



# Growing your Local Food Business in North Carolina

## A Guide to Laws and Regulations

September 2012



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### About Carolina Farm Stewardship Association

The Carolina Farm Stewardship Association (CFSA) is a farmer-driven, membership-based 501(c)(3) non-profit organization that helps people in the Carolinas grow and eat local, organic foods by advocating for fair farm and food policies, building the systems family farms need to thrive, and educating communities about local, organic agriculture.

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### Legal Disclaimer

This guide is intended for educational and informational purposes only and is not intended to be, nor should it be, construed as either a legal opinion or as legal advice.

Photo of cows on the cover by Mary Kay Flick.

# Overview

This guide was created to provide a comprehensive introduction to the regulations in North Carolina that are relevant to farm and food businesses, with a particular focus on small-scale, direct-to-consumer sales, and specialty operations.

This guide is divided into sections as shown in the table of contents. Some sections are further divided by product and jurisdiction (e.g., federal and state). Where possible, contact information for agency staff has been provided so readers may seek additional information.

# A Note on Jurisdiction

Many laws and regulations govern the production, processing, preparation, and sale of food. The type of food (e.g., produce or dairy), how it is prepared, processed, or packaged, and quantity of production determines which agency has regulatory jurisdiction. Each agency has a different set of specific rules, and the various agencies' regulatory authority sometimes overlaps. The situation is further complicated by a set of interconnected state laws that enable North Carolina to implement some federal programs, and local requirements imposed by health departments and zoning authorities.

Federal jurisdiction exists where a product is sold across state boundaries, called interstate commerce. State jurisdiction exists where products are sold within a state's boundaries.

## Interstate Commerce

In general, federal regulatory oversight is limited to the marketing, transportation and sale of agricultural products and prepared foods, including mail-order sales of products shipped by the farmer/producer across state lines, called interstate commerce.

## Intrastate Commerce

Intrastate commerce—the sale and movement of goods within state lines—is governed by state law and regulatory agencies. Though each section of this guide begins with an explanation of federal law, it highlights regulations for on-farm processing and cottage food production intended only for intrastate commerce.<sup>1</sup> It is important to note that when products are sold to consumers across state lines, additional federal requirements apply.

## Federal Agency Authority

The U.S. Department of Agriculture (USDA) and the U.S. Food and Drug Administration (FDA) share primary responsibility for regulating the nation's food supply. Additional details about the USDA's and FDA's regulation of particular products are provided in the relevant sections throughout the Guide.

### U.S. DEPARTMENT OF AGRICULTURE

The USDA has regulatory authority over meat, poultry, and eggs. The laws that give USDA this authority are:

- The Federal Meat Inspection Act
- The Poultry Products Inspection Act
- The Egg Products Inspection Act

The USDA, or a USDA-equivalent program delegated to the state, inspects meat, poultry, and eggs/egg products to ensure safety standards are met.

### U.S. FOOD & DRUG ADMINISTRATION

The FDA regulates all food that is not covered by USDA regulations, and is authorized by:

- The Food, Drug, and Cosmetic Act
- The Fair Packaging and Labeling Act

These laws allow FDA to set safe tolerances for unavoidable poisonous substances that may be found in or added to foods; set forth standards for identification, quality and fill-of-container; authorize factory inspections; and authorize enforcement actions such as injunctions, seizures, and prosecution. The laws also provide the FDA the authority to regulate the labeling of food products.

# Getting Started

Business and tax issues are important to any farm and food business, no matter how small-scale. One must understand whether it is necessary to register a business with a state or municipality and how and when to pay the required income, sales, and property taxes. This section introduces resources that are available to assist in navigating these requirements.

## Business Licensing

Farm and food businesses are subject to business licensing and permitting requirements at the federal, state, and local levels. Resources are provided below to help a business owner navigate the site-specific requirements for his/her business.

### Federal

For detailed information on specific federal licenses that a business might need, refer to the *Obtaining Federal Licenses and Permits* guide, available online through the “Permit Me” tool at <http://www.sba.gov/content/obtaining-business-licenses-permits>.

USDA issues permits for businesses involved in the importation and interstate transportation of animals, animal products, biologics, biotechnology, and plants. For more information on these permits, visit this website: <http://www.aphis.usda.gov/permits/>.

### North Carolina

In North Carolina, contact Business Link North Carolina ([www.blnc.gov](http://www.blnc.gov)) toll free at (800) 228-8443. The BLNC offers the following services, to all small businesses, including farm and food business, free of charge:

- One-on-one consultations
- Customized licensing information
- Employer and business structure forms
- Referrals to state agencies, state licensing boards, local governments, and federal agencies

- Contacts for local, state, and federal business services, programs, and resources
- A small-business ombudsman to work on business owners’ behalf to resolve issues with state government agencies.

NC BLNC offers entrepreneurial support on topics like selecting a business structure, obtaining business licenses and permits, business tax information, and employer requirements.

Every business has unique needs, so business owners are advised to consult with this office for assistance on specific permit requirements. For instance, these licenses are listed under the Department of Agriculture and Consumer Services and may be relevant to small food and farm businesses: frozen desserts for retail or wholesale, milk sampling, milk testing, fruit and vegetable handlers, plant sales/nursery, pesticide applicator, and meat and poultry handlers among many others.

Most counties and municipalities in North Carolina also have zoning and licensing requirements for farm and food businesses. NC BLNC will provide the appropriate county or local contact to determine local business licensing and permitting requirements.

## Taxes

### Federal Taxes

It is important to understand a small business’ federal tax obligations, including individual or business income tax, employee income tax withholding, and whether or not the small business must acquire an Employer Identification Number (EIN), also known as a Federal Tax Identification Number.

For an in-depth treatment of federal farm tax management, see *Tax Guide for Owners and Operators of Small and Medium Sized Farms*, available online at <http://www.ruraltax.org/files/uploads/TaxGuide%20Small%20to%20Midsized%20Farms%202011%2007%2014.pdf>.

The Internal Revenue Service (IRS) offers many tax publications for guidance, including Publication 225, the Farmer's Tax Guide, available online at <http://www.irs.gov/pub/irs-pdf/p225.pdf> which can help you determine whether to file Schedule C (self-employed) or Schedule F (farm income).

To determine whether a farm or food business should apply for an EIN, check with the IRS.<sup>2</sup> Generally, the business should have an EIN if it does any one of the following:

- Has employees
- Operates as a corporation or partnership
- Files Employment, Excise, or Alcohol, Tobacco, and Firearms tax returns
- Withholds taxes on income, other than wages, for a nonresident alien
- Has a Keogh plan
- Does business with any of these types of organizations: trusts, estates, real estate mortgage investment conduits, non-profit organizations, farmers' cooperatives, or plan administrators

Additionally, a business owner should contact the business licensing agency in his/her home state to determine whether the business requires a state number or charter.

State and local income, sales, and property taxes may also be required. The section below provides additional information on these topics.

## North Carolina Taxes

Under North Carolina law, there are many tax obligations for a small business. This guide only includes details about those that are relevant to small food and farm businesses. For additional information, contact NC BLNC or the county tax assessor's office in the county where the farm or food business is located. Relevant taxes are: sales and use tax, withholding tax (for employers), and county property taxes.

For detailed information on the taxation and labor and employment law issues related to hosting farm interns, see Carolina Farm Stewardship Association's *Internships in Sustainable Farming: A Handbook for Farmers*, available online at [http://www.carolinafarmstewards.org/wp-content/uploads/2012/04/Internship\\_Farm\\_Mentor\\_Handbook\\_2011.pdf](http://www.carolinafarmstewards.org/wp-content/uploads/2012/04/Internship_Farm_Mentor_Handbook_2011.pdf).

## SALES AND USE TAX

Food businesses, who sell value-added goods, are required to register and obtain a state sales and use tax ID; there is no fee. Farm businesses who sell raw products are not subject to this requirement. The ID is instantly issued if it is filed electronically, while applications by mail take four weeks to process. Taxes must be assessed on goods sold at retail outlets. Taxes collected can be remitted electronically or manually on a monthly (more than \$100/month) or quarterly (less than \$100/month) basis.

Food products are subject to a 2% sales tax throughout the state. For other products, there is a range of sales tax rates by county. The applicable rate depends on the county of residence or primary business operation because the rate is a combination of the state tax plus a local tax for non-food items (e.g., soaps, candles).

## WITHHOLDING TAX

State income tax must be withheld from employee wages and remitted to the NC Department of Revenue. Every employer must file for a withholding tax number.

## PROPERTY TAX

As a business owner, you are responsible for listing your business' personal property with the [County Tax Assessor's Office](#). You must also provide the assessor with information concerning any real property improvements such as the addition of a new structure.

In North Carolina, farm property may qualify for reduced property tax assessment if certain conditions are met. Under current law, a farm must have a minimum of 10 acres in active production of crops, plants, or animals to qualify for the program's lower taxes. In addition to the 10-acre minimum, the law also requires:

1. A qualifying form of ownership
2. A minimum average annual gross income for the previous three tax years plus the current tax year (4 years total)
3. Sound management (e.g., a business plan)

The same rules apply for horticulture land, except that the minimum acreage requirement is 5 acres. Land used for aquaculture may qualify for reduced tax assessment if the aquaculture operations produce at least 20,000 pounds of product annually.



# General Guidelines

## Inspection

Regardless of which agency has jurisdiction, the legal basis for agency oversight is the state and/or federal constitutional authority to protect public health and safety. Whether the requirements are imposed by federal, state, or local authority, the relevant laws focus on the safe and wholesome production of the food and the adequacy and integrity of information provided to the consumer. For this reason, the process of preparing and selling food to the public begins with an inspection.

## High-risk Foods

“High-risk” foods, such as refrigerated or frozen products (including dairy products), low-acid canned foods, and seafood products, are required to be produced in a licensed commercial facility and may not be produced in a home-based business.

## Low-risk Foods

The only food products that may be produced in the home and sold directly to consumers are considered “low-risk” packaged foods, such as baked goods, jams and jellies, candies, pickles, and acidified foods. But even home-based kitchens are subject to state inspection requirements, based on the federal Good Manufacturing Practices, and products produced in home kitchens must comply with labeling requirements.<sup>3</sup> Products are also required to conform to standards of identity set forth by the federal Food and Drug Administration. These standards of identity describe the products, contain lists of approved ingredients for each product, and may contain recommendations for production, processing and storage. All such Standards of Identity are set forth in Title 21, Chapter I of the Code of Federal Regulations and are available online.<sup>4</sup>

## Good Manufacturing Practices

All food processors in North Carolina, without exemption, are required to comply with the Good Manufacturing Practice requirements set forth in federal regulations.<sup>5</sup> These regulations specify that the premises on which the food is prepared be maintained to prevent the contamination of food, by, for example, eliminating conditions that would provide breeding grounds for pests, properly maintaining waste treatment and disposal facilities, using protective coverings, providing adequate lighting in hand-washing and food preparation areas, providing adequate ventilation, and properly cleaning, sanitizing, and maintaining equipment. The full text of the current version of Good Manufacturing Practices is available online at <http://www.access-data.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=110&showFR=1>.

## Production in Home Kitchens

North Carolina law authorizes the production of “low-risk” foods in home kitchens under certain circumstances.

The production area is subject to an inspection to protect public health. The inspection is conducted by the NC Department of Agriculture’s Food and Drug Protection Division<sup>6</sup> after an application for a Home Processor Inspection is filed. See



<http://www.ncagr.gov/fooddrug/food/homebiz.htm> for the full details of establishing a home-based food business.

The inspection is based on the Good Manufacturing Practices developed by the federal Food and Drug Administration and set forth in federal regulations, as discussed above.<sup>7</sup> The inspection will focus on the kitchen and other areas where processing and packaging of food will take place, but may include other areas in which ingredients and equipment are stored. The inspection is required to ensure that the kitchen is clean, free of insects, rodents, and pests, and without sanitation or safety concerns. It is important to note that indoor pets are prohibited from home-based kitchens. Standard household equipment, appliances and sinks are acceptable, and may be used for both personal and commercial use.<sup>8</sup>

Key requirements of home kitchens are:

- Food contact surfaces must be smooth and easily cleanable
- No pets in the home at any time
- Restroom and hand washing facilities—must have hot and cold running water easily accessible from processing area
- Kitchen sink is for food preparation only, hand washing must be done in a separate sink
- Thermometer must be kept in refrigerator to monitor temperature
- Waste must be carried away from the house in an acceptable fashion (sewer or septic system)
- All light bulbs in the kitchen must have protective shields or be shatter-proof

If the home is served by a public water supply, a copy of the water bill must be

attached to the application. If the home is served by a private well, then the well water must be tested by a certified private company or the local health department for the presence of fecal coliform bacteria. The results of that test must be attached to the completed application for the inspection.

## Pickle School

North Carolina State University's Department of Food, Bioprocessing, and Nutrition Sciences and the NCDA&CS' Food & Drug Protection Division co-host training courses, titled Acidified Foods Processing and Packaging Better Process Control School, also known as the Pickle School, throughout the year at various locations. Completion of this course is required to obtain a home-based kitchen inspection permit from the NCDA&CS. For registration information about upcoming Pickle School classes, contact Lisa Gordon, NCSU Department of Food, Bioprocessing, and Nutrition Sciences at

(919) 515-2760 or [lisa\\_gordon@ncsu.edu](mailto:lisa_gordon@ncsu.edu). For technical questions about the training, contact Fletcher Arritt, Ph.D., NCSU Department of Food, Bioprocessing, and Nutrition Sciences at (919) 513-0176 or [fletcher\\_arritt@ncsu.edu](mailto:fletcher_arritt@ncsu.edu).

## Mobile Kitchens

Mobile food trailers and pushcarts are subject to regulation and inspection by the health department in the county in which the trailer is located.<sup>9</sup> All mobile food trailers are required to have a permitted restaurant or commissary as a base of operations.<sup>10</sup> The base facilities must have a potable and protected source of water and adequate facilities for the disposal of solid waste.<sup>11</sup> The trailers and pushcarts must be kept clean and sanitary, and may not be operated by anyone with a communicable illness that can be transmitted by food.<sup>12</sup>

# Labeling & Packaging

Lawmakers and administrative agencies have developed specific requirements for information that must be presented on all labels, to ensure that consumers have adequate information to help them make informed decisions.

However, most laws governing labeling, claims, and marketing of food apply to processed and packaged foods rather than raw agricultural products. Concerns about the safety of food additives, color additives, adulterants, misleading or misbranded labels, and lists of ingredients, allergens and nutritional claims evolved with the increased processing, packaging, and national distribution of foods (and related outbreaks of illness such as botulism, increases in cancer linked to food additives, and deaths from harmful substances in foods and drugs), and a lengthy patchwork of laws and regulations was developed in response. Many of these requirements are not applicable to raw or whole foods, which are readily identifiable and can be visually inspected by the consumer prior to purchase. It also is assumed that the consumer will properly wash and prepare raw foods prior to consumption.

Therefore, this section focuses on general labeling and packaging requirements for raw agricultural products and their sale as whole or minimally processed food to the consumer or other end-user. Information specific to particular food products (e.g., meat, eggs) is provided below in the appropriate sections of the document.

## Federal

The Food and Drug Administration (FDA) is responsible for assuring that foods sold in the United States are safe, wholesome and properly labeled. The Federal Food, Drug, and Cosmetic Act (FD&C Act) and the Fair Packaging and Labeling Act are the Federal laws governing food products under FDA's jurisdiction. The FDA provides *Guidance for Industry: A Food Labeling Guide* to assist producers in navigating the complex rules that govern food labeling requirements. The complete guide can be found here: <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/FoodLabelingNutrition/FoodLabelingGuide/default.htm>.

### MISBRANDING

A food will be considered misbranded and civil fines may be levied if a food's labeling is found to be "false or misleading in any particular."<sup>13</sup> Food packaging and labeling must accurately convey the product's identity and source of manufacture.

### ADULTERATION

A food will be considered adulterated if it contains any poisonous or deleterious substances, such as chemical contaminants, metals, or filth, which may or ordinarily do render it harmful to health.

### ALLERGEN LABELING

In 2004, Congress passed the Food Allergen Labeling and Consumer Protection Act<sup>14</sup> requiring that food manufacturers label products containing 8 major allergens: milk, eggs, wheat, fish, crustacean shellfish, tree nuts, peanuts, and soybeans. The law requires that the common or usual name for each of the allergens be listed in the ingredients or in a separate statement starting with "Contains."<sup>15</sup>



FDA takes allergen labeling very seriously. Recent FDA Warning Letters to food manufacturers involve allergen labeling errors, commonly associated with seafood and bakery products. If the product's allergens are not labeled, the FDA considers the product “misbranded,” one of the two big violations of FDA law along with “adulteration.” Misbranding can result in warnings, costly product recalls, and over time, fines and imprisonment.<sup>16</sup> Including the ingredient in the product title (e.g., peanut butter) does not satisfy the regulatory requirements.

## ORGANIC LABELING

For produce to be labeled as organic, it must be certified as being grown in accordance with practices and standards developed by the Agricultural Marketing Service as part of the National Organics Program. These regulations<sup>17</sup> detail the practices that are accepted and prohibited in the growing, cleaning, packaging, and marketing of organically labeled products. The regulations include requirements for maintaining and improving soil health and fertility<sup>18</sup> and specifically prohibit the use of commercial fertilizers, soil and product fumigants, and chemical pest control practices in organic production.<sup>19</sup> In addition, sewage sludge may not be used in the production of the crops, and crops may not be processed using ionizing radiation.<sup>20</sup> The regulations include a National List of Allowed and Prohibited Substances to guide growers and certifying entities in the use of the label.<sup>21</sup> A production or handling operation that sells agricultural products as “organic” but whose gross agricultural income from organic sales totals \$5,000 or less annually is exempt from certification requirements.<sup>22</sup>

The Organic Foods Production Act of 1990<sup>23</sup> and its implementing regulations,<sup>24</sup> are intended to set uniform minimum national standards for organic production.<sup>25</sup> For agricultural products to be labeled as organic (or containing organically produced products), the products must have originated from farms or handling operations certified as organic by a state or private agency accredited by the USDA.<sup>26</sup> The regulations set forth requirements for use of the term “organic” and create categories that range from “100% organic” to “made with organic ingredients.”<sup>27</sup> In all cases, a product may not use the organic label if it contains genetically modified ingredients or was grown using synthetic fertilizers or sewage sludge.<sup>28</sup> The use of the word “organic” on a product is illegal if the product does not meet the standards set forth in the law and its implementing regulations.<sup>29</sup>

The requirements for certification as “organic” differ among categories of foods, such as crops, meat, and dairy products. These are described in the sections addressing specific food categories below. In addition to production methods; processing methods, such as cleaning and sanitizing must also be certified as organic for the finished products to qualify for the label. For example, for meat processed at a facility to be labeled and marketed as organic, the processor must also be certified organic. The processor may process non-organic meats, but must implement measures to



ensure that non-organic meats are not “comingled” with organic meats. This requires thorough cleaning of all equipment after processing non-organic meats and before processing organic meats, as well as measures to ensure that the meats in the package actually came from the farmer’s organically-raised animals.

For the USDA’s Organic Labeling and Marketing Fact Sheet, see <http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELDEV3004446&acct=nopgeninfo>.

In addition to federal labeling laws, states may impose additional food labeling requirements for home prepared foods or foods sold direct-to-consumer, see below.

## North Carolina’s Labeling Requirements

As with any other commercial food product, home-prepared foods must be packaged to guard against contamination. In addition, the package must be labeled with

- The name of the product
- The name and address of the manufacturer
- The net weight of the product (in conventional and metric weight equivalents)
- A complete list of ingredients used

The ingredients should be listed in order of weight of the raw material ingredients. Only those foods that are made to order for sale as a single unit (such as a wedding cake, an order of cookies for a restaurant, or a sandwich ordered from a food truck) may be exempt from individual labels. Small businesses may be exempt from nutrition-labeling requirements.<sup>30</sup>

# Specific Regulations by Type

## Meat & Meat Products

Meat is defined as beef, lamb, pork, and goat. Laws and regulations governing meat do not apply to fish and poultry.

### Federal Requirements

In order to sell meat<sup>31</sup>—whether through large grocery stores or co-ops, at farmers' markets, through CSAs, or on-farm directly to consumers—the meat must be processed at a facility that has been inspected by either federal or state officials. The Federal Meat Inspection Act,<sup>32</sup> vests the USDA with the authority to inspect animals and butchered meats intended for interstate commerce or export. Meat that is inspected by a state official (i.e., in a state-inspected facility) rather than a USDA official (i.e., in a federally-inspected facility) may be sold intrastate, but may not be shipped across state lines. This restriction to intrastate commerce means that the meat may not be sold online to out-of-state customers, by mail-order to out-of-state customers, or in any way shipped out of state.

The FMIA requires animals to be inspected prior to slaughter.<sup>33</sup> Any animal that is diseased or ill must be slaughtered separately and closely examined.<sup>34</sup> Humane methods of slaughter must be employed, and the agency is authorized to suspend operations at any facility that fails to comply with the requirements of the Humane Slaughter Act.<sup>35,36</sup> The carcasses and parts may not be further processed for sale to the public until they pass inspection and are labeled or marked as “inspected and passed” by the inspector, and labeled to identify the kind of animal from which they were derived and the facility at which they were processed.<sup>37</sup> Any parts determined to be adulterated must be marked “inspected and condemned” and the condemned parts destroyed.<sup>38,39</sup>

Before meat may be sold, it must be inspected, properly marked, and labeled.<sup>40</sup> In accordance with federal and state requirements, all meats offered for sale to the public must be labeled with the following information:

- The contents of the package (i.e., the name of the product) and its net weight
- Additional ingredients (e.g., salt, herbs, spices), if any were added
- Safe handling instructions (such as “keep refrigerated or frozen”)
- The mark of inspection (USDA or NCDA), with the processing plant number, name, and address.

The name and address of the farm may be included on the processor's label, or may be added as a separate label as long as it does not obscure any part of the processor's label. A label indicating the sale price may also be added as long as it does not obscure the processor's label. Labels must be approved by the USDA or state inspection office prior to use.<sup>41</sup> The farmer is encouraged to work directly with the processor to prepare a custom label if one is desired for marketing purposes.

A custom label may include other claims, such as “certified organic” or “grass-fed,” as long as those claims meet the standards, certification, or other requirements of the relevant laws governing product information. In an effort to prevent false or misleading food labeling and advertising, government agencies have defined and restricted the use of certain words and phrases that consumers rely on in making decisions



Photo by Victoria Bouloubaiss

about which foods to purchase.<sup>42</sup> For example, the USDA's Agricultural Marketing Service established a voluntary standard for a “grass-fed” ruminant livestock marketing claim. To qualify for use of this claim, the animal's diet must be “derived solely from forage consisting of grass (annual and perennial), forbs (e.g., legumes, Brassica), browse, or cereal grain crops in the vegetative (pre-grain) state. Animals cannot be fed grain or grain byproducts and must have continuous access to pasture during the growing season.”<sup>43</sup> The producer may ask the AMS to verify the claim through an audit of the production process. To qualify, the producer must be able to verify that the standard's requirements are being met through a detailed documented quality management system.

## ORGANIC LABELING

To label meat as certified organic, the farm on which the animal was raised must be certified as an organic farm with respect to the livestock produced on it. The animals' feed must be certified organic, and may not contain plastic pellets for roughage, manure refeeding, or formulas containing urea. In addition, the livestock may not be given growth promoters or hormones, whether implanted, ingested, or injected, including antibiotics and synthetic trace elements used to stimulate growth or production.<sup>44</sup> In addition, the farmer may not use subtherapeutic doses of antibiotics, synthetic internal parasiticides on a routine basis, or administer medication—other than vaccinations—in the absence of illness.<sup>45</sup>

## NUTRITIONAL LABELING

The USDA's Food Safety Inspection Service requires single-ingredient retail cuts of meats to be labelled with nutritional information.<sup>46</sup> Alternatively, nutritional information must be displayed at the point of sale. For more information on nutritional labeling for meat, see the fact sheet *Nutritional Labeling for Small-Scale Meat and Poultry Producers* on the CFSA website, [www.carolinafarmstewards.org](http://www.carolinafarmstewards.org).

## North Carolina

Meat and meat products sold in intrastate commerce are regulated by the N.C. Department of Agriculture and Consumer Services' NC Meat and Poultry Inspection Division. The agency has adopted by reference the federal requirements for inspection and grading described above.<sup>47</sup> Even though there are few, if any, differences between a federally and state inspected facility, meat from animals slaughtered and/or processed in a state-inspected facility may not be sold in interstate commerce.<sup>48</sup>

Meat may be sold fresh or frozen. Alternatively, nutritional information must be displayed at the point of sale. Meat that has been inspected at a state or federally inspected facility may be sold to grocery stores and to restaurants. Stores and restaurants may set their own requirements—i.e., specify whether they require meat to be processed in a state or a federally inspected facility, whether they require proof of liability insurance, and how they want their meats packaged and labeled—to satisfy their own customers' needs.

## CUSTOM SLAUGHTER

Custom slaughter facilities cater to farmers who want their meat butchered and processed for personal use. They may also provide meat slaughtering services for those who purchase a live animal and who want an animal slaughtered or processed for their own personal consumption. Custom slaughter facilities do not have a state or federal inspector on duty. While the facilities are periodically inspected for sanitation, animals processed at these facilities are not inspected for disease. The meat is cut, packaged and labeled "Not For Sale" before being returned to the owner of the animal.

The slaughter, processing, and sale of meat and poultry products intended for in-state sale is regulated by the NC Department of Agriculture's Meat and Poultry Inspection Division.<sup>49</sup> Although overseen by the same regulatory agency, the requirements for meat and meat products differ from those for poultry and poultry products.



North Carolina does not allow the on-farm slaughter or processing of meat for sale. On-farm slaughter and processing is allowed, but only if the meat is used for personal consumption, or for consumption by one's family, employees, or *invited*, non-paying guests.<sup>50</sup> State law prohibits a farmer from selling an animal, or shares or interests in an animal that would then be butchered on-site and packaged for off-farm use.

While a farmer may not slaughter and process his animals on-site and sell the products to consumers, he may take his animals to a processor licensed and inspected by the NCDA's Meat and Poultry Inspection Division<sup>51</sup> and then sell the inspected, marked and labeled products at his on-farm store or at his local farmers' market. The farmer also must register with the NCDA's Meat and Poultry Inspection Division as a Meat Handler and obtain a Registration (commonly known as a license) to store, transport and sell the inspected, marked and labeled meat products (see below for more details).

## MEAT AND POULTRY HANDLERS LICENSE

Any person who stores, transports or sells meat products is required to obtain a Meat Handler's Registration (commonly known as a license) from the NCDA&CS. This requirement applies to a farmer who picks up his inspected meats from the processor, as well as third-party handlers. This requirement is intended to protect public health by ensuring that meat products are properly marked, labeled, wholesome, and are stored and transported under conditions that will not lead to misbranding or adulteration. To qualify for a meat handler's license, the producer must have a storage facility that is clean, free of rodents and pests, and with appropriate cooling features to prevent adulteration of the products. For more information about obtaining a Meat Handlers' License, see <http://www.ncagr.gov/meatpoultry/meathandlers.htm>.



# Grade A Dairy

Federal and state-specific requirements for dairy marketing and labeling are outlined below.<sup>52</sup>

## Federal

### PASTEURIZATION REQUIREMENTS

The FDA is responsible for the enforcement of milk sanitation standards on interstate carriers, as well as milk and milk products shipped in interstate commerce. The FDA requires all milk sold in interstate commerce to comply with the Pasteurized Milk Ordinance (sometimes referred to as the Grade “A” Milk Ordinance),<sup>53</sup> and prohibits the introduction into interstate commerce of any unpasteurized milk product intended for human consumption.<sup>54</sup> The Milk Ordinance applies to milk produced by lactating cows, goats, sheep, water buffalo, and other hooved mammals.<sup>55</sup>

The Milk Ordinance was first adopted in 1938, when “milkborne outbreaks constituted twenty-five percent (25%) of all disease outbreaks due to infected foods and contaminated water.” By contrast, fluid milk products currently are associated “with less than one percent (<1%) of such reported outbreaks.”<sup>56</sup> The FDA maintains that “raw milk, no matter how carefully produced, may be unsafe.” Although some states do permit the intrastate sale of raw milk intended for human consumption, North Carolina does not.<sup>57</sup>

The Milk Ordinance “incorporates the provisions governing the processing, packaging, and sale of Grade ‘A’ milk and milk products, including buttermilk and buttermilk products, whey and whey products, and condensed and dry milk products.”<sup>58,59,60</sup> It sets forth permit requirements, inspection requirements, permit and inspection enforcement standards; standards for pasteurization, processing and packaging; procedures for milk sampling, handling, and transportation; definitions of milk products; standards for dairy farm construction; standards for water sources; procedures for animal disease control; cleaning and sanitizing; approved testing methods for chemical and bacteriological agents (including Vitamins A and D content); tolerance levels for drug residues; and vitamin fortification, among other things.

The Milk Ordinance also sets forth requirements for maintaining the cowyard. The “cowyard” is defined to include “the enclosed or unenclosed area adjacent to the milking barn in which the lactating animals may congregate” along with the animal-housing areas and feed lots. These areas are required to be graded and drained, and depressions and soggy areas must be filled. These requirements are imposed to minimize the soiling of the udders with manure and dirt and thus contamination of the milk.<sup>61</sup>

The Milk Ordinance also addresses the health of the lactating animal, as some diseases of lactating animals can be passed through the milk and communicated to humans who consume it. In addition, antibiotics used to treat illness in lactating animals can be passed to the milk. For these reasons, lactating animals that are ill or being treated with antibiotics or other medicines must be milked separately and their milk safely discarded.<sup>62</sup>

Finally, the Milk Ordinance addresses labeling of milk and milk products. The label must contain the identity of the milk plant, the name of the type of hooved animal that produced the milk (e.g., goat milk), and the words Grade “A.” Misleading labels and claims are prohibited (e.g., Select Grade “A”).<sup>63,64</sup>

In addition to these labeling requirements, other labeling requirements may apply as well. For example, to label milk as organic, the dairy farm must be certified in accordance with requirements set forth by the National Organic Program. Specifically,

the cow must not have been treated with antibiotics, hormones, or synthetic parasitocides, or given any animal drug—other than vaccine—in the absence of illness.<sup>65</sup>

One of the most controversial topics concerns labeling of milk from cows treated or not treated with bovine growth hormone (rBST) since 1993, when the FDA first approved the use of rBST.<sup>66</sup> Responding to concerns from consumers, the dairy industry, and the states, the FDA published interim guidance on the labeling of milk and milk products from cows that have not been treated with rBST in 1994.<sup>67</sup> The FDA expressed concern that labeling milk as rBST-free<sup>68</sup> could be misleading, because no test could distinguish between milk from cows treated with rBST and not treated with rBST, and because there wasn’t any known compositional or health-related difference between milk from treated and untreated cows that would make one safer than the other. The FDA determined that to avoid misleading the public, labeling claims about the use of rBST should be placed in context and accompanied by a statement that “No significant difference has been shown between milk derived from rBST-treated and non-rBST-treated cows.”<sup>69</sup> The ultimate decision about the exact wording of the label is relegated to the states, in accordance with requirements of the FDCA regarding misbranding by the use of false or misleading statements.

States are encouraged to adopt the Milk Ordinance as a means of overcoming interstate trade barriers, and NC has done so.<sup>70</sup> When a state adopts the Ordinance, its enforcement becomes a function of the local or state authorities.

## North Carolina

North Carolina has adopted the Pasteurized Milk Ordinance, with minor revisions,<sup>71</sup> and has outlawed the sale of raw milk. The State also has adopted strict laws and regulations to ensure the quality and safety of milk and milk products sold to the public. Pursuant to state law, dairy farms and milk plants are required to obtain a permit from the Division of Environmental Health. This permit covers the milk plant and plant-owned distributors. The Division is authorized to inspect and sample any facility or container used in the production, testing, processing, and distribution of milk, cream, butter, cheese, ice cream, frozen dessert, or any dairy product for which standards of purity and identity have been established.<sup>72</sup> It possesses broad authority to inspect “dairy products” for adulteration<sup>73</sup> or misbranding,<sup>74</sup> and for contamination with microorganisms. The Division requires a minimum of four samples of raw milk for pasteurization to be taken and recorded from each milk plant—after receipt of the milk by the plant and prior to pasteurization—every consecutive six months. It also requires the sampling of Grade “A” pasteurized milk and milk products a minimum of four times every consecutive six months.<sup>75</sup>

If the Division determines that the product has become harmful to the health at some point during production, processing, or distribution, or that the facility is in violation of its permit, it may issue a “stop-sale” order to prohibit the product’s further processing, distribution, or sale and label the product accordingly. The label must remain on the product pending compliance with relevant standards or appropriate disposal of the product. If the adulteration or misbranding can be corrected by proper labeling or processing, the producer or processor will have the opportunity to make the correction and, with the approval of the inspector, remove the “stop-sale” order and proceed with the processing, distribution, and/or sale of the product.<sup>76</sup> In the

event of an immediate health hazard, the permit may be suspended immediately.<sup>77</sup> The suspension will remain in effect until sampling indicates the conditions leading to the health threat have been corrected.<sup>78</sup>

In addition to the inspection and testing requirements, federal and state law also states that dairy farms may dispense raw milk or raw milk products only to a permitted milk hauler or to a processing facility for which the processing of milk is permitted, graded, or regulated by a state or federal agency.<sup>79</sup> Milk haulers, who come to the farm, pump the milk from the tanks, and then deliver the raw milk to a dairy plant for processing, must pass a samplers' exam, administered by the state Department of Agriculture, before they may obtain the necessary license to haul, sample, test, and grade the milk.

The milk hauler must inspect the milk at the farm before it may be transported to the processing plant. The hauler will check the milk temperature and smell and take a sample of the milk for chemical and microbial testing. These tests will be done at the plant before the milk will be pumped from the truck. The hauler may also take a sample to test for antibiotic residues, to ensure they do not exceed "safe" levels set by the FDA.<sup>80</sup> In the event that drug residue levels are exceeded, the "Grade A" permit will be suspended until subsequent testing shows a reduction in residue to legal limits. If a producer exceeds the legal limits three times within a 12-month period, his permit may be revoked.

North Carolina strictly regulates the production, processing, and sale of milk and dairy products. These requirements are implemented through regulations adopted by the Department of Agriculture's Food and Drug Protection Division, Grade "A" Milk Program.<sup>81,82</sup> The statute defines milk to include all milk regardless of fat content, flavored milks, cream, buttermilk, dry milks, and condensed and evaporated milks.<sup>83</sup> It is illegal to use the words "cream," "milk," or "ice cream" in connection with any product or product name that is not made from dairy products in accordance with requirements set forth by the Department of Agriculture.<sup>84</sup>

The State considers all milk and dairy products to be "high-risk" products, which must be produced in a non-home based commercial facility.<sup>85</sup> The statute also prohibits a person from living or sleeping in the facility in which the products are made, unless the living and sleeping accommodations are kept separate from the work or storage rooms.<sup>86</sup>

The state's milk program regulates the production and sale of fluid milk, yogurt, and minimally processed milk products such as cottage cheese. In accordance with the federal Grade "A" Pasteurized Milk Ordinance,<sup>87</sup> which North Carolina has adopted by reference,<sup>88</sup> only certified Grade "A"<sup>89</sup> pasteurized, ultra-pasteurized, or aseptically packaged milk or milk products may be sold to the consumer, including restaurants, grocery stores, or similar establishments.

A milk hauler's permit issued by the Division of Environmental Health is required to produce, process, transport, or distribute Grade "A" milk.<sup>90</sup> There are no exemptions for small-scale producers. However, producers who transport milk and milk products exclusively from their own dairy farm are exempt from obtaining a milk hauler's permit.<sup>91</sup> Businesses that serve or sell milk and milk products at retail, such as restaurants and grocery stores, also are exempt from permit requirements.<sup>92</sup>

Local health departments are required to provide or certify the availability of grade "A" milk sanitation services within their jurisdiction. Regulations adopted by the state Department of Health and Human Services set forth the minimum frequency with which the local health departments are required to inspect various facilities and equipment and sample well water and raw milk.<sup>93</sup> Inspection frequencies are as follows:

- Dairy farms are inspected once every six months.
- Farm well water is sampled once a year or when well equipment is repaired.
- Samples of raw milk taken from the farm of origin before comingled with other milk are required at least four times every six months.
- Every pasteurized milk product is sampled four times every six months.
- Temperature checks and inspection of retail storage facilities are conducted during each sanitation inspection of restaurants, markets, etc.

## RAW MILK

North Carolina prohibits the sale or dispensation of raw milk for human consumption directly to consumers.<sup>94</sup> There is no exemption for on-farm sales, exchanges through barter, or the sale of shares or interest in lactating animals (sometimes referred to as "cowshares"). Raw milk sold for non-human consumption, e.g., for animal feed, is allowed. In those instances, the milk container must be clearly labeled "NOT FOR HUMAN CONSUMPTION," and contain a warning that "IT IS NOT LEGAL TO SELL RAW MILK FOR HUMAN CONSUMPTION IN NORTH CAROLINA."<sup>95</sup>

Milk that has been properly inspected, graded, pasteurized, and packaged may be returned to the farm and sold on-site. It must be kept refrigerated at all times, including during transport.

## MANUFACTURED MILK PRODUCTS: ICE CREAM, BUTTER & CHEESE

Although ice cream, butter, and cheese are derived from milk, they are not considered Grade "A" milk products as that term is legally understood. Instead, they are characterized as manufactured milk products, and are subject to different regulatory requirements. State law and regulations require facilities in which ice cream<sup>96</sup> and cheese are made to be kept clean and in sanitary condition, with the maintenance of suitable washrooms and bathroom facilities, to prevent product contamination. These requirements extend to the appliances, utensils, and tools used to make and handle the cream, ice cream, butter, or cheese; all must be properly cleaned or sterilized.<sup>97</sup>

These requirements also apply to mobile frozen dessert units. Regulations require the use of sanitary milk piping in the mobile unit, and state that the equipment must be taken apart and thoroughly washed after each day's use.<sup>98</sup>

The NC Department of Agriculture has the authority to inspect these operations and enforce the regulatory requirements.<sup>99</sup> A valid inspection certificate is required, and it is illegal to operate without one.<sup>100</sup> The Department is authorized to order the facility to close in the event of violations.<sup>101</sup>

An inspection certificate is also required to manufacture cheese for retail sale. The inspections are intended to ensure that the facility in which the cheese is made is clean and sanitary and safe for human consumption.<sup>102</sup> Clean and sanitary means that the facility and equipment are thoroughly cleaned after each use and that facility conditions protect the product from contamination. Safe for human consumption means that the product is not adulterated with any chemical, physical, or biological substance that is deleterious to health.

The state has adopted by reference federal rules for cheese.<sup>103</sup> These federal rules set forth the definition and standard of identity for many different types of cheeses. The rules also require proper labeling of all cheeses offered for sale, including a list of each ingredient in the product, in accordance with general labeling requirements discussed above.



# Poultry

The production and processing of poultry and poultry products is governed by both federal and state law. Poultry includes chickens, turkeys, ducks, geese, guineas, ratites, and squabs.

## Federal Poultry Laws

As with meat and meat products, poultry and poultry products must be slaughtered and processed at a USDA-inspected facility to be sold in interstate commerce. The federal Poultry Products Inspection Act sets forth requirements for poultry slaughtering facilities, and these requirements are implemented through regulations adopted by the USDA<sup>104</sup> relating to eggs and poultry products.

The USDA is authorized to inspect poultry prior to slaughter, and is directed to inspect each carcass while processing operations are being conducted.<sup>105</sup> Any carcass or part deemed adulterated must be destroyed for human food purposes.<sup>106</sup> Poultry to be processed in accordance with recognized religious dietary laws may be exempt from certain requirements.<sup>107</sup>

## North Carolina

### POULTRY PRODUCTS INSPECTION ACT

The Poultry Products Inspection Act governs the processing and sale of poultry and poultry products in North Carolina. This law is administered by the NC Department of Agriculture's Meat and Poultry Inspection Division. As with meat and meat products, on-farm slaughtering and processing of poultry for sale is prohibited, unless processed under an approved exemption..

If the poultry and poultry products are to be sold in intrastate commerce, such as through a CSA, farmers' market or on-farm, the birds must be processed in either a state-inspected or federally-inspected facility or under one of the poultry exemptions listed below. Poultry and poultry products are regulated by the N.C. Department of Agriculture and Consumer Services' NC Meat and Poultry Inspection Division. The requirements are markedly similar to those set forth in federal law, as the State has adopted the relevant federal regulations by reference.<sup>108,109</sup> Facilities that slaughter poultry or process poultry products solely for intrastate commerce are required to employ sanitary practices and maintain their premises, facilities, and equipment.<sup>110</sup>

The NC Department of Agriculture and Consumer Services has the authority to inspect poultry and poultry products and regulate the processing<sup>111</sup> and distribution of poultry in order to protect both public health and the economic vitality of the state's poultry industry. This authority is vested in the Meat and Poultry Inspection Division, which is directed to inspect poultry, parts, and carcasses in each official

establishment engaged in processing poultry or poultry products solely for intrastate commerce.<sup>112</sup> Poultry products must pass inspection before they may be sold or transported in interstate commerce, and the blood, feathers, feet, head, and viscera must be removed prior to transport or sale.<sup>113</sup>

The Department has the authority to retain, detain, segregate, and re-inspect those products when deemed necessary, and is required to condemn and destroy any adulterated products. The owner may appeal the condemnation and call for re-inspection. All such products must be appropriately marked and segregated pending completion of an appeal inspection. If the Department determines the appeal was frivolous, it may charge the costs of re-inspection to the owner. An inspector may detain any poultry product determined to be misbranded<sup>114</sup> or adulterated<sup>115</sup> for a period not to exceed 20 days to ensure compliance with the law.<sup>116</sup>

### MEAT AND POULTRY HANDLER REGISTRATION

A Meat and Poultry Handler Registration is required to transport and sell processed poultry, except for poultry covered by the exemptions described below.

Any person who stores, transports or sells meat or poultry products is required to obtain a Meat Handler's Registration (commonly known as a license) from the NCDA&CS. This requirement applies to a farmer who picks up his inspected meats from the processor, as well as third-party handlers. This requirement is intended to protect public health by ensuring that meat products are properly marked, labeled, wholesome, and are stored and transported under conditions that will not lead to misbranding or adulteration. To qualify for a meat handler's license, the producer must have a storage facility that is clean, free of rodents and pests, and with appropriate cooling features to prevent adulteration of the products. For more information about obtaining a Meat Handler's License, see <http://www.ncagr.gov/meatpoultry/meathandlers.htm>.

### SMALL SCALE PRODUCER EXEMPTION

There are exemptions for small-scale poultry producers. A farmer who slaughters and processes (on his premises) 1000 poultry or less in a calendar year is exempt from the Poultry Products Inspection Act.<sup>117</sup> Poultry includes the following species in any combination: chickens, turkeys, ducks, geese, guineas, ratites, and squabs. This exemption is restricted to poultry he has raised on his own farm. Slaughtering and processing are still required to be conducted using sanitary standards, practices and procedures, and the grower must keep accurate and legible records, including the number of birds slaughtered and the sales to consumers. Such poultry products must be labeled with the processor's name and address, safe handling instructions, and the statement "Exempt P.L. 90-492."

A farmer who slaughters 20,000 poultry or less per calendar year may slaughter and process for retail sale on his own farm poultry that he has raised, as long as he provides the consumer with his name and address and the products are otherwise fit for human consumption when sold.<sup>118</sup> These products may be sold on the farm, or sold directly to consumers, restaurants, and food service businesses where used to prepare meals for sales direct to consumers.<sup>119</sup> This exemption applies only if the



PHOTO BY GRACE KANOH

poultry products are to be sold in-state; they may not be shipped or transported for sale across state lines. Slaughtering and processing are still required to be conducted using sanitary standards, practices and procedures, and the grower must keep accurate and legible records, including the number of birds slaughtered and the sales to consumers. Such poultry products must be labeled with the processor's name and address, safe handling instructions, and the statement "Exempt P.L. 90-492."

No Meat and Poultry Handler license is required when dealing in exempt poultry products. As with all exemptions (see below), the misbranding and adulteration provisions of the law still apply, with the exception of the inspection mark.

## SLAUGHTER FOR PERSONAL CONSUMPTION

A farmer may slaughter and process on his own farm poultry that he has raised, but only if the poultry products are to be used exclusively by him, members of his household and his *invited*, non-paying guests.<sup>120</sup>

## OTHER EXEMPTIONS

Exemptions may also be available for poultry that is to be processed as required by certain religious dietary laws. In those instances, the poultry or poultry products must be identified with the name and address of the producer, and be sound, clean, and fit for human food when distributed.<sup>121</sup>

## ORGANIC LABELING

To label poultry as certified organic, the farm on which the animal was raised must be certified as an organic farm with respect to the livestock produced on it. The animals' feed must be 100% certified organic, which may not contain animal drugs, antibiotics, or slaughter byproducts,<sup>122</sup> and may not contain plastic pellets for roughage, manure refeeding, or formulas containing urea. In addition, the livestock may not



be given growth promoters or hormones, whether implanted, ingested, or injected, including antibiotics and synthetic trace elements used to stimulate growth or production.<sup>123</sup> Poultry may not be housed in cages, must have access to the outdoors, and must be able to scratch and dustbathe.<sup>124</sup> Disease and pest management must also be conducted in accordance with organic standards; the farmer may not use sub-therapeutic doses of antibiotics, synthetic internal parasiticides on a routine basis; or administer medication—other than vaccinations—in the absence of illness.<sup>125</sup> The birds' waste must be managed so as not to pollute the environment or contaminate organic products; burning of the waste is prohibited.

## NUTRITIONAL LABELING

The USDA's Food Safety Inspection Service requires single-ingredient retail cuts of poultry to be labelled with nutritional information,<sup>126</sup> unless processed under an approved exemption. For more information on nutritional labeling for meat, see the fact sheet *Nutritional Labeling for Small-Scale Meat and Poultry Producers* on the CFSA website, [www.carolinafarmstewards.org](http://www.carolinafarmstewards.org).

# Eggs

Eggs are regulated by both federal and state laws and regulations.

## Federal Egg Products Inspection Act

The USDA has the authority to regulate eggs<sup>127</sup> and egg products pursuant to the federal Egg Products Inspection Act.<sup>128</sup> Authority for implementing the statute has been delegated to the Agriculture Marketing Service.<sup>129</sup> The statute and implementing regulations apply to all growers, egg handlers and facilities that handle or process shell eggs for sale in interstate commerce.

The agency is directed to inspect all the facilities of an egg handler, including any transport vehicles, to ensure that shell eggs destined for sale to the public are kept under refrigeration at an ambient temperature of no greater than 45 degrees Fahrenheit after packing, and contain labeling that indicates that refrigeration is required.<sup>130</sup> Inspections<sup>131</sup> must be conducted at least once each calendar quarter.<sup>132</sup> Egg handlers are required to maintain, for a period of 2 years, records showing the receipt, delivery, sale, movement, and disposition of all shell eggs they have handled, and must allow access to inspection and copying of the records.<sup>133</sup>

Facilities that process shell eggs are subject to continuous inspection when processing eggs for sale in interstate commerce.<sup>134</sup> The processing plant must be maintained in sanitary operating condition at all times.<sup>135</sup> Detailed requirements for the plant and the sanitation controls are set forth in the regulations, and include the provision of hot and cold potable water, adequate toilet and hand washing facilities, protections against dust, dirt, and pests, and proper sewage and waste disposal facilities such as refuse rooms to ensure that waste products and edible eggs are kept separate. They also include construction requirements to ensure that the plant's interior rooms are easy to clean and maintain, and the building is protected against infestations of pests and rodents.<sup>136</sup> In addition, the plant must have space and equipment necessary for use by the inspector.<sup>137,138</sup> The regulations also set forth requirements for maintaining the cleanliness of egg washing and drying facilities.<sup>139</sup>

If the inspector has reason to believe the eggs or facility are in violation of the law or regulations, the inspector may detain the eggs for a period not to exceed 20 days. A detention tag or other similar device must be used to identify the detained product, and the custodian or owner given a written notice of the detention. Only an authorized representative of the agency may affix or remove the detention identification.<sup>140</sup> The egg handler may appeal any decision of the inspector regarding the class, quantity, or condition of any product.<sup>141,142</sup>

## LABELING

All containers of shell eggs must be labeled and the labels must be approved by the Administrator of the Agriculture Marketing Service.<sup>143</sup> The containers must indicate that refrigeration is required.<sup>144</sup> The label must also include the name, address, and ZIP code of the packer or distributor, the net contents of the container, the grade of the product, the official identification and plant number, and the lot number or date of production.<sup>145</sup> The official symbol of inspection is provided in the regulations and may be downloaded.<sup>146</sup>

## U.S. FOOD & DRUG ADMINISTRATION EGG SAFETY RULE

The FDA's Final Rule on egg safety, Prevention of Salmonella Enteritidis in Shell Eggs During Production, Storage and Transportation,<sup>147</sup> requires shell egg producers to



Photo by Julie Williams Dixon

implement measures to prevent Salmonella Enteritidis (SE) from contaminating eggs on the farm and further growth during storage and transportation.

- The Egg Safety Rule went into effect July 9, 2010 for egg producers with 50,000 or more laying hens. For egg producers with less than 50,000 birds but more than 3,000 birds, the Rule went into effect July 9, 2012.
- Producers who sell all their eggs directly to consumers or have less than 3,000 hens are not covered by the rule.

CDC developed a webpage to inform the public about the risks of Salmonella as well as preventive measures one can take to reduce the risks. Consumers and producers can find that information at [http://www.cdc.gov/nczved/divisions/dfbmd/diseases/salmonella\\_enteritidis/](http://www.cdc.gov/nczved/divisions/dfbmd/diseases/salmonella_enteritidis/).

## ORGANIC EGGS

For eggs to be labeled as organic, the chicks must be managed as organic beginning from the second day of life.<sup>148</sup> The layers must be fed 100% organic feed, which may not contain animal drugs, antibiotics or slaughter byproducts.<sup>149</sup> Layers may not be housed in cages, must have access to the outdoors, and must be able to scratch and dustbathe.<sup>150</sup> Disease and pest management must also be conducted in accordance with organic standards.<sup>151</sup> The birds' waste must be managed so as not to pollute the environment or contaminate organic products; burning of the waste is prohibited.



## EXEMPTION FOR SMALL-SCALE PRODUCERS

Farmers who sell less than \$5000 in annual egg sales are exempt from the requirements of third-party organic certification, but may still use the term organic in their labels provided it is not misbranding or misleading.

## North Carolina

Eggs offered for sale in intrastate commerce are governed by the North Carolina Egg Law,<sup>152</sup> which is implemented by the North Carolina Department of Agriculture's Food & Drug Protection Division. While the Egg Law is specific to eggs produced and sold in North Carolina, the agency has adopted by reference federal regulations governing sanitation requirements and standards for grading shell eggs, see charts below.<sup>153</sup>



PHOTO BY Jena Eison

## U.S. Standards for Quality in Shell Eggs<sup>154</sup>

GRADE	SPECIFICATIONS
AA Quality	The shell must be clean, unbroken, and practically normal. The air cell must not exceed 1/8 inch (3.2 mm) in depth, may show unlimited movement, and may be free or bubbly. The white must be clear and firm, so that the yolk is only slightly defined when the egg is twirled before the candling light. The yolk must be practically free from apparent defects.
A Quality	The shell must be clean, unbroken, and practically normal. The air cell must not exceed 3/16 inch (4.8 mm) in depth, may show unlimited movement, and may be free or bubbly. The white must be clear and at least reasonably firm, so that the yolk outline is only fairly well defined when the egg is twirled before the candling light. The yolk must be practically free from apparent defects.
B Quality	The shell must be unbroken, may be abnormal, and may have slightly stained areas. Moderately stained areas are permitted if they do not cover more than 1/32 (0.8 mm) of the shell surface if localized, or 1/16 (4.8 mm) of the shell surface if scattered. Eggs having shells with prominent stains or adhering dirt are not permitted. The air cell may be over 3/16 inch (1.6 mm) in depth, may show unlimited movement, and may be free or bubbly. The white may be weak and watery, so that the yolk outline is plainly visible when the egg is twirled before the candling light. The yolk may appear dark, enlarged, and flattened, and may show clearly visible germ development, but no blood due to such development. It may show other serious defects that do not render the egg inedible. Small blood spots or meat spots (aggregating not more than 1/8 inch (3.2 mm) in diameter) may be present.
Dirty	An individual egg that has an unbroken shell with adhering dirt or foreign material, prominent stains, or moderate stains covering more than 1/32 of the shell surface if localized, or 1/16 of the shell surface if scattered.
Check	An individual egg that has a broken shell or a crack in the shell, but its shell membranes are intact and its contents do not leak.
Leaker	An individual egg that has a crack or break in the shell and shell membranes to the extent that the egg contents are exuding or free to exude through the shell.

## U.S. Weight Classes for Consumer Grades for Shell Eggs

WEIGHT CLASS	MINIMUM NET WEIGHT PER DOZEN (OUNCES)
Jumbo	30
Extra Large	27
Large	24
Medium	21
Small	18
Pee wee	15

State regulations require the seller to gather eggs promptly and keep them refrigerated at an ambient temperature of 60 degrees Fahrenheit or lower, until graded and packed. After grading and packing, the regulations specify that the eggs must be kept at a refrigerated ambient temperature of 45 degrees Fahrenheit or less, without freezing, until they are sold to the consumer or used in food preparation.<sup>155</sup>

The container in which eggs are marketed for sale<sup>156</sup> must be clearly marked as “eggs.” The label must include the number of eggs in the container, their grade and size or weight class, and the name and address of the grower.

The Food and Drug Division of the NC Department of Agriculture is authorized to establish standards of quality, grades and weight classes for eggs<sup>157</sup> sold or offered for sale in North Carolina (i.e., in intrastate commerce). These standards are intended to protect consumers from eggs that could harm human health which are injurious or likely to be injurious to health due to the condition of the shell or its contents, or the manner in which eggs are processed, handled, shipped, stored, displayed, sold or offered for sale.<sup>158</sup> The agency has adopted by reference federal standards and regulations for the grading and inspection of eggs and egg products.<sup>159</sup>

The Egg Law requires any person engaged in the processing and/or marketing of eggs to maintain sanitary egg-handling facilities, and keep the eggs in a proper environment. The regulations specify that eggs must be gathered promptly and placed in a refrigerated cooling room with an ambient temperature of 60 degrees Fahrenheit or lower, until graded and packed. After grading and packing, eggs must be held or transported at a refrigerated ambient temperature of 45 degrees Fahrenheit or less, without freezing, until sold to the consumer or used in food preparation.<sup>160</sup> The law also requires that containers and related packaging materials be clean, unbroken and “free from foreign odor.” The eggs must be protected from being soiled or dirtied, and any necessary cleaning must be done in accordance with sanitary measures.<sup>161</sup> The regulations prohibit the sale of inedible or “loss eggs”<sup>162</sup> for sale for human consumption.<sup>163</sup>

Establishments and facilities where eggs are bought, stored, offered for sale, or processed are subject to inspection by the Food and Drug Protection Division. This authority includes the inspection of records related to the production, sale and marketing of eggs.<sup>164</sup> Inspectors are authorized to issue a “stop-sale order” for any lot of eggs deemed to violate any section of the law. A stop-sale order must specify the

reason for its issuance, and prohibit the further marketing of the eggs subject to it until the eggs are released by the agency.<sup>165</sup>

## SMALL-SCALE EXEMPTION

A producer marketing eggs of his own production may be exempt from this section when the sale of the eggs takes place on the premises where the eggs are produced. This exemption also applies if ungraded sales do not exceed 30 dozen per week.<sup>166</sup>

## EGG CONTAINERS

NC law mandates that containers in which eggs are marketed for sale be clearly marked as “eggs,” and include correct information about the number of eggs in the container, their grade and size or weight class, and the name and address of the packer or distributor.<sup>167</sup> Egg containers may be re-used, but must be re-labeled with all required information, and the original label must be obscured.<sup>168</sup>

## LABELING CLAIMS

State law also strictly proscribes the claims that may be made when marketing eggs for sale within the State. For example, the term “fresh” may not be used for any eggs other than those certified as Grade A or better.<sup>169</sup> Eggs marketed and labeled as organic must be certified by a State or Federal agency or an accrediting organization recognized by a State or Federal agency and identified on primary container.<sup>170</sup> Eggs labeled and marketed as “Free Range” must have been produced from laying chickens that are “cage free” or have access to a suitable outdoors environment.<sup>171</sup> Evidence that the eggs are from production locations with cage-free birds or that have reasonable access to an outdoors range must be furnished by any person marketing these eggs to a retailer, institutional consumer or other person, and kept on file by both the seller and the purchaser at their respective places of business for a period of at least 30 days.<sup>172</sup> In addition, free range eggs must be identified and otherwise handled to maintain their identity through processing and packaging. Eggs may be labeled as “Fertile” or “Brown” providing these eggs meet all other applicable requirements.<sup>173</sup>



# Aquaculture, Fish & Seafood

## Federal: Fish & Seafood

Fish and shellfish are regulated pursuant to the federal Food, Drug, and Cosmetic Act.<sup>174</sup> The Good Manufacturing Practices (described in the Inspections section of this document) apply to ensure the safe and sanitary processing of fish and fish products.<sup>175</sup> In addition, every processor of fish is required to develop and implement a hazard analysis critical control point (HACCP) plan.<sup>176</sup> The HACCP plan must be specific to each location and kind of fish processed,<sup>177,178</sup> and must set forth a list of the types of food safety hazards likely to be encountered with each kind of fish, the points at which testing will take place, and the corrective action that will be taken to address any detected hazards and ensure that no product harmful to human health enters commerce.<sup>179</sup> Detailed records must be made and retained and made available for agency inspection.<sup>180</sup> Failure to comply with these requirements renders the facility's fish or fish products "adulterated."<sup>181</sup> In addition, the processor is required to develop and implement a Sanitation Operating Plan (SOP) and maintain sanitation control records. The processor must also monitor conditions and practices to ensure compliance with the GMPs, specifically including the safety of the water used in the processing of fish, proper labeling, exclusion of pests, and other matters.<sup>182</sup>

PHOTO BY Walking Fish



## NATIONAL SHELLFISH SANITATION PROGRAM

The interstate sale of raw molluscan shellfish (i.e., oysters, clams, mussels, or scallops) is regulated pursuant to the National Shellfish Sanitation Program, a cooperative federal/state program under the auspices of the federal Food and Drug Administration.<sup>183</sup> The Program—which includes participants from both shellfish producing and non-producing States' agencies, the FDA, Environmental Protection Agency, National Oceanic and Atmospheric Administration, and the shellfish industry—aims to ensure uniform sanitation standards for State shellfish programs, from monitoring of water quality to requirements for cleaning, processing, and transport to dealer certification requirements. The NSSP is based on public health principles and controls and is designed to prevent human illness associated with the consumption of shellfish. Sanitary controls are established over all phases of the growing, harvesting, shucking, packing, and distribution of fresh and fresh-frozen shellfish. The U.S. Food and Drug Administration has provided guidance in *The National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish* (2009 Revision).<sup>184</sup>

## INTERSTATE CERTIFIED SHELLFISH SHIPPERS

The FDA also maintains and updates monthly the Interstate Certified Shellfish Shippers List,<sup>185</sup> which contains an up-to-date list of shippers certified as compliant with Program requirements. Before a dealer, restaurant or grocer accepts shellfish from out-of-state (or a foreign country), he may consult this list to ensure the shellfish comes from an authorized source and has been certified as meeting safety standards to protect public health. Dealers must include measures in their HACCPs to ensure that the shellfish they receive has been harvested only from waters approved for harvesting by the relevant shellfish control authority (the Shellfish Sanitation Division in North Carolina).<sup>186,187</sup>

## North Carolina

Seafood is regulated by the NCDA&CS Food and Drug Protection Division. Wholesale seafood dealers must fulfill training requirements for safe seafood handling and HACCPs.

## COASTAL WATERS

The North Carolina Marine Fisheries Commission regulates fishing and fisheries in the state's coastal waters.<sup>188</sup> A Standard Commercial Fishing License (SCFL) issued by the Division of Marine Fisheries (DMF) is required to take or harvest fish for sale from coastal fishing waters in North Carolina.<sup>189,190</sup> The licensee must abide by size and harvest restrictions established by the DMF.<sup>191</sup>

A fish-dealer's license<sup>192</sup> is required to sell wild-caught fish from coastal waters to the public in North Carolina, regardless of whether the fish are caught in state or federal, the type of gear used, or the type of fish.<sup>193,194</sup> The holder of a SCFL license must also hold a fish dealer's license in order to sell fish directly to the public.<sup>195</sup> The fish dealer is required to prepare, maintain, and submit to the Division of Marine Fisheries records of all landings, including the information on the SCFL or shellfish license, the species,<sup>196</sup> size, and quantity of fish, and other information that may be required by the agency.<sup>197</sup> Violations of these requirements are subject to criminal and civil penalties.<sup>198</sup>

In addition to these requirements, a person who holds live fish for sale must obtain a Holding Pond/Tank permit.<sup>199</sup> This requirement does not apply to those who hold live lobsters for sale, or to those who hold an Aquaculture Propagation and Production Facility license.<sup>200</sup>

## SELLING SHELLFISH TO THE PUBLIC

The requirements for the sale of shellfish to the public are similar to those required for the sale of fish.<sup>201</sup> A shellfish harvest license issued by DMF<sup>202</sup> is required to take shellfish from state waters.<sup>203</sup> Shellfish may be harvested only from approved areas as determined by the Shellfish Sanitation Division.<sup>204</sup> A certified dealer's license issued by the Shellfish Sanitation Division is required to sell the shellfish to the public. The dealer must have an approved HACCP Plan, adequate refrigeration and storage for the product (including a refrigerated truck for transport), and a place of business at which potable water and proper sewage facilities are available.<sup>205</sup> If the dealer does not intend to break down, shuck, or repack the shellfish, the place of business may be the dealer's home. Before shellfish may be sold, they must be cleaned of sediment and other detritus.<sup>206</sup> Detailed daily records of sale and purchase must be kept by both the buyer and the seller.<sup>207</sup>

Breaking down, shucking, repackaging, or further processing of shellfish must be done at a licensed shellstock plant, to ensure an adequate flow-through process that will prevent re-contamination of the unshelled product with wash-water. The plant must be thoroughly cleaned and sanitized each day, and may not be used for any other purpose than handling shellfish during the operating season.<sup>208</sup>

As with other foods for human consumption, shellfish must be properly labeled, or tagged, before they may be sold.<sup>209</sup> The tag must be durable and waterproof, and must include the dealer's name, address, certification number, the date and location of harvest, the type of shellfish, and the quantity.<sup>210</sup> It must also include a consumer advisory that the consumption of raw shellfish may cause severe illness, especially for people with certain medical conditions.<sup>211</sup> The tags must remain attached to their containers until empty, and kept on file for another 90 days thereafter.<sup>212</sup>

The Shellfish Sanitation Division and the Marine Patrol are authorized to enforce the permit and licensing requirements. Any shellfish that are found to have been harvested from waters closed to shellfish collection, are without tags from a certified dealer, or that exceed bacteriological standards, are considered adulterated and may be seized and embargoed.<sup>213</sup>

## INLAND WATERS: AQUACULTURE

North Carolina ranks second in the nation in trout sales behind Idaho, and 7<sup>th</sup> nationally in total catfish sales.<sup>214</sup> Commercially-raised freshwater fish and crustaceans are regulated by the NCDA&CS, Division of Aquaculture and Natural Resources. Species allowed for aquaculture are bluegill, redear sunfish, redbreast sunfish, green sunfish, black crappie, white crappie, largemouth bass, smallmouth bass, white catfish, channel catfish, golden shiner, fathead minnow, goldfish, rainbow trout, brown trout, brook trout, common carp, and crayfish. Hybrid striped bass may be permitted in some areas with additional escapement prevention measures. Yellow perch may be permitted at facilities west of Interstate 77.

Food entrepreneurs seeking to operate an aquaculture facility are subject to licensing requirements developed by the Division of Aquaculture and Natural Resources.<sup>215</sup> There are two types of licenses relevant to the production and sale of aquaculture products: the Aquatic Propagation and Production Facility License and the Holding Pond/Tank Permit. They are described in more detail as follows.

## AQUATIC PROPAGATION AND PRODUCTION FACILITY LICENSE

A person who owns or operates an aquaculture facility for the purpose of possession, production, transportation, or sale of select species must apply for a license.



Photo by Victoria Bouloubasis

The license will be granted for a period of five years at no cost to the applicant. The application must include the facility name, the county in which facility is located, the address and telephone number of facility, the name of the responsible agent for the facility, the address and telephone number of the responsible agent, a description of primary activities at the facility (e.g., hatchery, food fish production), and the primary species to be possessed at the facility.

## HOLDING POND/TANK PERMIT

A Holding Pond/Tank Permit shall be obtained for all facilities holding live food or bait species for sale, except those facilities which are licensed as Aquaculture Propagation and Production Facilities (described above). This permit will be granted for a period of two years at no cost to the applicant.

## RETAIL SALE

Any aquaculture facility that sells product to wholesalers, distributors, or the public is also subject to federal regulations for fish and shellfish described above in this document. These requirements are based on Good Manufacturing Practices and include a HACCP plan.

# Raw Fruits, Vegetables & Nuts

## Federal

Entities and individuals engaged solely in the harvesting, storage, or distribution of “raw agricultural commodities—i.e., fresh, unprocessed fruits and vegetables—are exempt from compliance with the Good Manufacturing Processes set forth in federal regulations.<sup>216,217</sup> It is assumed that such commodities will be adequately cleaned and prepared prior to sale to the public. Sales of raw fruits and vegetables are also exempt from compliance with the HACCP.<sup>218</sup>

Although fresh, unprocessed fruits and vegetables are exempt from compliance with most mandatory inspection and labeling requirements, the Agricultural Marketing Service (AMS), a division of the USDA, has developed a detailed set of practices, requirements and inspection services to standardize marketing of many types of produce (e.g., apples, grapes, citrus, peanuts, pecans, honey, etc.).<sup>219</sup> Voluntary U.S. grade standards are promulgated pursuant to authority articulated in the Agricultural Marketing Act of 1946,<sup>220</sup> and are used to provide a point of reference and comparison, to assist with marketing and quality control, and to provide a basis for determining loan values for the Farm Credit Administration. A grower must comply with these requirements and obtain the necessary inspection certification in order to make claims about the grade or quality of these products and label the products accordingly. Restaurants, grocery stores, and food processors may require inspection and certification pursuant to this program.

To obtain the agency’s inspection and certification services, which are provided on a fee-for-service basis, a grower must file an application for inspection in an office of inspection at any destination or terminal market,<sup>221</sup> or with any inspector.<sup>222</sup> Each application for inspection service must include:

- The name and address of the applicant and the name and capacity of the person, if any, making the application in his behalf
- The name and address of the shipper
- The kind and quantity of the products involved
- The interest of the applicant therein
- The identification of the products by:
  1. Grade, brand, or other marks, if practicable
  2. Car number of carrier or number of truck or name of boat, if practicable
  3. The name and location of the store, warehouse, or other place where the products are located
- The particular quality or condition concerning which inspection is requested, to which may be added the time and place at which it is desired that the inspection be made
- When the lot is to be inspected in a receiving market, the name and address of the receiver
- The name of the shipping point and of the destination, when known
- Such other information as may be necessary for identification of the product, or as may be required by the inspector or the Administrator.<sup>223</sup> Inspections may be made at any shipping point or destination market.



The inspector will take samples of the products and test them for quality and safety and comportment with applicable product standards established by the federal or state agency. The inspector will issue a certificate for each lot inspected, and, upon request and payment of fees, will prepare an inspection report for the grower’s use.<sup>224</sup> The grower may appeal the inspection if dissatisfied with the results.<sup>225</sup>

Growers must comply with GMPs, HACCP plan requirements, and other standards if the produce is processed—including freezing—prior to sale. These standards cover everything from packing and storage to color variation and tolerances for pesticide residues. The standards and tolerances are set forth by type of fruit, vegetable, and nut in Title 7 of the Code of Federal Regulations, Subchapter C, Part 51. These regulations are developed and implemented by the Agricultural Marketing Service, a division of the USDA. The rules also set forth penalties for violations/misbranding.

## North Carolina

North Carolina has adopted federal requirements by reference.<sup>226</sup> The state also has adopted grading standards for certain produce—e.g., apples,<sup>227</sup> peaches,<sup>228</sup> cucumbers,<sup>229</sup> and pecans—which are subject to inspection and certification by the state Department of Agriculture.<sup>230</sup>

Fresh, unprocessed fruits and vegetables may be sold in intrastate commerce without inspection or permit. The federal Food and Drug Administration has published nonbinding guidance for the safe production and processing of fruits and vegetables and to minimize food safety hazards. See <http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/FruitsVegetablesJuices/default.htm> and <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/ProduceandPlanProducts/ucm064458.htm>



# Honey

## Federal

Federal regulations pertaining to protection of honey bees from pests and pathogens are set forth at 7 CFR Part 322. This part does not contain reference to standards or grades of honey. As with other fresh agricultural products, certification of grades for comb and extracted honey is available from the Agricultural Marketing Service on a fee-for-service basis. Grade and color standards and certification requirements for comb and extracted honey are set forth at 32 Fed. Reg. 7565 (May 24, 1967) and 50 Fed. Reg. 15861 (April 23, 1985), respectively.<sup>231</sup> As one writer has recommended “the best method for determining the quality of honey produced in the USA is to know the local producer and ask them about their honey and production procedures.”<sup>232</sup>

## North Carolina

The North Carolina General Assembly has recognized the importance of the bee and honey industry and adopted laws and regulations designed to protect bees from disease, regulate their use in the pollination of crops, conduct and promote research, and market honey products. This includes the authority to regulate substances deemed toxic to bees, and to regulate “undesirable species or strains of bees.”<sup>233</sup>

The NCDA&CS has adopted regulations designed to protect the state’s bees. Individuals who transport bees through North Carolina to another state must keep the bees in a tightly closed, refrigerated container.<sup>234</sup>

A permit from the NC Department of Agriculture’s Plant Industry Division is required to sell bees in North Carolina.<sup>235</sup> Permits are issued for a maximum period of one year and may not be transferred to another person.<sup>236</sup>

No permit is required for:

- The sale of less than 10 bee hives in a calendar year
- A one-time going-out-of-business sale of less than 50 bee hives
- The renting of bees for pollination purposes or the movement of bees to gather honey.<sup>237</sup>

The Department of Agriculture is authorized to inspect premises and vehicles used to transport bees or regulated products (including honey, bees, comb, hives, appliances, or colonies, wherever they are kept, located, or found) for the presence of bees or other regulated articles, inspect colonies for bee diseases and disorders, and enforce regulations. If the owner of the premises or vehicle denies permission for access or inspection, then the State agency official is authorized to obtain a search warrant from a court.<sup>238</sup>

A beekeeper or a grower seeking to rent bees for crop pollination may request the State Apiarist to inspect bee colonies for colony strength and condition of bees and issue a certification as to the findings of the inspection.<sup>239</sup> Inspections may be con-



Photo by Victoria Boulouba

ducted randomly or upon request.<sup>240</sup> In conducting the inspection, the inspector will open the hive and observe the brood (eggs, larvae, and developing bees) and adult bees.<sup>241</sup> Inspections are required to be conducted within 14 days of a request as a prerequisite for interstate shipment of bees.<sup>242</sup> Violations of the law are considered a Class 3 misdemeanor, and subject to civil penalties of up to \$10,000 per day per violation.<sup>243</sup>

To protect their colonies from harm caused by the aerial application of pesticides, beekeepers may register with the Plant Industry Division to receive advanced notice of aerial application. Registration costs \$10.00 and must be renewed annually.<sup>244</sup>

The North Carolina Beekeepers’ Association has proposed a honey standard to prevent abuses in production, labeling, and marketing, and to promote product consistency. The NCDA&CS recently adopted the standard, see <http://www.ncbeekeepers.org/Honey%20Standard.pdf>.

# Miscellaneous Prepared Foods

North Carolina regulates cottage food production and the production of value-added products on the farm. Much of the focus is on packaged foods, and detailed safety and labeling requirements apply. Nutrition information relating to the product must be provided, on a per-serving basis<sup>245</sup> on the label, for any product intended for human consumption and offered for sale.<sup>246</sup>

## Small-scale Exemption

A small-scale producer is exempt from nutrition label requirements as long as the food producer makes no nutritional claims on the products or in its advertising, sells directly to consumers and has annual gross sales of \$50,000.<sup>247</sup>

All food processors in North Carolina, without exemption, are required to comply with the Good Manufacturing Practice requirements set forth in federal regulations.<sup>248</sup> These regulations specify that the premises on which the food is prepared be maintained to prevent the contamination of food, by, for example, eliminating conditions that would provide breeding grounds for pests, properly maintaining waste treatment and disposal facilities, using protective coverings, providing adequate lighting in hand-washing and food preparation areas, providing adequate ventilation, and properly cleaning, sanitizing, and maintaining equipment. Copies of these regulations are available in local law libraries and on the internet.<sup>249</sup>

“High-risk” foods, such as refrigerated or frozen products (including dairy products), low-acid canned foods, and seafood products, are required to be produced in a licensed commercial facility and may not be produced in a home-based business. The only food products that may be produced in the home and sold directly to consumers are considered “low-risk” packaged foods, such as baked goods, jams and jellies, candies, pickles, and acidified foods. But even home-based kitchens are subject to state inspection requirements, based on the federal GMP, and products produced in home kitchens must comply with labeling requirements.<sup>250</sup> Products are also required to conform to standards of identity set forth by the federal Food and Drug Administration. These standards of identity describe the products, contain lists of approved ingredients for each product, and may contain recommendations for production, processing, and storage. All such Standards of Identity are set forth in Title 21, Chapter I of the Code of Federal Regulations and are available online.<sup>251</sup> Two examples of common products are provided as follows.



### EXAMPLE 1: FRUIT BUTTERS, JAMS, AND JELLIES

Federal regulations set forth specific standards for identifying fruit butters, jellies, and preserves.<sup>252</sup> These regulations specify the minimum content of fruit or fruit juice and ratios of fruit to sugar, standards for preparation, and ingredients that may be added to each product. The regulations also require proper labeling, including a list of each ingredient used in the preparation of the item.

### EXAMPLE 2: PICKLED FOODS

Production standards for pickled foods are set forth at in Part 114 of the federal Code of Regulations. The regulations specify that pickled/acidified foods must have a pH value of 4.6 or lower, and must be thermally processed, or contain preservatives, sufficient to destroy harmful microorganisms.<sup>253</sup> The regulations include procedures to attain required pH levels,<sup>254</sup> and approved methods for testing acidity.<sup>255</sup> As with all other packaged foods, labels are required that identify the product, manufacturer, and place and date of manufacture, as well as list of ingredients.<sup>256</sup> In addition, the preparer of the product must prepare and keep records for a minimum of three years from the date of manufacture. These records should include the source(s) of the raw materials or ingredients used, records documenting the processing and production methods used, and information on the product’s distribution or point of sale.<sup>257</sup>



# Agritourism

Agritourism is the practice of diversifying a farm or food production business to allow members of the general public to visit the property for purposes of learning about operations, taking part in activities centering on the farm theme for entertainment and/or education, holding an event, engaging in harvesting produce for personal consumption (e.g., U-pick), or purchasing farm products (e.g., Christmas trees, farm dinners).

North Carolina law limits the liability of agritourism providers if the following warning is prominently displayed at the venue: "WARNING Under North Carolina law, there is no liability for an injury to or death of a participant in an agritourism activity conducted at this agritourism location if such injury or death results from the inherent risks of the agritourism activity. Inherent risks of agritourism activities include, among others, risks of injury inherent to land, equipment, and animals, as well as the potential for you to act in a negligent manner that may contribute to your injury or death. You are assuming the risk of participating in this agritourism activity."<sup>258</sup>

Weatherproof signs are available from the NCDA&CS Agritourism Office at a charge of \$10.00/sign. Two signs, as required by law for the protection of the law, are free to farmers joining the Agritourism Networking Association. Farmers may also create their own signs, but these signs must use the font size and wording required by the law. Notwithstanding this law, agritourism operators are encouraged to obtain liability insurance for their agritourism operations.

NCDA&CS maintains an Agritourism Office, supports the NC Agritourism Networking Association for agritourism farmers and rural tourism service providers, hosts annual conferences and workshops, and markets the services of agritourism operators online. For more information see: <http://www.ncagr.gov/markets/agritourism/>.



PHOTO BY GRACE KANOPY

## Farm Stores and Roadside Markets

City and county governments regulate local land uses, including agricultural production and food-related businesses. It is essential to contact the planning and zoning office in the county in which the farm is located for site-specific guidance.

In North Carolina bona fide farms are exempt from county zoning requirements,<sup>259</sup> but local governments retain the right to regulate on-farm sales and businesses. For example, the county could restrict the hours of operation, specify parking requirements, impose set-back requirements, or require access to ADA-compliant bathroom facilities. In addition, cities and towns retain the right to exercise zoning powers over farms and businesses,<sup>260</sup> and their zoning codes often prohibit agricultural uses of land within city limits. These requirements vary by county and municipality. To determine the regulations applicable at a specific location, contact the county or city zoning office of the local government office with property tax jurisdiction over the property.

## Additional Resources

The [Legal Guide for Farm Direct Marketing](#) is published by Drake University's Agricultural Law Center.

The [National Center for Agricultural Law Research and Information](#) has numerous articles and agricultural law bibliographies, including [An Overview of Organizational and Ownership Options Available to Agricultural Enterprises](#).

[Tax Guide For Owners and Operators of Small and Medium Size Farms](#), published in 2011, by the Land Grant University Tax Education Foundation, Inc. provides a thorough guide to farm taxes. [Federal Environmental Laws Affecting Agriculture](#) are compiled at <http://www.nasda.org/nasda/nasda/foundation/state/Federal.pdf>.

[North Carolina Environmental Laws Affecting Agriculture](#) are compiled at <http://www.nasda.org/nasda/nasda/foundation/state/NorthCarolina.pdf>.

[Gemppler's](#) offers a Safety and Employment Law Compliance Kit; search their site for "Employment Law."

[Agricultural Justice Project Toolkit of Materials and Resources for Farmers](#), available online at <http://www.nofany.org/organic-farming/beginning-farmers-and-mentors/resources-host-and-mentor-farmers>. See pages 46-57 for information about the legal use of apprentices and interns.

The U.S. Small Business Administration provides comprehensive information about government programs that help new and existing agricultural businesses start, expand, obtain financing, and comply with laws and regulations. See <http://www.sba.gov/content/agriculture>.

## Footnotes

- 1 On-farm sales to out-of-state customers visiting the farm are included in this description.
- 2 See <http://www.irs.gov/businesses/small/article/0,,id=98350,00.html>.
- 3 See generally, North Carolina Food, Drug and Cosmetic Act, N.C. Gen. Stat. § 106 120.
- 4 For the index of relevant subparts, go to [http://www.access.gpo.gov/nara/cfr/waisidx\\_03/21cfrv2\\_03.html](http://www.access.gpo.gov/nara/cfr/waisidx_03/21cfrv2_03.html).
- 5 See 21 CFR Part 110.
- 6 Link to application: <http://www.ncagr.gov/fooddrug/food/documents/homeprocessor8.pdf>
- 7 <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=110>
- 8 <http://www.ncagr.gov/fooddrug/food/homebiz.htm>
- 9 15A N.C.A.C. 18A.2638(a).
- 10 N.C. Gen. Stat. § 130A-248(c1).
- 11 15A N.C.A.C. 18A.2638(f).
- 12 See generally 15A N.C.A.C. 18A.2638, 18A.2640.
- 13 21 U.S.C. § 343.
- 14 Public Law 108-282.
- 15 21 U.S.C. § 343(w)(1).
- 16 21 U.S.C. 333.
- 17 7 CFR 205.
- 18 7 CFR 205.203.
- 19 See 7 CFR 205.106, 205.600-602.
- 20 7 CFR 205.105(f), (g).
- 21 When residue testing detects prohibited substances at levels that are greater than 5 percent of the Environmental Protection Agency's tolerance for the specific residue detected or unavoidable residual environmental contamination, the agricultural product may not be sold, labeled, or represented as organically produced. 7 CFR 205.671
- 22 7 CFR 205.101(a).
- 23 7 U.S.C. 6501 et seq.
- 24 7 CFR Part 205.
- 25 Although the statute allows states to adopt additional requirements after review and approval by USDA, North Carolina has not done so. Instead, the State has adopted the National Organic Program regulations by reference. 02 NCAC 39 .0101.
- 26 7 CFR §§ 205.102.
- 27 7 CFR 205.300, 301.
- 28 7 CFR 105.
- 29 7 CFR 105.100(c).
- 30 21 CFR 101.9(j).
- 31 The statute defines "meat" as red meat (beef, lamb, pork and goat), and does not apply to fish or poultry.
- 32 21 U.S.C. §§ 601 et seq.
- 33 This requirement does not apply to animals one has raised and slaughters for one's personal use and does not intend to sell to another. 21 U.S.C. § 623(a).
- 34 21 USC § 603(a).
- 35 The Humane Slaughter Act requires all animals to be rendered unconscious swiftly prior to slaughter. 21 U.S.C. §§ 1901-06.
- 36 21 U.S.C. § 603(b).
- 37 21 U.S.C. §§ 604, 619.
- 38 21 U.S.C. §§ 604.
- 39 The USDA has also adopted facility guidelines for meat processing plants. For information concerning those guidelines and requirements, see 62 Fed. Reg. 45027 (Aug. 25, 1997).
- 40 See 7 CFR § 54.17 for examples of official marks and identifications.
- 41 O'Reilly, James, "A Consumer's Guide to Food Regulation & Safety," p. 19 (2010).
- 42 Some claims, such as "certified humane" or "dolphin safe" are not defined by the regulatory agencies, but rather trademarks of private entities such as the U.S. Humane Society or Earth Island Institute, the use of which requires the permission of those entities.
- 43 72 Fed. Reg. 58631, 58637 (Oct. 16, 2007).
- 44 7 U.S.C. § 6509(c).
- 45 7 U.S.C. § 6509(d).
- 46 9 CFR Parts 317 and 381 Nutrition Labeling of Single-Ingredient Products and Ground or Chopped Meat and Poultry Products; Final Rule, <http://www.fsis.usda.gov/OPPDE/RDAD/FRPubs/2005-0018F.pdf>
- 47 02 NCAC 43D .0106.
- 48 The Meat and Poultry Inspection Division has adopted guidelines for equipment used in the processing of meat and poultry products. For information concerning those guidelines and requirements, see NCDA&CS, Meat and Poultry Inspection Division, "Acceptable Meat and Poultry Equipment Guidelines," available at [http://www.ncagr.com/vet/meat\\_poultry](http://www.ncagr.com/vet/meat_poultry).
- 49 <http://www.ncagr.gov/meatpoultry/>
- 50 N.C. Gen. Stat. § 106.549.27.
- 51 N.C. Gen. Stat. §§106-549.23, 130A-250(9).
- 52 This guide discusses only those requirements applicable to fresh Grade A milk and does not address requirements for aseptically processed milk, dried or canned milks (e.g., evaporated, condensed). Readers should refer to the Milk Ordinance for information concerning requirements applicable to those milk products. Readers should also consult 21 CFR Part 131 for relevant standards of identity for milk and milk products. In addition, as noted above, cheese is not defined as a milk product and subject to different regulations. Milk Ordinance, Section 1-X.
- 53 The Milk Ordinance is available at <http://www.fda.gov/downloads/Food/FoodSafety/Product-SpecificInformation/MilkSafety/NationalConferenceonInterstateMilkShipmentsNCIMSMModelDocuments/UCM209789.pdf>. A certified copy may be obtained from the Department of Health and Human Services, Public Health Service, Food and Drug Administration, Division of Plant and Dairy Food Safety (HFS- 316), 5100 Paint Branch Parkway, College Park, MD 20740-3835.
- 54 21 CFR 1240.61.
- 55 Milk Ordinance Section 1-L.
- 56 US DHHS, Food & Drug Administration, Milk Ordinance, p. ii (2009).
- 57 See 15A NCAC 18A .1210.
- 58 Milk Ordinance, p. iii.

- This guide discusses only those requirements applicable to fresh Grade A milk and does not address requirements for aseptically processed milk, dried or canned milks (e.g., evaporated, condensed). Readers should refer to the Milk Ordinance for information concerning requirements applicable to those milk products. Readers should also consult 21 CFR Part 131 for relevant standards of identity for milk and milk products.
- Cheese is not defined as a milk product. Milk Ordinance, Section 1-X.
- STANDARDS FOR GRADE "A" RAW MILK FOR PASTEURIZATION, ULTRA-PASTEURIZATION OR ASEPTIC PROCESSING ITEM
- 4r. Cowyard
- Standards for Grade "A" Raw Milk for Pasteurization, Ultra-pasteurization or Aseptic Processing Item 1r. Abnormal Milk.
- Milk Ordinance, Section 4.
- This section of the Milk Ordinance also includes labeling requirements for milk haulers.
- 7 CFR § 205.238(c).
- See, e.g., *International Dairy Foods Ass'n v. Amestoy*, 92 F.3d 67 (2nd Cir. 1996); *Int'l Dairy Foods Ass'n v. Boggs*, 622 F.3d 628 (6th Cir. 2010); *Cochran v. Veneman*, 359 F.3d 263 (3rd Cir. 2004);
- 59 Fed. Reg. 6279 (February 10, 1994).
- 59 Fed. Reg. at 6280.
- 59 Fed. Reg. at 6280.
- 15A NCAC 18A .1201.
- See generally 15A N.C.A.C. 18A .1202 for the State's revisions and amendments to the Milk Ordinance.
- N.C. Gen. Stat. § 106-268(d); 15A NCAC 18A .1205.
- Adulteration is defined as a product that fails to meet the Board's definitions and standards, that omits any valuable constituent, that includes a substituted substance, or that is deemed unfit for human consumption. N.C. Gen. Stat. § 106 268(b).
- A product is misbranded if its labeling is false or misleading or is offered for sale under the name of another dairy product or frozen dessert. A product is also considered misbranded if its label fails to include the name of the defined product, name and address of the producer, processor or distributor and carries an accurate statement of the quantity of contents in terms of weight or measure. N.C. Gen. Stat. § 106 268(c).
- 15A N.C.A.C. 18A .1205(a), (d).
- N.C. Gen. Stat. § 106-268(d); 15A NCAC 18A .1206.
- 15A N.C.A.C. 18A .1206(d).
- 15A N.C.A.C. 18A .1206(e).
- 15A N.C.A.C. 18A .1210(a).
- Milk Ordinance, Table 1. Chemical, Physical, Bacteriological, and Temperature Standards
- Articles 26, 28, 28B and 29 of Chapter 106 the North Carolina General Statutes.
- <http://www.ncagr.gov/fooddrug/food/milk/index.htm>
- N.C. Gen. Stat. § 106-260; 2 NCAC 9K.0202(m).
- N.C. Gen. Stat. § 106-253.
- "Starting a home-based food business," NC Department of Agriculture and Consumer Services, Food & Drug Protection Division, available at <http://www.ncagr.gov/fooddrug/food/homebiz.htm>
- N.C. Gen. Stat. § 106-246.
- <http://www.fda.gov/downloads/Food/FoodSafety/Product-SpecificInformation/MilkSafety/NationalConferenceonInterstateMilkShipments/NCIMSMModelDocuments/UCM209789.pdf>
- N.C. Gen. Stat. §150B-14(c); 15A NCAC 18A .1201.
- Grade "B" refers to processed milk products such as cheese and are regulated separately.
- 15A NCAC 18A.1204(a).
- 15A NCAC 18A.1204(c).
- 15A NCAC 18A.1204(b).
- 10A NCAC 46.0212.
- N.C. Gen.Stat. §130A-279; 15A NCAC 18A.1210(a).
- N.C. Gen. Stat. § 130A-279.
- Pursuant to state regulations, ice cream, frozen yogurt and frozen custard are classified as "frozen desserts." 2 NCAC 9K.0202(h).
- N.C. Gen. Stat. § 106-247.
- 2 N.C.A.C. 9K.0205.
- N.C. Gen. Stat. § 106-251; 2 N.C.A.C. 9K.0203(a).
- 2 N.C.A.C. 9K.0204.
- N.C. Gen. Stat. § 106-251.
- 2 N.C.A.C. 9K.0203(a), (b).
- 2 N.C.A.C. 9B.0016(o)(32) (adopting by reference 21 CFR Part 133).
- 7 C.F.R. Parts 55, 56, 59 and 70.
- 21 CFR § 455(a), (b).
- 21 CFR § 455(c).
- 21 CFR § 464(a)(3).
- 02 NCAC 43D .0103.
- In fact, the State's Meat and Poultry Inspection Service is directed to cooperate and coordinate with the USDA in the implementation of this law and the Federal Poultry Products Inspection Act. N.C. Gen. Stat. § 106 549.52.
- N.C. Gen. Stat. § 549.54.
- "Processed" means slaughtered, canned, salted, stuffed, rendered, boned, cut up, or otherwise manufactured or processed. N.C. Gen. Stat. § 106 549.51(28).
- N.C. Gen. Stat. § 106 549.53.
- N.C. Gen. Stat. § 106 549.56,
- A poultry product is considered misbranded if its labeling is false or misleading or fails to include the name and place of business of the manufacturer, packer, or distributor, and an accurate statement of the quantity of the product. The label must include a list of artificial flavoring, artificial coloring, or chemical preservative added to the product, as well as the common names of optional ingredients (other than spices, flavoring, and coloring). The label must also include the official inspection legend and establishment number of the establishment where the product was processed. N.C. Gen. Stat. §§ 106 549.51(17), 55(a).
- A poultry product is considered adulterated if it contains any poisonous or deleterious substance that may render the poultry product injurious to health (except a substance which is a pesticide chemical in or on a raw agricultural commodity; a food additive; or a color additive); if the poultry died from any reason other than slaughter; if it contains a substance that is filthy or putrid or unfit for human consumption; if its container is unsanitary; if damage or inferiority has been concealed in any manner; or if any substance has been added thereto or mixed or packed therewith so as to increase its bulk or weight, or reduce its quality or strength, or make it appear better or of greater value than it is. N.C. Gen. Stat. § 106 549.51(1) (the terms food additive and color additive are defined in the federal Food, Drug, and Cosmetic Act, sections 409 and 706, respectively).
- N.C. Gen. Stat. § 106 549.65.
- N.C. Gen. Stat. § 106-549.62(e).
- N.C. Gen. Stat. § 106-549.62(a)(6), (c).
- N.C. Gen. Stat. § 106-549.62(a)(6), (7).
- N.C. Gen. Stat. § 106-549.62(a)(4).
- N.C. Gen. Stat. § 106 549.62(a)(3), (7).
- 7 CFR 205.237.
- 7 U.S.C. § 6509(c).
- 7 CFR 205.239.
- 7 CFR 205.238, 205.271.
- 9 CFR Parts 317 and 381 Nutrition Labeling of Single-Ingredient Products and Ground or Chopped Meat and Poultry Products; Final Rule, <http://www.fsis.usda.gov/OPPDE/RDAD/FRPubs/2005-0018F.pdf>
- The term "egg" means the shell egg of the domesticated chicken, turkey, duck, goose or guinea. 21 U.S.C. § 1033(g).
- 21 U.S.C. §§ 1031 et seq. 21 U.S.C. § 1043.
- See 9 CFR Part 590.
- 21 U.S.C. § 1034(e)(1); 9 CFR § 590.50.
- An inspection is not required of an egg handler with fewer than 3000 birds in his flock. 21 U.S.C. § 1034(e)(4); 21 U.S.C. § 1044(7); 9 CFR § 590.50(c). In addition, growers who sell eggs directly to consumers, whether on the grower's own farm or at another venue such as a farmers' market, for their own personal use may be exempt from the Inspection Act. 21 U.S.C. § 1044(3), (4), (5).
- 21 U.S.C. § 1034(e)(2).
- 9 CFR § 590.200(a).
- 21 U.S.C. § 1034; § 590.504(b).
- 21 U.S.C. § 1035.
- 9 CFR § 590.500.
- 9 CFR § 590.136.
- The Secretary of the USDA may license as an inspector any person who is a Federal or State employee, or the employee of a local jurisdiction, possessing proper qualifications as determined by an examination for competency. 9 CFR § 590.110(a). No one with a financial interest in the product may be licensed as an inspector. 9 CFR §§ 590.110(c), 590.120.
- 9 CFR §§ 590.515; 590.516; 590.550; 590.552.
- 9 CFR § 590.240.
- 9 CFR 590.300.
- Instructions for appealing the inspector's decision are detailed in the regulations, 9 CFR §§ 590.310-370.
- 9 CFR § 590.411.

144 9 CFR § 590.410(a).  
145 9 CFR 590.411(c).  
146 See 9 CFR 590.412(a).  
147 21 CFR, Parts 16 and 118  
148 7 CFR § 205.236(a)(1).  
149 7 CFR 205.237.  
150 7 CFR 205.239.  
151 7 CFR 205.238, 205.271.  
152 N.C. Gen. Stat. § 106-245.13 et seq.  
153 See 2 N.C.A.C. 43D.0003 (adopting by reference 7 C.F.R. Parts  
55, 56, 59 and 70, relating to eggs and poultry products), and 2  
N.C.A.C. 43H.0103, .0104.  
154 USDA Egg Grading Manual, [http://www.ces.ncsu.edu/depts/  
poulsctech\\_manuals/egg\\_grading.pdf](http://www.ces.ncsu.edu/depts/poulsctech_manuals/egg_grading.pdf)  
155 2 N.C.A.C. 43H.0104(b).  
156 Egg containers may be reused, but must be re-labeled with all  
required information, and the original label must be obscured.  
N.C. Gen. Stat. § 106-245.18.  
157 "Eggs" means product of a domesticated chicken in the shell  
or as further processed egg products. N.C. Gen. Stat. § 106  
245.14(7).  
158 N.C. Gen. Stat. § 106-245.16.  
159 See 02 NCAC 43H .0103(a), (b); 02 NCAC 43H .0104(a).  
160 02 NCAC 43H .0104(b).  
161 N.C. Gen. Stat. § 106-245.22.  
162 "Loss Eggs" means eggs that are inedible, cooked, frozen,  
contaminated or containing bloody whites, blood spots, meat  
spots, or other foreign material. 02 NCAC 43H .0101(3).  
163 02 NCAC 43H .0105.  
164 N.C. Gen. Stat. § 106-245.23.  
165 N.C. Gen. Stat. § 106-245.17.  
166 N.C. Gen. Stat. § 106-245.15.  
167 A producer marketing his own eggs on his own farm is exempt  
from this requirement. Producers whose sales do not exceed 30  
dozen per week are also exempt from this requirement. N.C. Gen.  
Stat. § 106-245.15.  
168 N.C. Gen. Stat. § 106-245.18.  
169 N.C. Gen. Stat. § 106-245.18.  
170 02 N.C.A.C. 43H.0107(b).  
171 02 N.C.A.C. 43H.0101(8).  
172 02 N.C.A.C. 43H .0107(c).  
173 02 N.C.A.C. 43H.0107(d).  
174 21 U.S.C. 301 et seq.  
175 21 CFR § 123.5.  
176 The FDA has also published a document titled "Fish and Fishery  
Products Hazards and Controls Guidance" to help processors  
with the development of their HACCPs. The guide was most  
recently updated in April of 2011, and is available at [http://www.  
fda.gov/FoodGuidances](http://www.fda.gov/FoodGuidances).  
177 Processors of smoked fish and fish products must include in their  
HACCP plans additional provisions to ensure control of hazards  
associated with *Clostridium botulinum*. 21 C.F.R. § 123.16.  
178 21 CFR § 123.5(b).  
179 21 CFR §§ 123.5(b); 123.7.  
180 21 C.F.R. § 123.9.  
181 21 CFR § 123.5(g).  
182 21 C.F.R. § 123.11.  
183 21 C.F.R. § 123.3(h).  
184 Available at: [http://www.fda.gov/Food/FoodSafety/  
Product-SpecificInformation/Seafood/FederalStatePrograms/  
NationalShellfishSanitationProgram/ucm046353.htm](http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/Seafood/FederalStatePrograms/NationalShellfishSanitationProgram/ucm046353.htm)  
185 [http://www.fda.gov/Food/FoodSafety/Product-  
SpecificInformation/Seafood/FederalStatePrograms/  
InterstateShellfishShippersList/default.htm](http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/Seafood/FederalStatePrograms/InterstateShellfishShippersList/default.htm)  
186 As of this writing, the Shellfish Sanitation is being moved from  
the NC Division of Environmental Health to the NC Division of  
Marine Fisheries.  
187 21 C.F.R. § 123.28.  
188 N.C. Gen. Stat. § 113-182(a),(b).  
189 N.C. Gen. Stat. § 113-168.2(a).  
190 A Recreational Commercial Gear License (RCGL) is required to  
take fish for personal use. A RCGL holder must comply with  
recreational possession limits. N.C.Gen. Stat. § 113-173(a), (b).  
A RCGL is not required to take crabs for personal use using crab  
pots attached to the shore along privately owned land.  
191 15A N.C.A.C. 3M.0120.  
192 Requirements for obtaining a fish dealer's license are found at  
N.C.Gen. Stat. § 113-169.3.  
193 The only exception to the licensing requirement is for the  
organizer of a recreational tournament, who may obtain a  
tournament license to sell fish. Unless that licensee also holds  
a fish dealer's license, the licensee may sell the fish only to a  
licensed fish dealer. The gross proceeds of the sale of the fish  
must be used for charitable or other public purposes, and may  
not be used to offset expenses associated with the tournament.  
N.C. Gen. Stat. § 113-168.4(c); 15A N.C.A.C.30.0102.  
194 N.C. Gen. Stat. §§ 113-168.4(a), (b)(1)-(3); 113-169.3(c);  
113-174.1(b).  
195 This requirement applies to those who obtain fish from maricul-  
ture operations as well. N.C. Gen. Stat. § 113-168.4(a).  
196 For some species of fish, such as striped bass, a special dealer's  
permit is required. See, e.g., 15A N.C.A.C. 30.0503(b)(2), (3),  
(4), (5).  
197 N.C. Gen. Stat. § 113-168.2(i); see also N.C. Gen. Stat. § 113-  
169.3(i); 15A N.C.A.C. 31.0114.  
198 N.C. Gen. Stat. § 113-191.  
199 N.C. Gen. Stat. § 106-761(f); 2 N.C.A.C. 53.0101(e)(3).  
200 N.C. Gen. Stat. § 106-761(f).  
201 As noted above, North Carolina is part of the National Shellfish  
Sanitation Program. In order for North Carolina to ship shellfish  
interstate, satisfactory compliance criteria contained in the  
NSSP Guide for the Control of Molluscan Shellfish Model  
Ordinance must be met. [http://portal.ncdenr.org/web/mf/  
about-the-section](http://portal.ncdenr.org/web/mf/about-the-section)  
202 Requirements for the license are set forth at N.C. Gen. Stat §  
113-169.2.  
203 15A N.C.A.C. 18A.0302.  
204 See 15A N.C.A.C. 18A.0904.  
205 15A N.C.A.C. 18A.0434.  
206 15A N.C.A.C. 18A.0422.  
207 15A N.C.A.C. 18A.0421.  
208 15A N.C.A.C. 18A.0402. Additional requirements for materials  
used in the construction of the plant and equipment and  
conditions for the operation of the plant are detailed in  
the regulations, found at 15A N.C.A.C. 18A.0404-.0418 and  
18A.0601-0621.  
209 15A N.C.A.C. 18A.0424.  
210 15A N.C.A.C. 18A.0425(a)(1)-(7).  
211 15A N.C.A.C. 18A.0425(a)(8).  
212 15A N.C.A.C. 18A.0425(b).  
213 15A N.C.A.C. 18A.0429.  
214 <http://www.ncagr.gov/stats/release/Aquaculture.pdf>  
215 N.C. Gen. Stat. § 106-761; 2 N.C.A.C. 53.0101.  
216 21 CFR § 19(a); 21 U.S.C. § 321(r).  
217 This exemption does not apply if the products are cut and pack-  
aged, frozen, dehydrated, milled, cooked or canned prior to sale.  
21 U.S.C. 321(gg); 21 CFR 110.3.  
218 The FDA has developed a Guide to Minimize Microbial Food  
Safety Hazards of Fresh-cut Fruits and Vegetables. See [http://  
www.fda.gov/food/guidancecomplianceregulatoryinformation/  
guidancedocuments/produceandplanproducts/ucm064458.  
htm](http://www.fda.gov/food/guidancecomplianceregulatoryinformation/guidancedocuments/produceandplanproducts/ucm064458.htm).  
219 See generally 21 CFR Part 51.  
220 12 U.S.C. § 1141 et seq.  
221 An up-to-date list of inspection offices may be obtained from  
the Fresh Products Standardization and Inspection Branch, Fruit  
and Vegetable Division, Agricultural Marketing Service, U.S.  
Department of Agriculture, Washington, D.C. 20250.  
7 CFR § 51.4.  
222 7 CFR § 51.6.  
223 7 CFR § 51.7.  
224 21 CFR §§ 51.19, 51.23.  
225 21 CFR § 51.24.  
226 02 NCAC 43D.0102.  
227 (§ 106-189.2, 02 NCAC 43F .0103).  
228 (02 NCAC 43F .0103).  
229 (02 NCAC 43F .0110).  
230 See 2 N.C.A.C. 43C.0100 et seq.  
231 Copies also are available from the Agricultural Marketing  
Service's Fruit and Vegetable Division.  
232 [http://www.honeytraveler.com/types-of-honey/  
honey-standards/](http://www.honeytraveler.com/types-of-honey/honey-standards/)  
233 N.C. Gen. Stat. § 106-638.  
234 02 N.C.A.C. 48a.0246(4).  
235 N.C. Gen. Stat. § 106-639.1  
236 02 NCAC 48a .0263.  
237 N.C. Gen. Stat. § 106-639.1.  
238 N.C. Gen. Stat. § 106-643.  
239 02 N.C.A.C. 48a.0260.  
240 02 N.C.A.C. 48a.0243.  
241 02 N.C.A.C. 48a.0244.  
242 02 N.C.A.C. 48a.0245.  
243 N.C. Gen. Stat. § 106-644.  
244 02 N.C.A.C. 48a.0262.

245 The regulations define serving for a variety of different foods, 21  
CFR 101.9(b), and provide examples of approved label formats.  
See, e.g., [http://ecfr.gpoaccess.gov/graphics/pdfs/er11jy03.003.  
pdf](http://ecfr.gpoaccess.gov/graphics/pdfs/er11jy03.003.pdf). The Food Science lab at NCSU may be able to provide  
assistance in determining the nutritional content of agricultural  
products and prepared foods. [http://ncsu.edu/foodscience/  
extension\\_program/food\\_product\\_testing.html](http://ncsu.edu/foodscience/extension_program/food_product_testing.html)  
246 21 CFR 101.9(a), (b).  
247 21 CFR 101.9(j).  
248 See 21 CFR Part 110.  
249 [http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/  
CFRSearch.cfm?CFRPart=110](http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=110)  
250 See generally, North Carolina Food, Drug and Cosmetic Act, N.C.  
Gen. Stat. § 106-120.  
251 For the index of relevant subparts, go to [http://www.access.gpo.  
gov/nara/cfr/waisidx\\_03/21cfrv2\\_03.html](http://www.access.gpo.gov/nara/cfr/waisidx_03/21cfrv2_03.html).  
252 See 21 CFR Part 150. See 21 CFR Part 151 for standards of identify  
for fruit pies.  
253 21 C.F.R. 114.80(a)(1).  
254 21 C.F.R. 114.80(a)(3).  
255 21 C.F.R. 114.90.  
256 21 C.F.R. 114.80(b).  
257 21 C.F.R. 114.100.  
258 N.C. Session Law 2005-236.  
259 N.C. Gen. Stat. § 153A-452 (2006)  
260 N.C. GEN. STAT. § 160A-381(2006)