA study, certified organic cropland more than doubled from 1992 to 1997. Two organic livestock sectors, eggs and dairy, grew even faster. The growth of organic food production and the ensuing trade has brought about the need for verification that products are truly organic as determined by set standards. Less than 7,000 of the farms claiming to be organic are actually now approved by some certifying agency.

Organic Foods Protection Act

In the late 1980’s, after an unsuccessful attempt to develop a consensus of production and certification standards, the organic industry petitioned Congress to draft the Organic Foods Production Act (OFPA) defining “organic.” The growth and ultimate survival of the industry depended on the need for a credible certification process to enhance consumer trust. Therefore, in 1990, Congress passed the Act to: (1) establish national standards governing the marketing of certain agricultural products as organically produced products; (2) assure consumers that organically produced products meet a consistent standard; and (3) facilitate commerce in fresh and processed food that is organically produced.

The Act of 1990 gave the USDA authority to write a regulation that explains the law to producers, handlers and certifiers who are regulated. The OFPA also provided that an advisory board, the National Organic Standards Board (NOSB), be assembled to help USDA write the regulation. The result of the OFPA was the USDA adopting, in some form, the NOSB recommendations, listening to public input, consulting with states and certifying agents, and considering other federal regulations, to develop the National Organic Program (NOP) Proposed Rule of 2000. This proposed rule, after public comment, was finalized on December 20, 2000 thereby providing structure for all organic products in the United States, including pork.

According to USDA, all agricultural products labeled organic must originate from farms or handling opera-
tions certified by a state or private agency accredited by the Department of Agriculture. Farms and handling operations that sell less than $5,000 worth of organic agricultural products per year are exempt from certification. All farmers and handlers have 18 months to comply with the national standards. Therefore, consumers should begin to see some products on the shelf with new organic labels by mid-year 2001. According to the U.S. Secretary of Agriculture, these standards ensure consumers that they can be confident in knowing what they are buying. For farmers, these standards create clear guidelines on how to take advantage of the exploding demand for organic products. And for the organic industry, these standards provide an important marketing tool to help boost exports since trading partners will now deal with only one national standard rather than multiple state and private standards.

So, why not Organic Pork?

Is there a niche for such a product? Does such a product truly exist? Is “organic” pork different from “traditional” pork? These are the questions individual producers must ask themselves as they explore other avenues of value-added marketing. Those interested in pursuing such a market will find the ensuing information helpful, if not challenging when realized in the production scheme.

USDA National Organic Program (NOP)

The new regulation and rules promulgated by USDA to govern the production and marketing of organic products are numerous and stringent. The national organic standards address the methods, practices, and substances used in producing and handling crops, livestock, and processed agricultural products. The requirements, which may be found on the internet at www.ams.usda.gov/nop/ apply to the way the product is created, not to measurable properties of the product itself. Although specific practices and materials used by organic operations may vary, the standards require every aspect of organic production and handling to comply with the provisions of the Organic Foods Production Act (OFPA). Organically produced food cannot be produced using excluded methods, sewage sludge, or ionizing radiation. The information below is a layman’s summary, gleaned from USDA and other sources, of the new regulations which will help those interested, in determining whether this is a market they should attempt to pursue. Basically, the new organic standards offer a national definition for the term “organic.”

Certification

Producers with operations or portions of operations that produce or handle agricultural products that are intended to be sold, labeled, or represented as “100 percent organic,” “organic,” or “made with organic ingredients or food group(s)” must be certified. Farms and handling operations that sell less than $5,000 a year in organic agricultural products are exempt from certification. However, these producers and handlers must abide by the national standards for organic products to be able to label their products as organic. Handlers, including final retailers, that do not process or repackage products and those that only handle products with less than 70 percent organic ingredients are exempt. A handling operation that is a retail food establishment that processes or prepares, on the premises of the establishment, raw and ready-to-eat food labeled organic or that uses the word organic only on the information panel is also exempt. Farmers and handlers who wish to become certified must submit specific information to an accredited certifying agent. The information will include: type of operation, history of substances applied to land for the previous 3 years, and organic products being raised or processed. Also, an organic plan, which includes practices and substances used in production must be submitted. The organic plan also must describe the monitoring practices to be performed to verify that the plan is effectively implemented, the record-keeping system, and the practices to prevent commingling of organic and non-organic products and to prevent contact of products with prohibited substances.

Applicants for certification will have to keep accurate post-certification records for 5 years concerning the production, harvesting, and handling of agricultural products that are to be sold as organic. These records should document that the operation is in compliance with the regulations and verify the information provided to the certifying agent. Access to these records must be provided to authorized representatives of USDA, including the certifying agent.

Certifying agents will review applications for certification eligibility. A qualified inspector will conduct an on-site inspection of the applicant’s operation. Inspections will be scheduled when the inspector can observe the practices used to produce or handle organic products and talk to someone knowledgeable about
the operation. The certifying agent will review the information submitted by the applicant and the in-
spector’s report. If this information shows that the applicant is complying with the relevant standards and
requirements, the certifying agent will grant certification and issue a certificate. Certification will remain in
effect until terminated, either voluntarily or through the enforcement process.

Annual inspections will be conducted of each certified operation, and updates of information will be
provided annually to the certifying agent in advance of conducting these inspections. Certifying agents
must be notified by a producer immediately of any changes affecting an operation’s compliance with the
regulations, such as application of a prohibited pesticide to a field. Unannounced inspections at any time
to adequately enforce the regulations and residue tests will be performed to help in enforcement of the
regulations. Certifying agents and USDA will conduct residue tests of organically produced products when
there is reason to believe that they have been contaminated with prohibited substances. If any detectable
residues are present, an investigation will be conducted to determine their source.

Organic System Plan

An organic system plan must meet the requirements set forth below for organic production or handling.
An organic production or handling system plan must include:
1. A description of practices and procedures to be performed and maintained, including the frequency
   with which they will be performed;
2. A list of each substance to be used as a production or handling input, indicating its composition,
   source, location(s) where it will be used, and documentation of commercial availability, as applicable;
3. A description of the monitoring practices and procedures to be performed and maintained, including
   the frequency with which they will be performed, to verify that the plan is effectively implemented;
4. A description of the record keeping system implemented to comply with the requirements;
5. A description of the management practices and physical barriers established to prevent commingling
   of organic and non-organic products on a split operation and to prevent contact of organic production
   and handling operations and products with prohibited substances; and
6. Additional information deemed necessary by the certifying agent to evaluate compliance with the
   regulations.

Production Standards

Any farm, wild crop harvesting, or handling operation that wants to sell an agricultural product as organi-
cally produced must adhere to the national organic standards. Handling operations include processors,
manufacturers, and repackers of organic products. These requirements include operating under an or-
ganic system plan approved by an accredited certifying agent and using materials in accordance with the
National List of Allowed Synthetic and Prohibited Non-Synthetic Substances available from USDA. Retail
food establishments that sell organically produced agricultural products but do not process them are ex-
empt from certification.

Livestock standards apply to animals used for meat, milk, eggs, and other animal products represented as
organically produced. The livestock standards state: Animals for slaughter must be raised under organic
management from the last third of gestation. Producers are required to feed livestock agricultural feed
products that are 100% organic, but may also provide allowed vitamin and mineral supplements. Organi-
cally raised animals may not be given hormones or antibiotics to promote growth. Preventive manage-
ment practices, including the use of vaccines, will be used to keep animals healthy. Producers are prohib-
ited from withholding treatment from a sick or injured animal; however, animals treated with a prohibited
medication may not be sold as organic. All organically raised animals must have access to the outdoors.
They may be temporarily confined only for reasons of health, safety, the animal’s stage of production, or
to protect soil or water quality.

Handling standards say that all non-agricultural ingredients, whether synthetic or non-synthetic, must be
included on the National List of Allowed Synthetic and Prohibited Non-Synthetic Substances. Handlers
must prevent the commingling of organic with non-organic products and protect organic products from
contact with prohibited substances. In a processed product labeled as “organic,” all agricultural ingredients
must be organically produced, unless the ingredient(s) is not commercially available in organic form.
Origin of livestock

Livestock products that are to be sold, labeled, or represented as organic must be from livestock under continuous organic management from the last third of gestation. Livestock or edible livestock products that are removed from an organic operation and subsequently managed on a non-organic operation may be not sold, labeled, or represented as organically produced.

Breeder stock that have not been under continuous organic management since the last third of gestation may not be sold, labeled, or represented as organic slaughter stock. Producers must maintain records sufficient to preserve the identity of all organically managed animals and edible and non-edible animal products produced on the operation.

Livestock feed

Producers must provide livestock with a total feed ration composed 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 may be used as feed additives and supplements. Producers must not: use animal drugs, including hormones, to promote growth; 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; feed plastic pellets for roughage; feed formulas containing urea or manure; feed mammalian or poultry slaughter by-products to mammals or poultry; or use feed, feed additives, and feed supplements in violation of the Federal Food, Drug, and Cosmetic Act.

Livestock health care practice standard

The producer must establish and maintain preventive livestock health care practices, including selection of species and types of livestock with regard to suitability for site-specific conditions and resistance to prevalent diseases and parasites; provide a feed ration sufficient to meet nutritional requirements, including vitamins, minerals, protein and/or amino acids, fatty acids, energy sources, and fiber (ruminants); establish appropriate housing, pasture conditions, and sanitation practices to minimize the occurrence and spread of diseases and parasites; provide conditions which allow for exercise, freedom of movement, and reduction of stress appropriate to the species; perform physical alterations as needed to promote the animal's welfare and in a manner that minimizes pain and stress; and administer vaccines and other veterinary biologics.

When preventive practices and veterinary biologics are inadequate to prevent sickness, a producer may administer synthetic medications, provided, such medications are allowed. Parasiticides allowed may be used on breeder stock, when used prior to the last third of gestation but not during lactation for progeny that are to be sold, labeled, or represented as organically produced. The producer of an organic livestock operation must not: sell, label, or represent as organic any animal or edible product derived from any animal treated with antibiotics, any substance that contains a synthetic substance not allowed or any substance that contains a non-synthetic substance prohibited; administer any animal drug, other than vaccinations, in the absence of illness; administer hormones for growth promotion; administer synthetic parasiticides on a routine basis; administer synthetic parasiticides to slaughter stock; administer animal drugs in violation of the Federal Food, Drug, and Cosmetic Act; or withhold medical treatment from a sick animal in an effort to preserve its organic status. All appropriate medications must be used to restore an animal to health when methods acceptable to organic production fail. Livestock treated with a prohibited substance must be clearly identified and shall not be sold, labeled, or represented as organically produced.

Livestock living conditions

The producer of an organic livestock operation must establish and maintain livestock living conditions that accommodate the health and natural behavior of animals. Animals must have 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. Also, appropriate clean, dry bedding is necessary. If the bedding is typically consumed by the animal species, it must comply with feed requirements. Shelter must be provided which is designed to allow for natural maintenance, comfortable behavior, and with an opportunity to exercise. Also, appropriate temperature level, ventilation, and air circulation suitable to the species is required. The producer of an organic livestock operation may provide temporary confinement for an animal.
because of inclement weather, the animal's stage of production, conditions under which the health, safety, or well being of the animal could be jeopardized, or risk to soil or water quality. Producers must manage manure in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, heavy metals, or pathogenic organisms and optimizes recycling of nutrients.

**Organic handling requirements**

Mechanical or biological methods, including but not limited to cooking, baking, curing, heating, drying, mixing, grinding, churning, separating, distilling, extracting, slaughtering, cutting, fermenting, eviscerating, preserving, dehydrating, freezing, chilling, or otherwise manufacturing, and the packaging, canning, jarring, or otherwise enclosing food in a container may be used to process an organically produced agricultural product for the purpose of retarding spoilage or otherwise preparing the agricultural product for market. Nonagricultural substances allowed and non-organically produced agricultural products allowed may be used: (1) In or on a processed agricultural product intended to be sold, labeled, or represented as “organic,” if not commercially available in organic form; (2) In or on a processed agricultural product intended to be sold, labeled, or represented as “made with organic (specified ingredients or food groups).” The handler of an organic handling operation must not use in or on agricultural products intended to be sold, labeled, or represented as “100 percent organic,” “organic,” or “made with organic (specified ingredients or food groups),” or in or on any ingredients labeled as organic: (1) Practices prohibited; or (2) A volatile synthetic solvent or other synthetic processing aid not allowed, except, that, non-organic ingredients in products labeled “made with organic (specified ingredients or food group(s)” are not subject to this requirement.

**Facility pest management practice standard**

The producer or handler of an organic facility must use management practices to prevent pests, including but not limited to: (1) Removal of pest habitat, food sources, and breeding areas; (2) Prevention of access to handling facilities; and (3) Management of environmental factors, such as temperature, light, humidity, atmosphere, and air circulation, to prevent pest reproduction. Pests may be controlled through: (1) Mechanical or physical controls including but not limited to traps, light, or sound; or (2) Lures and repellents using non-synthetic or synthetic substances consistent with the National List. If these practices are not effective to prevent or control pests, a non-synthetic or synthetic substance consistent with the National List may be applied. If the infestation continues a synthetic substance not on the National List may be applied, provided that the handler and certifying agent agree on the substance, method of application, and measures to be taken to prevent contact of the organically produced products or ingredients with the substance used.

**Commingling and contact with prohibited substance prevention practice standard**

The handler of an organic handling operation must implement measures necessary to prevent the commingling of organic and non-organic products and protect organic products from contact with prohibited substances. The following are prohibited for use in the handling of any organically produced agricultural product or ingredient labeled: (1) Packaging materials, and storage containers, or bins that contain a synthetic fungicide, preservative, or fumigant; and (2) The use or reuse of any bag or container that has been in contact with any substance in such a manner as to compromise the organic integrity of any organically produced product or ingredient placed in those containers, unless such reusable bag or container has been thoroughly cleaned and poses no risk of contact of the organically produced product or ingredient with the substance.

**Certifying Agents**

The OFPA directs the USDA to accredit certifying agents so they can certify that producers and handlers representing their products as organic have complied with USDA regulations. USDA’s accreditation program establishes requirements an applicant must meet in order to become an accredited organic certifying agent, and procedures and requirements to maintain accreditation. The program is designed to ensure that all organic certifying agents act consistently and impartially. There are nearly 50 private and State organic certification programs in the United States, some of which have existed for 20 years or more. Certifying agents will apply for accreditation to the Administrator of the Agricultural Marketing Service. USDA will evaluate the application to ensure that the certifying agent can comply with the NOP requirements, includ-
ing a site evaluation at the applicant’s place of business. Accreditation will be for 5 years. The OFPA requires USDA to review the certification programs under which imported organic products are produced to ensure that they meet the requirements of the NOP. Certifying agents operating in foreign countries may apply for USDA accreditation and will be evaluated based on the same criteria as domestic certifying agents.

**State Organic Program**

The U.S. Secretary of Agriculture will approve State organic programs that are consistent with the national organic standards and regulations established under the OFPA. Under USDA's NOP, a State government may request the U.S. Secretary of Agriculture to approve its State organic program. Once a State's requested organic requirements are approved, those requirements become the NOP requirements for organic producers, handlers, and certifying agents operating in the State. Under the NOP final rule, a State's organic requirements cannot be less restrictive than NOP requirements. State organic programs can have more restrictive requirements than the NOP; however, these more restrictive requirements will be approved only if those requirements are found to be necessary in light of a particular environmental condition or unique production or handling practice in the State or a particular area of the State. For instance, a State may request approval of additional restrictions to protect a sensitive watershed. A State's more restrictive standards cannot be applied to production and handling activities outside its jurisdiction. Finally, a State's more restrictive requirements cannot be used to discriminate against organic products produced in other States.

The State's organic program will oversee certified organic producers and handlers in the State to assure that they are operating in compliance with the NOP. Working with certifying agents, the State organic program will administer enforcement and appeal procedures to make sure all certified organic operations are in compliance with NOP and State requirements. However, only the NOP will exercise compliance authority over accredited certifying agents operating in the State. In States with no approved State organic program, USDA will administer and enforce the requirements of the NOP. USDA will monitor any State, private, and foreign certifying agents operating within the State to assure compliance with the national program.

**Temporary variances**

A temporary variance from the requirements may be established by the Administrator due to: (1) Natural disasters declared by the U.S. Secretary of Agriculture; (2) Damage caused by drought, wind, flood, excessive moisture, hail, tornado, earthquake, fire, or other business interruption; and (3) Practices used for the purpose of conducting research or trials of techniques, varieties, or ingredients used in organic production or handling.

**Labeling**

The OFPA and the NOP are intended to assure consumers that the organic foods they purchase are produced, processed, and certified to consistent national organic standards. The labeling requirements of the new program apply to raw, fresh products and processed foods that contain organic ingredients. Foods that are sold, labeled, or represented as organic will have to be produced and processed in accordance with the NOP standards. A certified operation may label its products or ingredients as organic and may use the “USDA Organic” seal.
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