Track changes with QUESTIONS for oral exam: Thursday, Nov. 16, 2017 at 1-3 p.m.

# **Understanding Food Labels**

# Non-Thesis Master's Project

Presented in Partial Fulfillment of the Requirements for the Degree Master of Science in the Graduate School of The Ohio State University

Ву

Carol S. Hamilton

Graduate Program in Agricultural and Extension Education

The Ohio State University

2017

Master's Examination Committee:

# Dr. Brian Raison, Advisor and Dr. Graham Cochran, Committee Member

Table of Contents         Section 1: Introduction	1
Background	1
Purpose	4
Objectives	
Section 2: Literature Review	5
Overview of Food Labels	5
Government Labels	7
Third-Party Labels	11
Producer Labels	13
Consumer Perception	14
Case for Consumer Education	17
Section 3: Project Plan/ Procedures	19
Objective 1: Catalog standards and key aspects of commonly used food labels	19
Objective 2: Inventory food labeling educational tools and resources currently available	
Objective 3: Develop an interactive food label educational website for consumers, supporting facing guide, and evaluation tool for educators.	
Website development.	21
Facilitator guide	22
Evaluation tool	22
Peer review process to refine materials	22
Section 4: Project Content and Discussion	23
Results	23
Objective 1: Catalog standards and key aspects of commonly used food labels.	24
Objective 2: Inventory food labeling educational tools and resources currently available	26
Objective 3: Develop an interactive food label educational website for consumers, supporting facilitator guide, and evaluation tool for educators	
Recommendations and Conclusion	30
References	33
Appendix Error! Bookmark not de	fined.
Appendix A: Catalog of Food Labels Error! Bookmark not de	fined.
Appendix B: Inventory Food Labeling Educational Tools and Resources	118

# Understanding Food Labels

Appendix C: Website Content	122
Appendix D: Facilitator Guide	123
Appendix E: Evaluation Tool	124

# Section 1: Introduction

that reflect their personal and social values (Litchtenstein, Nathan, Wartella, & Yaktine, 2012).

Being able to decipher the information presented on food labels is an important part of making purchasing decisions. All commercially processed food items have a label containing the product name, weight, manufacturer's address, nutrition facts, and list of ingredients. However, many labels contain additional statements that are not always regulated. It can be difficult to discern what labels mean and how they are regulated. This project aims to provide a resource for consumers to improve their understanding of food labels. Food labels commonly used by government of certifying third-party agencies will be cataloged identifying the standards for their use. Common label claims generated by producers will also be cataloged with their legal definition. Additional teaching tools and resources will be inventoried to provide educators with additional food label curriculum for consumers. Lastly, an interactive website will allow consumers to explore various food labels and their standards as well as view short informational videos about food industry standards regarding labeling.

# Background

Over 150 years ago President Lincoln launched the Bureau of Chemistry under the Department of Agriculture. It functioned to enforce provisions of the Food and Drugs Act and the Tea Act, studying chemical problems related to agriculture and agricultural products including food (United States Bureau of Chemistry, 1922). The Food and Drugs Act focused mainly on stopping manufacturers from producing and selling adulterated or misbranded foods. Frequently, labels would be worded correctly under the law but have deceptive pictures that led to erroneous perceptions by the consumer (United States Bureau of Chemistry, 1922). Although

there have been many new laws and regulations created regarding food labels, manufacturer compliance, and consumer comprehension of these regulations remains a problem.

Consumers, food manufacturers, third-party entities, and the government all play an integral role in determining the contents of food labels (Golan, Kuchler, & Mitchell, 2000).

Consumers are the driving force for market labels; consumers use their purchasing power to influence not only what is on the market but also how products are marketed. Manufacturers are knowledgeable about what labels resonate with consumers and can result in premium prices.

(Golan, Kuchler, & Mitchell, 2000). Third-party entities serve as regulators for specific food attributes. When producers meet the third-party standards and undergo the certification process, they can use specific food labels like organic or non-genetically modified organisms (non-GMO). The government also influences food labels to encourage consumer safety and health, increase consumer access to information, and promote fair competition between producers (Caputo, Nayga, Meullenet, Ricke, & Van Loo, 2001; Golan, Kuchler, & Mitchell, 2000).

Although consumers are a driving force for market labels, their influence does not always translate into understanding of the food label terminology. In a National Research Center Consumer Report, nearly two-thirds of consumers indicated they thought the label "No Nitrates" meant no nitrates at all whether natural or artificial; when in fact it is only referring to artificial or synthetic nitrates (National Research Center, 2016). The same report also showed over 80% of survey participants thought that food labeled "humanely raised" came from farms that were inspected to verify this claim, where in fact there is no official definition of humanely raised and the claim is not verified by any organization, United States Department of Agriculture included

(National Research Center, 2016). Numerous other studies have been conducted to gain insight on consumer comprehension of food labels and their content (Abrams & Irani, 2010; Caputo, Nayga, Meullenet, Ricke, & Van Loo, 2001; Heimbach & Stokes, 1982; Janssen & Hamm, 2012).

Numerous studies have been conducted around the issue of organic foods. Some have shown that in most cases consumers purchase organic food because they believe it to be more sustainable, socially responsible, and supportive of small farms (Lessing, 2011). However, the organic label is in fact relaying information regarding pesticide use, livestock feed, pasturing, and restrictions on certain processes like genetic engineering (Lessing, 2011). The term "organic" as defined by the United States Department of Agriculture (USDA) may not be perceived by consumers the same way it is defined. There have been several studies conducted in the United States showing consumers are willing to pay a premium of 10-25% more for organic foods because they are believed to be of higher quality (Caputo, Nayga, Meullenet, Ricke, & Van Loo, 2001). However, consumers are frequently unable to discern the difference between organic and conventional food products without a label present (Caputo, Nayga, Meullenet, Ricke, & Van Loo, 2001).

As previously identified, there are a number of studies indicating that many consumers are misunderstanding food labels' intended meaning. This confusion calls for supplemental education to help consumers understand the label claims (Shepard, 2014). Studies have also shown that consumers are unsure of whom to trust. These studies revealed more trust in third-party organic certifiers than producers and processors. They also showed skepticism about the

integrity of organic products preventing them from buying more organic food (Janssen & Hamm, 2012). Consumer perceptions and attitudes regrading organic food labeling can be altered through awareness of organic standards and certification logos (Janssen & Hamm, 2012).

If consumers are unable to understand the information a food label presents, it is not serving its intended purpose. Through education, consumers can be taught to understand the information presented on food labels and use food labels to make more informed purchasing decisions (Heimbach & Stokes, 1982). This project provides consumers the opportunity to be better informed about the food they are purchasing. Although there are other resources available, most focus on only one aspect of a food label.

Consumers are tasked with navigating numerous websites and resources to find basic food label information. Many of these sources focus on only one category or part of the food label, leaving consumers unaware of other label information. Current consumer education efforts are mainly focused on the nutrition label but often neglect addressing other aspects of the label. There appears to be no single source that can provide consumers an overview of all the categories of food labels and provide non-biased standards dictating the use of specific labels. An all-inclusive resource for consumers and educators is needed to help improve consumers' overall understanding of food labels.

# **Purpose**

The purpose of this project is to develop a web-based resource that can be used by educators, students, and consumers to increase their understanding of food labels. A facilitator

guide that can be used by educators in a classroom setting to help navigate the website will also accompany the website.

# **Objectives**

- 1. Catalog standards and key aspects of commonly used food labels.
- 2. Inventory food labeling educational tools and resources currently available.
- 3. Develop an interactive food label educational website for consumers, supporting facilitator guide, and evaluation tool for educators.

#### **Section 2: Literature Review**

Food packages include a variety of product information including branding, images, claims, and promotions (Litchtenstein, Nathan, Wartella, & Yaktine, 2012). Although all food packages must adhere to regulatory standards, manufacturers still have a choice of claims they choose to convey to the consumer (Litchtenstein, Nathan, Wartella, & Yaktine, 2012). This literature review will describe mandatory food label regulations, differentiate government, third party, and producer issued labels, explicate consumer perceptions, and provide support for consumer education needs.

#### **Overview of Food Labels**

Food labels are a cost-effective way of communicating information about a product to consumers (Soederberg-Miller & Cassady, 2015). The United States Food and Drug Administration (FDA) mandates that all food labels have five components (The National Food Lab, 2013). The package must have a Principal Display Panel (PDP) and an Information Panel

(IP). The PDP should be the first item a consumer sees when examining a product and must include the product identity that accurately describes the product, and a net contents statement that provides the quantity of the product. Nutrition facts, ingredient/allergen statement, and a signature line are contained on the IP which is located to the right of the PDP. The Federal Code 21 details acceptable scenarios for nutrition facts (Food Consulting Company, 2017). The ingredients are listed in descending order by weight. If the product contains: milk, eggs, fish, crustacean shellfish, tree nuts, peanuts, wheat, or soybeans, an additional allergen statement must be included. The last required component of the food-packaging label is a signature line, which includes the name and address of the responsible party (Food Consulting Company, 2017). However, most packages contain additional information including product seals, certifications, and information about how and where the product was made. The FDA and U. S. Department of Agriculture (USDA) regulate some claims in order to protect consumer interest by prohibiting false and misleading food labels (Negowetti, 2013). Many terms used by manufacturers to elicit consumer favor are not regulated. This review examines various types of labels, how consumers perceive their meaning, and whether consumer education on understanding food labels is needed.

There are three possible origins for food label claims: government certified, third-party certified, and producer claim. Labels, seals, or certifications issued by the federal government have been inspected or guaranteed by trained inspectors or auditors. Third-party certifications can originate from consumer demands and hold manufacturers to specific growing, environmental, processing, and handling standards in order to label their product with a branded claim. The Certified Angus Beef brand is one example of a third-party issued label. The last type

of claim seen on packaging is that of the producer. Although by law these claims must not be false or misleading, they are defined by the producer and are not held to a standard definition.

# **Government Labels**

There are three main reasons the government is involved with food labels: to ensure fair competition among producers, to provide consumers with basic product information, and to reduce health and safety risks of consumers (Golan, Kuchler, & Mitchell, 2000). Two Federal government agencies, the FDA and USDA, help ensure that food products are safe, wholesome, sanitary, and properly labeled (Food and Drug Administration, 2017). The FDA and USDA are responsible for enforcing different components of: The Federal Meat Inspection Act (FMIA); The Poultry Products Inspection Act (PPIA); The Egg Products Inspection Act (EPIA); The Agricultural Marketing Act (AMA); The Federal Food, Drug and Cosmetic Act (FFDCA); and the Fair Packaging and Labeling Act (FPLA) (Food Safety and Inspection Service, 2007). The USDA runs the Food Safety and Inspection Service (FSIS), which ensures that meat, poultry, and eggs are properly processed, labeled, and distributed.

There are specific labels issued by the USDA for meat and meat products inspected and passed by FSIS inspectors. The labeling type, styles, and sizes are pre-defined by the Federal and Federal-State standards. These standards have been deemed necessary in order to protect consumers (Title 21-Food and Drugs, 2014). Standards require, food to be labeled in a manner that is not false or misleading and properly identified with food consistency standards found under the Federal Food, Drug and Cosmetic Act [ 21 U.S.C. 301 et Seq.]. Any person, firm or corporation that does not properly mark their food is subject to a hearing (Title 21-Food and

Drugs, 2014). The USDA issues grade shields, official seals, and labels to inform consumers of product quality and integrity. These labels help ensure products are evaluated using the same official grade standards. The labeling process helps the buyer to feel confident in the product they are purchasing (USDA, 2017).

The USDA seals, certifications, and labels were created by the USDA's Agricultural Marketing Service (AMS) to guarantee the quality of American food products and add value to those products (USDA, 2017). The USDA uses these labels for dairy products, fruits, vegetables, and specialty crops, organic agricultural products, poultry, eggs, beef, other livestock, and laboratory test approved products (USDA, 2017). Each USDA graded product has a set of standards that highly skilled graders and auditors follow in order to accurately assess the product quality. For a dairy product, attributes such as flavor, body, or texture are measured to describe the value of butter and cheese (USDA, 2017). Other dairy products have different standards that reflect the product composition and utility; there is even a quality-approved label for non-standardized dairy products (USDA, 2017).

Not all quality graded labels are geared toward consumers; some labels are to inform packers or processors about the quality of an item they purchased. For instance, grade and quality labels for fruits, vegetables, and specialty crops are only seen by industry packers and processors. These labels will not be present on fruits and vegetables purchased at the grocery store. Instead, they inform purchasers that a processing plant was under inspection by the USDA. The plants operating under USDA inspection will be given a grade mark to indicate the quality of the product. Other labels may indicate: product sampling, inspected lots, qualified through

verification program shield, or other quality programs (USDA, 2017). All of these labels are used to ensure product quality through the use of proper processing and handling (USDA, 2017).

Just as dairy products are assigned grades, poultry, and eggs are also graded against quality standards. However, poultry, and egg grading is a voluntary service paid for by producers (USDA, 2017). The products are graded based on the absence of defects and freshness in eggs. These grades can be seen on poultry packaging and egg cartons at the grocery store (USDA, 2017). Grade A poultry is the most common grade in supermarkets meaning it is the highest quality with the fewest number of defects like presence of feathers, bruising, or discoloration (USDA, 2017). Lower quality poultry can be downgraded to B or C grades. Eggs are graded based on freshness, quality, and sanitary processing. The highest to lowest quality eggs are graded AA, A, and B respectively. Grade B eggs are often used for liquid egg products and baked goods (USDA, 2017).

Beef cuts are also graded on quality to help make business transactions easier for the producer and consumer by using a standard of quality (USDA, 2017). The grades most consumers see are prime, choice, and select but there are also standard and commercial grades that are used to make processed and ground beef products (USDA, 2017). Other USDA certifications that might be seen on beef cuts are the Certified Tender or Very Tender shields that inform consumers that a slice shear force test was used to ensure meat tenderness (USDA, 2017). Companies also have the option of enrolling in a Processed Verified Program (PVP) that allows them to develop their own quality claims (USDA, 2017).

One of the newest labels used by the USDA is the Organic Seal. There are three categories that organic food products can be placed into: 100 Percent Organic, Organic, and "Made With" Organic. Each of these categories have their own requirements with which farms and businesses must comply in order to label and market their products as organic (USDA, 2017). According to the USDA:

Organic food is produced without using most conventional pesticides; fertilizers made with synthetic ingredients or sewage sludge; bioengineering; or ionizing radiation. Before a product can be labeled 'organic,' a Government-approved certifier inspects the farm where the food is grown to ensure the farmer is following all the rules necessary to meet USDA organic standards. (Gold, 2007)

The Radura symbol is used to inform purchasers that the meat or poultry product they are buying has been irradiated in its entirety. The product may also contain a statement such as "Treated with radiation" or "Treated by irradiation" (United States Department of Agriculture, 2005). Products that contain irradiated ingredients are not required to bear the Radura logo but must be identified in the products ingredient statement (United States Department of Agriculture, 2005). Manufacturers are allowed to include a statement on the label explaining the purpose of radiation as long as the statement is not false or misleading (United States Department of Agriculture, 2005).

Country of Origin Labeling (COOL) is a USDA requirement that certain food items must be labeled with information regarding the source for muscle cut and ground meats: lamb, goat, venison, and chicken; wild and farm-raised fish and shellfish; fresh and frozen fruits and

vegetables; peanuts, pecans, and macadamia nuts; and ginseng (Agricultural Marketing Service, 2017). The COOL requirement is different from the previously mentioned government-regulated labels because there is not a standard label. The retailers are simply required to identify the country of origin, which could mean a package label, stamp, handwritten indication or simply a visible sign on the product display. The supplies should also be able to provide information on how the product was produced; for example wild or farm-raised (Agricultural Marketing Service, 2017). Any person involved with the preparation, storage, handling, or distribution of regulated imported items is subject to USDA audits (Agricultural Marketing Service, 2017).

# **Third-Party Labels**

In addition to government-regulated claims, third-party organizations have taken it upon themselves to develop their own identifiable labels. Third-party labels can contribute to enhancing the intelligibility and credibility of certain food attributes through the use of standards, verification, certification, and enforcement (Golan, Kuchler, & Mitchell, Economics of Food Labeling, 2000). Some of the more common third-party labels you have probably seen include American Grassfed®, Non-GMO Project Verified, Fair Trade Certified, Certified Angus Beef®, Ohio Proud, and Rainforest Alliance. Each of these organizations has their own set of standards that producers must follow in order to use their trademark design. For example, the American Grassfed Association (AGA) is made up of producers, food service industry personnel, and consumers that are interested in promoting the grassfed ruminant livestock industry (American Grassfed Association, 2017). AGA developed their own set of standards that defines grassfed and requires that any participating producers be audited annually (American Grassfed

Association, 2017). Most third-party organizations make their product standards available to consumers through the organizations' website.

Unlike government-regulated labels that are intended to protect consumers from false and misleading information, third-party organizations have their own motives. Each organization's motives are different; some include animal welfare, environmental, local economic impact, religious, cultural, and marketing interests. These labels provide consumers with additional information about the product that can be used (or not) at the consumer's discretion. Third-party labels may not be government issued; however, they do still need to comply with food labeling laws. This means that the label itself is subject to evaluation by the Labeling and Program Delivery Staff (LPDS), a subunit of Food Safety Inspection Service (FSIS). LPDS evaluate labels for religious exempt products, labels for export with deviations from domestic requirements, labels with special statements, and claims and labels for temporary approval.

Any label that does not fall into one of the previously listed categories may be generically approved without LPDS evaluation (FSIS, 2015). Special statements of claims are claims, logos, trademarks, and other symbols on packaging that are not defined in the federal meat and poultry inspection regulations or the Food Standards and Labeling Policy Book (FSIS, 2015). Health claims, ingredient and processing method claims, structure-function claims, claims regarding the raising of livestock, poultry or fish, organic claims, and instructional or disclaimer statements concerning pathogens are considered special claims (FSIS, 2015). The term "natural" and any negative claims such as "gluten-free" are exceptions to special claim regulation (FSIS, 2015). All labels bearing a special statement or claim must be submitted with a sketch approval request and

supporting documentation backing the claim (FSIS, 2015). The supporting documentation must be kept up-to-date and remain on file with the labeling record. (FSIS, 2015).

For example, all labels that wish to display the Ohio Proud Logo, which states the product was made and/or grown in Ohio, is subject to LPDS evaluation. Any products using the Ohio Proud label must have proof that their product met the third-party, in this case Ohio Proud standards. Producers are required to keep records of all labels and approved sketches as well as product formulations, processing procedure, and any additional documentation to support their label's claims (FSIS, 2015).

#### **Producer Labels**

Claims can also be made by the food manufacturer or producer. These claims do not have to go through a government or third-party auditing system. Instead, the producer must simply ensure that the claims are not false or misleading. Some statements require the food product to meet certain standards to be used while others are unregulated. For example, the term free-range is defined by the USDA as "produced by hens housed in a building, room, or area that allows for unlimited access to food, water, and continuous access to the outdoors during their laying cycle. The outdoor area may be fenced and/or covered with netting-like material" (United States Department of Agriculture, 2015). This means that if the producer chooses to use free-range on their poultry or egg product they must be able to supply evidence that the USDA standards for this term were met. Terms that are unregulated include, natural, 100%, pure, all, made with real fruit, made with whole grains, lightly-sweetened, a good source of fiber, and strengthens your immune system (Silverglade & Heller, 2010). Unregulated means producers can use these terms

to help in their marketing strategy with little or no evidence to support them. For example, a producer of strawberry ice cream could use the claim "made with real fruit" even if the ice cream was made using artificial strawberry flavoring and a few pieces of real strawberries. These claims may be considered misleading but are not breaking government regulations regarding food labels (Silverglade & Heller, 2010).

Producers use labels as a method of attracting consumers to their particular product's attributes. Marketing research helps firms decide which attributes are most important to consumers and help drive sales (Golan, Kuchler, & Mitchell, Economics of Food Labeling, 2000). As previously mentioned, some labels focus on quality and how and where a product was produced. When producers make their own claim for a product, they are subject to consumer skepticism and competing brand's claims. One way to establish a product above a competing product is to utilize a third-party labeling service that has credibility and a good reputation (Golan, Kuchler, & Mitchell, Economics of Food Labeling, 2000). The third-party labeling effectiveness is dependent on consumer responsiveness to this particular standard (Golan, Kuchler, & Mitchell, Economics of Food Labeling, 2000). The standard must align with consumer demands, be easily verifiable, and not raise the product cost above consumers' willingness to pay (Golan, Kuchler, & Mitchell, Economics of Food Labeling, 2000).

#### **Consumer Perception**

Food labels serve as information guides to consumers. "Accurate, easy-to-read and scientifically valid nutrition and health information on food labels is an essential component of a comprehensive public health strategy to help consumers improve their diets and reduce their risk

of diet-related diseases" (Silverglade & Heller, 2010). Not only do food labels provide health information, but they provide insight on how the product was raised, processed, handled, and distributed. It is important to recognize the complexity of labeling decisions because the consumer population has diverse values and beliefs (Golan, Kuchler, & Mitchell, 2000).

Although food labels are intended to provide consumers with additional information, a number of studies indicate that consumers are lacking an accurate understanding of their meaning. In a global study involving 11 countries including the United States, 96% of respondents were very interested in food and nutrition (Enough, 2016). Consumer comprehension of food labels and farming practices do not always align with purchasing habits. Out of the respondents, 80% look at labels and food claims before purchasing (Enough, 2016). The survey looked at consumer views of organic, hormone free, antibiotic free, local production, modern agriculture production, and health label claims (Enough, 2016). Of the respondents that indicated they purchased organic food, 82% stated their motivation was because they thought the products were free of chemicals and pesticides, 75% believe they are safer, 68% believe they are better for the environment, and 67% believe they are more nutritious (Enough, 2016). Pesticides and chemicals are permitted in organic farming as long as they were derived from a natural source or are an approved synthetic substance, such as calcium hypochlorite (Synthetic substances allowed for use in organic crop production, 2000). Stanford University completed a comprehensive review of 223 nutrient and contaminant level studies and 17 studies in humans that determined there was not significant evidence indicating the superiority of organic foods in nutritional value or health and safety (Smith-Spangler, et al., 2012). A comprehensive study out

of the University of Colorado identified organic farming as having both benefits and detriments to the environment (Baker, 2015). Organic farming typically produces lower yields than conventional farming and therefore uses more land to produce equivalent quantities (Baker, 2015).

Consumers perceive the term "all-natural" as encompassing organic production practices; they typically have a more idealized view of organic farming than what is reality (Baker, 2015). Some of the common perceptions of products labeled "all-natural" are that there are no preservatives, no additives, no antibiotics, no hormones, no extra liquids in meat products, no phosphates, and no chemicals (Abrams & Irani, 2010). They also associated the term with small family farms with livestock raised outside. Although, producers are supposed to qualify an "all-natural" claim, it is not strictly defined by the USDA like the term Organic (Abrams & Irani, 2010). Some pork producers have been using "all-natural" and qualifying it with a "no hormone" statement. This creates a perceived risk with other pork products not labeled "all-natural" and "no hormones"; while growth hormones are prohibited in all pork and poultry products in the United States (Abrams & Irani, 2010). These labels are used purely as a marketing tactic with producers benefiting from the lack of consumer understanding (Abrams & Irani, 2010). This can hurt conventional food markets if the term all-natural continues to be perceived as the safer food choice (Abrams & Irani, 2010).

According to Consumer Reports® survey research report, consumers have higher expectations for food products with a "humanely raised" claim (National Research Center, 2016). Of the consumers surveyed, 82% thought that a humanely raised claim on eggs, dairy, and

meat means that the farm was inspected for verification (National Research Center, 2016). Sixty-eight percent thought that animals had access to outdoors and 57% thought the animals were raised without cages. Currently, welfare claims including "Raised with Care," "Humanely Raised," "Sustainably Farmed," and "Raised with Environmental Stewardship" are not formally defined in regulations or government policy (National Research Center, 2016). Producers are responsible for establishing their own definition of the claim and making it available to consumers. The claim must be defined by the producer on the same panel that bears the claim; either along with the claim or linked by an asterisk to a statement somewhere else. Without one standard for humanely raised claims, it is up to consumers to self-educate on the producer's standards.

Even with clear, concise food labels, consumers cannot address the problem of imperfect information (Golan, Kuchler, & Mitchell, Economics of Food Labeling, 2000). Consumers have to make purchasing decisions based on their individual private costs and benefits, exclusive of externalities and social objectives (Golan, Kuchler, & Mitchell, Economics of Food Labeling, 2000). If consumers are unaware of labels, purpose, and meaning, it will be difficult for a label to affect purchasing behavior (Golan, Kuchler, & Mitchell, Economics of Food Labeling, 2000). Consumers will continue to be confused about what food labels represent without clear explanations of government regulations and food labeling standards.

#### **Case for Consumer Education**

Consumer education in its broadest sense defined by Lauridsen: "to use what you have in order to get what you want" (Benn, 2002). Consumers must rely on their knowledge of the food

industry and the information a producer provides to make an informed decision on what to purchase. Food labels are a method of providing information to consumers about a particular product. From a producer's standpoint, the label is their attempt to maximize profits by differentiating their product from competing products (Golan, Kuchler, & Mitchell, Economics of Food Labeling, 2000). Consumers need to be aware of what label information is verifiable and what information is just part of the producer's marketing plan. Individual purchasing decisions can influence natural resources and the environment, personal health and quality of life, and ethical issues as well as cultural and social aspects of the economy (Benn, 2002). An educated consumer can look past his or her personal needs and can take into account the complete history of that product and production circumstances (Benn, 2002). For example, someone who is concerned with dolphin safety and marine mammal protection would look for seafood products, particularly tuna, that was labeled "Dolphin- Safe" meaning that no dolphins were killed in the process of catching the tuna (Golan, Kuchler, & Mitchell, Economics of Food Labeling, 2000).

In the Ohio Revised Code 3313.60, part of the 9<sup>th</sup>-12<sup>th</sup> grade health education curriculum includes teaching "the nutritive value of foods, including natural and organically produced foods, the relation of nutrition to health, and the use and effects of food additives." This often includes students learning how to read the nutrition label on food packages. However, labeling educational resources rarely address labeling topics beyond nutrition facts. When looking for food label information resources there are a number of government websites that explain the USDA and FDA's involvement with food labels, particularly nutrition labels. There are also a number of third-party organization websites that provide information specific to their label

standards. For consumers who are interested in self-educating, this means doing multiple searches and filtering through mainly non-scientific information regarding food labeling.

Although there has been a push for more government involvement with food labels, the problem remains that consumers are uninformed as to what they mean.

The goal of this project is to provide a clear and concise resource for consumers to become better informed about products they purchase. Research has shown that many consumers have inaccurate perceptions regarding certain labeling terms including but not limited to; organic, natural, humanely raised, Non-GMO verified, antibiotic free, and no-nitrates. Consumer choices have an impact on the entire economy and can lead to environmental, social, and community health implications. In order for consumers to make informed purchasing decisions it is important for them to know what they are getting and how it was produced.

### **Section 3: Project Plan/ Procedures**

This section explains the procedures taken to fulfill the project objectives, including inventorying, cataloging, and development of the educational website, supporting facilitator guide, and evaluation tool. Each objective is addressed individually in this section to explicate the various techniques used.

#### Objective 1: Catalog standards and key aspects of commonly used food labels.

This objective was approached by dividing the search into three categories of labels: government issued, third-party issued, and producer issued. The government issued labels were identified using the USDA and FDA's websites: USDA.gov and FDA.gov. On both websites

search terms such as "food labels," "FDA labels," "USDA labels," "organic," "meat grade labels," "required food labels," "food packaging labels," "allergen labels," and "country of origin" were used to locate various government issued labels. Some FDA and USDA sources also identified third-party issued labels, which were cataloged at that time. A similar search procedure was used for third-party labels except the sources for information became much broader. Search engines such as Google and Google Scholar were used to identify third-party labels. Search terms such as "animal welfare food labels," "fair trade," "environmental protection food labels," "seafood labels," "certified gluten free," "free range," and "grass fed." All these are terms that are commonly seen on food packages in a grocery store. The last categories of labels, producer issued, are the same claims seen in both government and thirdparty issued labels. The difference is the producer is personally guaranteeing the product without any external auditing process. Google was used to search for individual producers who were making the same claims as third-party organizations, therefore a very similar search terms list was used. The documentation for these labels was slightly different in that the claims "terms" were identified and cataloged rather than the company who issued them.

Three vital pieces of information were gathered on each food label: the trademarked logo, what the standards were for making that claim, and who was responsible for the regulation of that claim. All food labels gathered were cataloged based on issuing body and cited according to their organization.

Objective 2: Inventory food labeling educational tools and resources currently available.

For this objective, several approaches were used to inventory food labeling educational tools and resources. The first approach was to make personal contact with Ohio State University Extension family consumer science educators and ask if they had any knowledge of food label curricula. The second approach was a general internet search using Google to locate resources used in both formal and informal education settings to teach about food labels. Search terms included "food label curriculum," "consumer education on food labels," "food label lesson," "tools for food consumers," "understanding food label claims," "meat label curriculum," "organic vs. natural curriculum," "fair trade curriculum," and "environmental food curriculum". A similar search was done using The Ohio State University online library database and National Agriculture in the Classroom database. The following information was documented for each tool or resource: name, grade level, cost, focus areas & objectives, and where to access the curriculum.

Objective 3: Develop an interactive food label educational website for consumers, supporting facilitator guide, and evaluation tool for educators.

Website development. After food labels were cataloged to fulfill the first project objective, they were organized into recognizable categories for consumers. These categories were determined based on the literature review of common consumer questions and areas of confusion. Categories included: allergen, animal welfare, colors, flavors, sweeteners, environmental, fair trade and fair labor, genetic modification, health claims, label quiz, meat, other marketing claims, organic, and references and other resources. Google Sites was chosen as the web platform. Each page was created by first providing a general description of the topic or

category. Visual aids were created and used throughout the website to help illustrate various label topics. Videos were produced as additional website content to elaborate on food labeling perceptions, meat labeling, and other marketing with the use of the Ohio Proud logo. An interview style was used in filming the videos to highlight common consumer questions and answers identified by prior consumer studies and industry leaders. These videos are used to quickly engage the website user in an educational experience regarding particular food label topics.

Facilitator guide. The second component to this objective is the facilitator guide. The facilitator guide was developed to help educators who are interested in teaching a consumer audience about food labels, navigate the website mentioned above and facilitate an educational program or workshop using its content. The facilitator was formatted based off previously published Extension facilitator guides. An optional slide presentation was developed to accompany the facilitator guide.

**Evaluation tool.** The final component of this objective was developing an evaluation for use by educators facilitating a food label educational workshop or lesson. The evaluation can be used to test participants' knowledge of food labels after completing a food label workshop or training. The evaluation was developed as a series of multiple choice questions covering basic food labeling information presented on the web resource as well as in the facilitator guide lesson.

Peer review process to refine materials. As an additional step to the third objective, the materials developed were peer reviewed by an agriculture and natural resource Extension educator as well as a high school agri-science teacher interested in using the materials in a

classroom setting. They were asked to review the consumer website resource, facilitators guide, and evaluation. When reviewing the website resource, they were asked to play the role of a consumer looking for information on food labels they have previously encountered. They were asked to observe layout, content, and site navigation for quality, clarity, ease of use, and effectiveness in conveying information. When reviewing the facilitator guide and evaluation, they were asked to play the role of an educator interested in teaching this curriculum. After reading the facilitator guide, they were asked again about quality, clarity, ease of use, and whether or not they would feel comfortable teaching a workshop using the provided resources. Comments and suggestions were then used to refine the developed resources to better serve consumers and equip facilitators teaching about food labels. After revisions were made, they were presented again to the peer reviewers to establish whether the adjustments improved any previously mentioned issues.

# **Section 4: Project Content and Discussion**

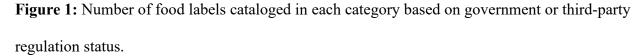
#### **Results**

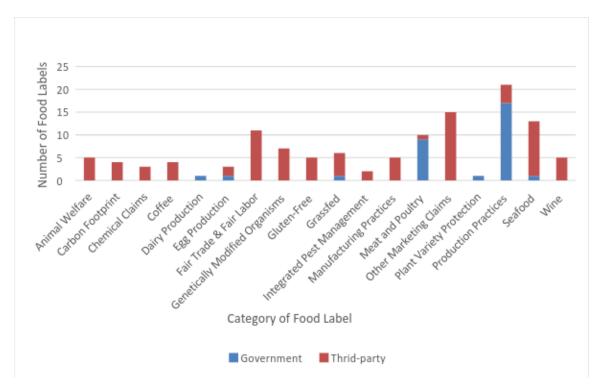
The purpose of this project was to develop a resource that could be used by both consumers and educators to better understand food product labels. This section provides a summary of each of the project components including the cataloged standards of commonly used food labels, inventory of food labeling educational tools and resources, interactive food label education website, supporting facilitator guide, and evaluation tool. This section will also include recommendations on how to use each of these tools and identification of future needs in food labeling education.

#### Objective 1: Catalog standards and key aspects of commonly used food labels.

Internet searches for food labels yielded hundreds of results in a broad spectrum of food label categories. Each label's logo was saved as well as a brief description of the label's standards, and source that the information came from. The food label catalog is located in Appendix A and is broken into eighteen label categories. The categories consist of animal welfare, carbon footprint, chemical claims, coffee, dairy production, egg production, fair trade and fair labor, genetically modified organisms, gluten-free, grassfed, integrated pest management, manufacturing practices, meat and poultry, other marketing claims, plant variety protection, production practices, seafood, and wine. These categories were chosen based on commonly found food labels.

Some labels could potentially fall into more than one category based on their standards. In this case the category that best fit their overall standards was selected. For example, many of the kosher and halal labels could be considered production or manufacturing practices. However, both of these certifications span multiple product categories and are used by producers as marketing claims. Therefore, all kosher and halal labels were placed in the other marketing claims category. Each cataloged label consists of an image, label name, label standards creator, description, who certifies those standards and the source from which the information came. Figure 1 illustrates the number of food labels cataloged in each category based on the regulatory body. Government regulated food labels primarily fell into meat and poultry, and the production practices categories with a few other labels in dairy production, egg production, grassfed, plant variety protection, and seafood.





Government labels are intended to protect consumers from false or misleading information.

Some of the government food labels inform consumers that a product was inspected by a state or federally licensed inspector prior to being placed on the market. Other government labels insure that the same standards of quality were used to grade the product and ensure fair prices across the market. Two government labels that are slightly different from the rest are the plant variety protection label and dolphin safe seafood label. These labels are focused on resource preservation rather than consumer safety or market fairness.

The third-party labels had a much broader spectrum both categorically and in purpose. As previously mentioned, any third-party organization has the ability to create and govern their own

food label as long as it is not false or misleading. The result of this ability is hundreds of food labels worldwide each with their own set of standards. This project documented 90 third-party regulated food labels ranging from protection efforts to marketing advantages. Some of the most notable third-party food label categories include animal welfare, fair trade and fair labor, genetically modified organisms, gluten-free, grassfed, manufacturing practices, other marketing claims, seafood and wine. Verification for third-party labels ranged from simply being a member of the organization and filling yearly paperwork to intense audits and documentation. As a result of cataloging the 121 food labels, which can be found in Appendix A, it became clear why there is so much confusion when it comes to consumer understanding of food labels. The number alone can be overwhelming let alone all the different standards and processes of verification that come with them.

Consumers and educators can use the food label catalog to quickly identify common food labels they might encounter at a grocery store. The food label catalog is designed so that the label can be found by name or logo image. As previously mentioned, a description of the food label standards from the third-party organization accompanies the image to provide a quick reference. The catalog is not an exhaustive list of standards and consumers are encouraged to use the provided link to read all the standards put forth by the organizations.

Objective 2: Inventory food labeling educational tools and resources currently available. An inventory of food labeling educational tools and resources was developed to determine what was currently available to educators. As described in the procedure, several family consumer science Extension educators were asked what tools they used to teach about

food labels. However, the majority of the tools and resources were found through internet searches. Each resource was evaluated for content to provide insight into topic areas that were not being covered. Figure 2 shows how many curricula covered each topic area. There were 57 resources inventoried and included both youth and adult curriculum.

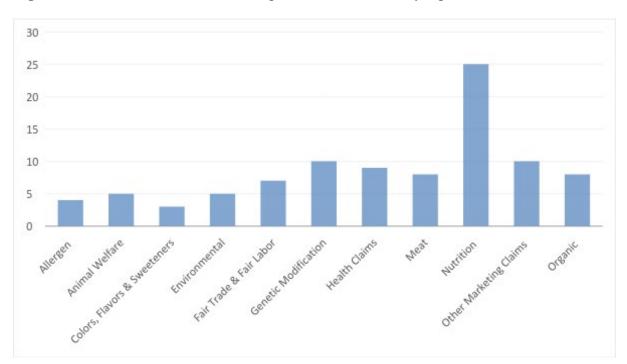


Figure 2: Number of food label teaching tools and resources by topics covered

The full inventory of labeling educational tools and resources is located in appendix B. Many of the resources covered multiple topics, however the most prevalent resources focused solely on nutrition labeling. Other resources were often focused on only one or two aspects of food labeling and no resource covered all topic areas. This confirmed the need for a comprehensive food labeling educational resource. It is important to note that resources were not evaluated for their accuracy or content quality. Educators looking to teach particular food labeling topics can use the inventory list to find tools and resources.

Objective 3: Develop an interactive food label educational website for consumers, supporting facilitator guide, and evaluation tool for educators. The final component of this project was to provide consumers and educators with tools to improve the understanding of food labels. There were three tools developed to help achieve better consumer understanding including a website, <a href="http://go.osu.edu/understandingfoodlabels">http://go.osu.edu/understandingfoodlabels</a>, facilitator guide and evaluation tool.

The website was developed to be an easy-to-use tool for consumers to find food label information. The website content includes an introduction followed by pages on regulation, allergen, animal welfare, colors, flavors, and sweeteners, environmental, fair trade and fair labor, genetically modified organisms, health claims, label quiz, meat, other marketing, organic, and references and other resources. Each page provides a description of the label category, terminology, and labels that fall into that category. Each label image is hyperlinked to the organization's home website where consumers can find detailed information on the product claim standards. The website also includes videos providing information on meat labeling, consumer perceptions of food labels, and Ohio Proud product labeling. A video produced by Purdue University was also used to provide further insight on genetic modification. A food label quiz developed by Simmons School of Nursing and Health Sciences was embedded to provide addition information to consumers. There are also hyperlinks for additional FDA and USDA information regarding food labeling standards. The home page of the web resource can be found in Appendix C.

The facilitator guide was developed to help educators facilitate a workshop or lesson on consumer understanding of food labels. The workshop is geared for adult audiences although it could be easily used in a high school classroom setting as well. The lesson introduces the topic of food labels and provides consumers with background knowledge of how food labels are regulated, while discussing participants' own experiences with different labels. The lesson progresses into an activity where participants observe food packages and try to identify the source of the labeling information: government, third-party, or producer regulated. The second activity uses the same labels and has participants categorize them based on types of claims or statements. At the conclusion of the workshop participants should know the five required components to a food label, know the two main governing bodies that regulate labeling, learn how to verify claims, understand common food label terminology, and become more confident consumers. The food label guide comes with an optional PowerPoint that can be used to guide discussion and provide food label samples if physical packages are not available. It is also recommended that facilitators familiarize themselves with the "Understanding Food Labels" website and resources before presenting this lesson. The facilitators guide can be found in Appendix D.

The last component for this objective was an evaluation that could be used by educators facilitating the lesson. There are three sections to the evaluation including program content, consumer confidence, and demographics. The program content section has seven questions that help determine whether or not participants can apply the knowledge they learned through the labeling workshop. The second section addresses consumer confidence coming out of the

workshop by rating how their understanding of food labels has changed as a result of the program in four topic areas. The last section asks basic demographic questions in order to gain insight into the population attending the workshop. The evaluation was created in Qualtrics and can be used on electronic devices or printed depending on the needs of the facilitator and program setting. The evaluation can be located in Appendix E.

# **Recommendations and Conclusion**

This project presents a number of tools that can be used independently of one another or all together depending on the needs of the clientele and depth of information desired. The catalog of food labels as previously mentioned is a reference guide to the basic standards associated with particular labels. It is an excellent starting point for educators to quickly locate information, and provides a source for each label to locate additional information. The inventory of food labeling tools and resources is also a quick source of information when looking for teaching material on a particular labeling topic. By following the provided link or source educators can gain access to these curricula.

The online resource has a broader audience, targeting any consumer who wishes to know more about food labeling. Some strategies for consumers to get the most out of the website resource include reading the introduction and regulation pages to gain a basic understanding of food labels. From the regulation page, consumers can navigate to any other category of food labeling according to their needs as a consumer. Each page briefly describes the labels in that category and provides clickable logos to guide the consumer to that particular organization's website. The website is not intended for consumers to learn about every food label produced but

rather guide them to resources on labels they are interested in. The website does not endorse any label and does not verify the processes used to issue individual product labels. It is important for consumers to know that they have the right to know the standards, verification process, and enforcement of any label and can request this information from the issuing party.

Strategies for facilitators using the catalog, inventory of tools and resources, facilitator guide, and evaluation include creating a custom workshop or program geared towards their clientele's needs. Each of these tools can be used in their entirety; however a more probable use is to focus these resources on a particular topic. For example, a group might want to know more about meat labels and terminology. Therefore, a facilitator might just use animal welfare, grassfed, and meat labels from the catalog. They can review the inventory of tools and resources to see if any current curriculum meets their needs and they can customize the lesson in the facilitator guide to feature meat labels for the activities. The evaluation tool is based on the entire food label spectrum, however it could easily be adjusted as needed.

This project content will be made available free to educators interested in teaching consumers about food labels. The website resource is available to all internet users and can be accessed through the direct link as well as through internet searches. This project will also be shared at Extension functions such as Ohio State University Extension workshops, National Extension conferences, and journal article publications. The resource will also be shared through the National Association of Agricultural Educators (NAAE) network for agri-science teachers. As this workshop is presented in various classroom and community functions, participants will gain awareness to the website resource and be able to use it for future food label inquiries.

The food industry is constantly trying to meet the ever-changing demands of consumers and with that comes the creation of new labels and marketing methods. Because of the nature of this industry, this project will need periodic updating to keep up with labeling regulation changes and the expanding third-party certifications. Every year the web-resource should be reviewed to insure continued accuracy. Federal food labeling regulations will be monitored for updates that can then be relayed to consumers through the web-resource. The food industry can help consumer education by remaining transparent and answering consumer questions. Consumers can be an advocate for their own knowledge by asking questions and doing research into topics that are important to their values and belief systems.

This project will continue to expand to meet the needs of consumers. The future goal is to create more learning opportunities surrounding consumer education on food labeling. Consumers should feel comfortable and confident when they see a food label and one way of achieving this is through familiarizing consumers with the food industry's terminology and use of labels, claims and statements. This project provides an avenue for consumers to become more informed and make better purchasing decisions for themselves, their families, and their community.

#### References

- Abrams, K., & Irani, T. G. (2010). Naturally confused: Consumers' perceptions of all-natural and organic pork products. *Agric Hum Values*. Retrieved from https://www.researchgate.net/publication/226985344\_Naturally\_confused\_Consumers%2 7\_perceptions\_of\_all-natural\_and\_organic\_pork\_products
- Aertsens, J., Mondelears, K., Verbeke, W., Buyssee, J., & VanHuylenbroeck, G. (2011). The influence of subjective and objective knowledge on attitude, motivations and consumption of organic food. *British Food Journal*, 1353 1378.
- Agricultural Marketing Service . (2017). *Country of Origin Labeling*. Retrieved from Unites States Department fo Agriculture, Agricultural Marketing Service: https://www.ams.usda.gov/rules-regulations/cool
- American Grassfed Association. (2017). *American Grassfed*. Retrieved from http://www.americangrassfed.org/about-us/
- Baker, K. (2015). *The Truth About Organic: Sustainability, Practice,*. University of Colorado, Boulder. Retrieved from http://scholar.colorado.edu/cgi/viewcontent.cgi?article=2097&context=honr theses
- Benn, J. (2002). Consumer education: educational considerations and perspectives. *International Journal of Consumer Studies*, 26(3), 169-177. Retrieved from http://web.b.ebscohost.com.proxy.lib.ohio-state.edu/ehost/pdfviewer/pdfviewer?vid=1&sid=79f91287-420d-4792-b244-cab1d8ca9d57%40sessionmgr102

- Caputo, V., Nayga, R., Meullenet, J.-F., Ricke, S. C., & Van Loo, E. J. (2001). Consumers' willingness to pay for organic chicken breast: Evidence from choice experiment. *Food Quality and Preference*, 22, 603–613.
- Enough. (2016). *Truth About Food: The Data*. Kynetec. Retrieved from https://www.enoughmovement.com/Assets/pdf/truth/TAF\_Report\_03-21-17.pdf
- Food and Drug Administration . (2017, June ). *U.S. Food & Drug Administration* . Retrieved from https://www.fda.gov/AboutFDA/Transparency/Basics/ucm194877.htm
- Food Consulting Company. (2017). *food labels*. Retrieved from http://www.foodlabels.com/pdf/foodlabels.com\_required-food-label-components.pdf
- Food Safety and Inspection Service . (2007). A guide to Feederal Food labeling Requirements for Meat, Poultry, And Egg Products. U.S. Department of Agriculture. Retrieved from https://www.fsis.usda.gov/wps/wcm/connect/f4af7c74-2b9f-4484-bb16-fd8f9820012d/Labeling Requirements Guide.pdf?MOD=AJPERES
- FSIS. (2015). FSIS Compliance Guidance for Label Approval. United States Department of Agriculture. Retrieved from https://www.fsis.usda.gov/wps/wcm/connect/bf170761-33e3-4a2d-8f86-940c2698e2c5/Label-Approval-Guide.pdf?MOD=AJPERES
- Golan, E., Kuchler, F., & Mitchell, L. (2000). *Economics of Food Labeling*. Washington:

  Economic Research Service, U.S. Department of Agriculture. Retrieved from

  https://www.ers.usda.gov/webdocs/publications/aer793/18885\_aer793.pdf

- Golan, E., Kuchler, F., & Mitchell, L. (2000). Economics of Food Labeling. *Agricultural Economic Report No.793*. Retrieved from https://www.ers.usda.gov/webdocs/publications/41203/18885\_aer793.pdf?v=41063
- Gold, M. V. (2007). *Alternative Farming Systems Information Center*. Retrieved from United States Department of Agriculture National Agricultural Library:

  https://www.nal.usda.gov/afsic/organic-productionorganic-food-information-access-tools
- Heimbach, J., & Stokes, R. (1982). Nutrition labeling and public health: survey of american Institute of Nutrition members, food industry, and consumers. *The American Journal of Clinical Nutrition*, 36, 700-708. Retrieved from http://ajcn.nutrition.org/content/36/4/700.full.pdf+html?ijkey=03cf85894c875b5a9135b9 f0590cd3e38eb94ec2&keytype2=tf\_ipsecsha
- Janssen, M., & Hamm, U. (2012). Product labelling in the market for organic food: Consumer preferences and willingness-to-pay for different organic certification logos. *Food Quality and Preference*, 25(1), 9-22.
- Lessing, A. (2011). A Supplemental Labeling Regime for Organic Products: How the Food,

  Drugs and Cosmetic Act Hampers a market Soultion to an Organic Transparency

  Problem. *Journal of Environmental and Sustainability Law, 18*(3).
- Litchtenstein, A., Nathan, R., Wartella, E., & Yaktine, A. (2012). Front-of-Package nutrition

  Rating Systems and Symbols. Washington: The National Acaemies Press. Retrieved from https://www.nap.edu/read/13221/chapter/8

Marquette Elder's Advisor.

- National Research Center. (2016). *Food Labels Survey*. Consumer Reports®. Retrieved from http://greenerchoices.org/wp-content/uploads/2016/08/2016\_CRFoodLabelsSurvey.pdf Negowetti, N. E. (2013). A National "Natural" Standard for Food Labeling. *65 Me. L. Rev. 581*. Shepard, C. Q. (2014). "Natural" Food Labeling: False Advertising and the First Amendment.
- Silverglade, B., & Heller, I. R. (2010). *Food Labeling Chaos*. Washington, DC: Center for Science in the Public Interest. Retrieved from https://cspinet.org/sites/default/files/attachment/food\_labeling\_chaos\_report.pdf
- Smith-Spangler, C., Brandeau, M. L., Hunter, G. E., Bavinger, J. C., Pearson, M., Eschbach, P. J., Bravata, D. M. (2012). Are Organic Foods Safer or Healthier Than Conventional Alternatives?: A Systematic Review. *Ann Intern Med*(157), 348-366. Retrieved from http://annals.org.proxy.lib.ohio-state.edu/aim/article/1355685/organic-foods-safer-healthier-than-conventional-alternatives-systematic-review
- Soederberg-Miller, L. M., & Cassady, D. L. (2015). The effects of nutrition knowledge on food label use. A review of the literature. *Appetite*, 207-216. Retrieved from http://ac.els-cdn.com/S0195666315002743/1-s2.0-S0195666315002743-main.pdf?\_tid=1b13f2c4-5699-11e7-aa2a-
- 00000aacb360&acdnat=1498060304\_366d2ecca3b08ca648af786d2f9ed1eb

  Synthetic substances allowed for use in organic crop production, §205.601 (December 21, 2000).

- The National Food Lab. (2013). A Snapshot of FDA Food Labeling Requirements. Tha National Food Lab. Retrieved from http://www.thenfl.com/wp-content/uploads/A-Snapshot-of-FDA-Food-Labeling-Requirements 131.pdf
- The Ohio Revised Code 3313.60 (2001). Retrieved from http://codes.ohio.gov/orc/3313.60 Title 21-Food and Drugs. (2014). 21 U.S.C. § 607.
- United States Bureau of Chemistry. (1922). The Bureau of Chemistry of the United States

  Department of Agriculture: organization, enforcement of Food and Drugs Act,

  enforcement of Tea Act, research work (Vol. 137). Washington, D.C.: United States

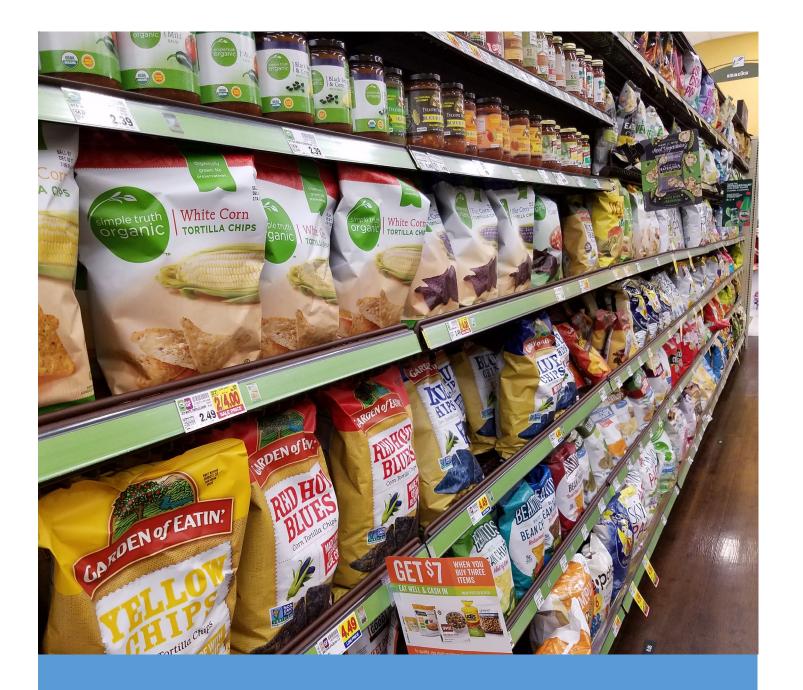
  Department of Agriculture. Retrieved from

  https://archive.org/details/bureauofchemistr137unit 1
- United States Department of Agriculture. (2005). FSIS Directive 7700.1. *Irradiation of Meat and Poultry Products*. Retrieved from https://www.fsis.usda.gov/wps/wcm/connect/058dd732-7fc8-4787-a283-30ed50d6f7e0/7700.1Rev1.pdf?MOD=AJPERES
- United States Department of Agriculture. (2015). *USDA Shell Egg Grading Service*. Retrieved from USDA Agricultural Marketing Service: https://www.ams.usda.gov/publications/qashell-eggs
- USDA. (2017). *Understanding Food Quality Labels*. United States Department of Agriculture.

  Retrieved from
  - https://www.ams.usda.gov/sites/default/files/media/AMSP roduct Label Factsheet.pdf

# Appendix

**Appendix A: Catalog of Food Labels** 



# Understanding Food Labels -M.S. Project

**Carol Hamilton** 

# **Understanding Food Labels**

Table of Contents Animal Welfare	15
American Humane Certified <sup>TM</sup>	
Animal Welfare Approved by A Greener World	
Food Alliance Certified.	
Global Animal Partnership	
RSPCA Assured	
Carbon FootPrint	
Carbon Care Environmental Access	
Carbon Neutral Product	
Carbon Trust	
Certified Carbon Free	
Chemical Claims	
BioChecked Glyphosate Free & Non Glyphosate Certified	
Processed Chlorine Free & Totally Chlorine Free	
SCS Certified Pesticide Residue Free	
<u>Coffee</u>	
4C Association	52
Bird Friendly Smithsonian Migratory Bird Center	52
C.A.F.E. Practices	53
Rainforest Alliance Certified	53
Dairy Production	54
Dairy Products Grade AA, A or B, U.S. Extra Grade, ASDA Quality Approved	54
Grade AA, A or B	54
U.S. Grade AA	54
U.S. Grade A.	55
U.S. Grade B.	55
U.S. Extra Grade	55
USDA Quality Approved	55
Egg Producton	56
Egg Grade Shield	56
Nest Fresh Certified Cage Free Eggs	56
United Egg Producers Certified	57
Fair Trade & Fair Labor	
	40

Certified Fair Labor	57
Equal Exchange Fairly Traded	58
Fair for Life	58
Fair Labor Association	59
Fair Trade Certified	60
Fair Trade Federation.	60
Fair Trade Proof	61
<u>FairWild</u>	61
Fairtrade International	62
Hand in Hand Organic Rapunzel FairTrade	63
World Fair Trade Organization.	63
Geneticly Modified Organisms	64
BioChecked	64
GMO Guard Natural Food Certifiers	65
No GMO Ingredients Nestle	65
No GMO Ingredients Tribeca Oven	65
Non GMO Certified by NSF	66
Non GMO Project Verified	67
ProTerra Certified Sustainability Non-GMO	68
Gluten-Free Certification Program (GFCP)	68
Gluten-Free Certification Program (GFCP)	69
Gluten-Free Product Certification.	69
National Celiac Association Certified Gluten Free.	70
National Celiac Association Certified Gluten Free.	70
<u>Grassfed</u>	71
American Grassfed	71
Certified Grassfed by a Greener World	71
Food Alliance Certified Grassfed	72
Northeast Organic Farming Association of New York Certified Grass Fed	73
PCO 100% Grassfed Certified	73
USDA Grass Fed Program for Small and Very Small (SVS) Producers	74
Integrated Pest Managment	75
AvoGreen Assured	75

# Understanding Food Labels

Responsible Choice	75
Manufacturing Practices	76
Bonsucro Better Sugar Cane Initiative	76
Certified Sustainable Palm Oil RSPO	76
Certified Vegan	77
Round Table on Responsible Soy (RTRS)	78
WindMade	78
Meat & Poultry	78
Accepted as Specified	78
Beef Grades Prime, Choice, and Select	79
<u>Prime</u>	79
Choice	79
Select	79
Standard and Commercial	79
Certified Angus Beef®	79
Inspection mark on raw meat, Inspection mark on raw poultry, and Inspection mark on Processed products	
Poultry Grade Shield	
Process Control Certification Program	
Process Verified Program	
Safe Handling Instructions	
Tender & Very Tender Shields	
Voluntary Federal Inspection.	
Other Market Claims	
American Heart Association Heart-Check Food Certification	
Appalachian Grown	
Chicago Rabbinical Council Kosher Certification	
Food Justice Certified	
Green Field Farms Certification Seal.	
Halal Food Council USA Halal Certification	
Islamic Food and Nutrition Council of America Halal Certification	
Islamic Services of America Halal Certification	
Islamic Society of North America's Halal Certification	
Islamic Society of the Washington Area Halal Certification.	
isianne society of the washington Area maiar Certification	42

KOF-K Kosher Certified	91
Ohio Proud	91
Organized Kashrut Laboratories	92
Orthodox Union Hechsher Mark	93
Star-K Kosher Certified	94
Plant Variety Protection	95
Plant Variety Protection	95
Production Practices	95
Certified Naturally Grown	95
Continuous Inspection by Federal-State Licensed Employees	96
Continuous Inspection Grades	96
Continuous Inspection Marks	97
Fresh Produce Inspected Lots	97
Friend of the Earth	97
Global G.A.P.	98
Good Agricultural Practices (GAP) and Good Handling Practices (GHP)	99
Graded Product Packed Under Continuous Inspection	99
Identity Preservation (IP)	100
Inspection Grades	100
Inspection Marks	100
Linking Environment and Farming	101
Organic Seal	101
Partners in Quality (PIQ)	102
Processed Product Grade Marks	103
Processed Product Inspection Marks	103
Qualified Through Verification (QTV).	103
Quality Assurance Program (QAP)	104
Quality Monitoring Program (QMP)	104
Sampling Marks	104
Seafood	105
ASC Farmed Responsibly	105
Best Aquaculture Practices Certified	105
Certified Sustainable Seafood Marine Stewardship Council (MSC)	106

# Understanding Food Labels

Dolphin Safe United States Department of Commerce	107
Dolphin Safe	108
Friend of the Sea	108
Global Trust	109
IFFO Assured Responsible Sourcing, Responsible Production	110
Monterey Bay Aquarium Seafood Watch	
Ocean Wise Recommended	
Salmon-Safe	112
SeaChoice	
Seafood Safe	
 Wine	
Bio Garantie Delinat	
Deutsches Güteband Wein	
LIVE Certified Sustainable	
Sip Certified Sustainability in Practice	
Sustainable Winegrowing New Zeeland	
Bustamable winegrowing new Zecianu	11/

# Animal Welfare



American Humane Certified<sup>TM</sup>

Standards by: American Humane Certified<sup>TM</sup>

The standards were created with input from renowned animal science experts and veterinarians and are frequently reviewed by our Scientific Advisory Committee to reflect current research, technological advances, best practices, and humane handling methods. Our Animal Welfare Standards were built upon the Five Freedoms of Animal Welfare, which require that an animal be healthy, comfortable, well-nourished, safe, able to express normal behavior, and free from unpleasant states such as pain, fear, and distress. American Humane Certified producers are audited for their compliance to the standards.

**Certifying Agency:** Third-Party Auditor on behalf of American Humane Certified<sup>TM</sup>

**Source:** http://www.humaneheartland.org/



Animal Welfare Approved by A Greener World

Standards by: A Greener World

Animal Welfare Approved

- Requires animals to be raised on pasture or range
- Prohibits dual production
- Awards approval only to family farmers
- Charges no fees to participating farmers

Incorporates the most comprehensive standards for high welfare farming

To accomplish the goals of the Animal Welfare Approved program, all standards address every aspect of each species' lifecycle needs from birth to death. Animal Welfare Approved works diligently to maintain a farm's ability to be economically viable and the standards have been proven to be



achievable by the vast majority of farm situations. Animal Welfare Approved reviews its standards annually, updating them as needed to incorporate new research and on-farm findings.

Animal Welfare Approved has standards for all commonly domesticated farmed animals. A number of other species are managed for meat and fiber. Animal Welfare Approved will only consider accrediting other more exotic species if they are indigenous to the country where they are being produced. Currently the only additional species is as follows: Bison in the US.

Certifying Agency: Third-Party Auditor on behalf of A Greener World

**Source:** <a href="https://animalwelfareapproved.us/">https://animalwelfareapproved.us/</a>



Food Alliance Certified **Standards by:** Food Alliance

Food Alliance certifies agricultural operations, food processors and distributors that ensure:

- Safe and fair working conditions.
- The health and humane treatment of farm animals.
- Reduced risk from pesticides and other toxic or hazardous materials.
- Protection and enhancement of wildlife habitat and biodiversity.
- Conservation of soil, water, and energy, and reduction and recycling of waste.
- Transparent and traceable supply chains.
- Food product integrity, with no genetically engineered or artificial ingredients.
- Continual improvement of management practices.

Food Alliance certification is a voluntary means for agricultural producers and food companies to address growing customer demand for traceability, transparency, and social and environmental responsibility.

Food Alliance is the most experienced sustainable agriculture certifier in the United States – with over two decades spent developing and maintaining comprehensive sustainability standards and criteria for a wide range of agricultural products, including: fruits, vegetables, grains, livestock, eggs, dairy, shellfish, mushrooms, grains, legumes, horticultural

products, and prepared food products made with Food Alliance Certified ingredients.

Food Alliance is a non-profit organization. We are motivated by our mission. That means that Food Alliance certification, with clear, publicly available standards and a rigorous third-party audit process, is a credible and effective way for producers and food companies to demonstrate their commitment to sustainable management practices.

Certifying Agency: Third-Party Auditor on behalf of Food Alliance

**Source:** http://foodalliance.org/operations/



Global Animal Partnership

Standards by: Global Animal Partnership

We define animal welfare as 3 overlapping components that together with good management and genetics, contribute to good farm animal welfare:

Health & Productivity – raising animals so that they're healthy and productive with good quality feed and water, shelter, and free from disease, illness and injury (but treating any animals that get sick).

Natural Living – raising animals in environments that allow them to express their natural behaviors effectively – both indoors and outdoors

Emotional Well Being – raising animals in environments that provide them the ability to be inquisitive, happy and playful and minimize boredom, frustration, fear, stress and pain, as much as possible.

By defining animal welfare, this helps us to identify and improve farming and ranching systems and practices. We then translate these systems into standards for each species under our GAP 5-Step® Animal Welfare Rating program.

Certifying Agency: Third-Party Auditor on behalf of Global Animal

Partnership

**Source:** https://globalanimalpartnership.org/



#### RSPCA Assured

**Standards by:** Royal Society for the Prevention of Cruelty to Animals (RSPCA)

The farms, haulers and abattoirs approved by RSPCA Assured have been assessed to the RSPCA's farm animal welfare standards.

A team of scientific officers in the RSPCA's farm animals department write the standards.

They're continually reviewed and informed by the latest research and practical experience - and in consultation with leading scientific, veterinary and practical industry experts.

These detailed documents cover every aspect of the animals' lives, including feed and water, the environment they live in, how they're managed, health care, transport and humane slaughter

Depending on species, benefits of the RSPCA welfare standards include:

More space, Natural lighting, Comfy bedding, Environmental enrichment objects for birds to peck at, Shade and shelter.

Certifying Agency: Third-Party Auditor on behalf of RSPCA

**Source:** https://www.rspcaassured.org.uk/farm-animal-welfare/rspcawelfare-standards/

# Carbon FootPrint



Carbon Care Environmental Access Standards by: Enviro-access GHG Experts

The Carbon CareTM certification offered by Enviro-access recognizes organizations' efforts to responsibly manage and reduce greenhouse gases (GHGs). Through this certification, Enviro-access confirms that the organization is sensitive to the problem of climate change and proactive in its emissions management.

Certifying Agency: Enviro-access carbon Auditors

**Source:** http://www.enviroaccess.ca/expert-conseil/en/carbon-carecertification/



#### Carbon Neutral Product

Standards by: Carbon Reduction Institute

Any business can offer carbon neutral products and services and operate in the Low Carbon Economy. Businesses that have been certified under the NoCO2 Certification Program can automatically supply carbon neutral products and services. For other businesses, we offer the Carbon Neutral Product and Carbon Neutral Service Certification Programs.

The first step to certifying a product or service as carbon neutral is to conduct a life cycle assessment. The life cycle assessment calculates the carbon footprint of the product or service throughout its useful life from manufacture, including all inputs, to transportation and usage through to disposal or cessation. A carbon neutral certification for the product or service is achieved by implementing carbon reduction strategies and purchasing carbon offsets for any remaining emissions.

Certifying Agency: Carbon Reduction Institute

**Source:** http://noco2.com.au/noco2-business-certification/certified-products/



#### Carbon Trust

Standards by: Carbon Trust

A product carbon or water footprint is the total sum of the greenhouse gas emissions (CO2e) produced or the water used throughout a product's lifecycle, including production, distribution and use.

Measuring and analyzing the environmental, carbon and resource footprints of your products and services provides a wealth of useable data and key information that can be used to manage risks as well as to identify cost reduction and product-development opportunities.

**Certifying Agency:** Approved Third-party Inspectors for Carbon Trust

**Source:** <a href="https://www.carbontrust.com/client-services/certification/product-footprint/">https://www.carbontrust.com/client-services/certification/product-footprint/</a>



#### Certified Carbon Free

Standards by: CARBONFREE®

The Carbonfree® Product Certification is a meaningful, transparent way for you to provide environmentally-friendly, carbon neutral products to your customers. By determining a product's carbon footprint, reducing it

where possible and offsetting remaining emissions through our third-party validated carbon reduction projects.

The Carbonfree® Certification Process

- Perform a Life-Cycle Assessment (LCA) or Product Carbon Footprint (PCF) to determine the carbon footprint of your product(s) using our Carbonfree® Product Certification Carbon Footprint Protocol and one of the leading LCA product methodologies.
- Register and Certify your product as Carbonfree®
- Offset the product's carbon footprint quarterly, based on actual sales
- Renew your product annually

Certifying Agency: CARBONFREE®

**Source:** <a href="https://carbonfund.org/product-certification/">https://carbonfund.org/product-certification/</a>

## **Chemical Claims**







# BioChecked Glyphosate Free & Non Glyphosate Certified Standards by: BioChecked

BioChecked<sup>TM</sup> Agrees to provide third party certification for Glyphosate Free Certified<sup>TM</sup> or Non Glyphosate Certified<sup>TM</sup> (2 Great Labels – Both Zero Tolerance!) by reviewing and holding producer's individual copy of laboratory test results of Glyphosate testing in house in secure and confidential manner for 1 year and as renewed. (Testing is required annually for each product.) Each product must meet and maintain our ZERO tolerance threshold for glyphosate and be tested regularly by an ISO 17025 Accredited Laboratory. An ISO/IEC 17025 ISO/IEC 17025 the International Organization for Standardization (ISO) and the International Electro-technical Commission (IEC). This is the single most important standard for calibration and testing laboratories around the world. Laboratories that are accredited to this international standard have demonstrated that they are technically competent and able to produce precise and accurate test and/or calibration data.

Certifying Agency: Approved Third-party Inspectors for BioChecked

**Source:** <a href="http://biochecked.com/glyphosate-free-certified/">http://biochecked.com/glyphosate-free-certified/</a>



Processed Chlorine Free & Totally Chlorine Free Standards by: Chlorine Free Products Association

The Chlorine Free Products Association (CFPA) is an independent notfor-profit accreditation & standard setting organization, incorporated in the state of Illinois. The primary purpose of the association is to promote Total Chlorine Free policies, programs, and technologies throughout the world. Our mission is to provide market awareness by providing facts, drawing direct comparisons, and highlight process advantages for Totally Chlorine Free (TCF) and Processed Chlorine Free (PCF) products.

Certifying Agency: Chlorine Free Products Association

Source: http://www.chlorinefreeproducts.org/About Us.html



#### SCS Certified Pesticide Residue Free

Standards by: Scientific Certification Systems, Inc

Pesticide residue free certification is a pesticide residue management and product safety program available to growers using conventional, integrated pest management, organic and biodynamic farming methods. Over the years, growers have found that they can fine-tune their agrochemical applications and save money in the process by monitoring residue levels.

#### **Certification Guarantee**

Certification guarantees that your product falls below the maximum residue limits (MRLs) for every export market, and the specifications of your most exacting retail buyers.

#### **Certification Criteria**

Certification requires that there be no detected residues above the laboratory's reliable limits of detection. For most pesticides, this level is 0.01 ppm, which is 10 to 1,000 times more stringent than required by law. This level meets the universal definition of "limit of detection."

#### **Strict Scientific Protocols**

Certification is backed by strict scientific protocols of inspection, sampling and testing. Targeted inspection protocols allow SCS to sample those areas of the field or growing environment most likely to have residues. Testing is based on actual pesticide use to provide the highest accuracy in results. SCS chemists oversee the laboratory testing process, including blind sampling, split sampling, and other quality assurance measures.

Certifying Agency: Scientific Certification Systems, Inc

**Source:** <a href="https://www.scsglobalservices.com/certified-pesticide-residue-free?scscertified=1">https://www.scsglobalservices.com/certified-pesticide-residue-free?scscertified=1</a>

## Coffee



**4C** Association

Standards by: 4C Association

Emphasis on Farming as a Business. The new Code helps farmers to make better business out of their coffee production by introducing profitability and productivity principles (Farming as a Business) and focusing records on costs and income. This will give farmers a better understanding to work towards improving their livelihoods.

Changes to better address small holder producers. The order of the Code has been changed; it now begins with a focus on the economic dimension, to recognize what is most important to farmers. It also introduces specific mention of small holders to make it more relevant for the majority of producers and improve understanding in general.

An improved approach to Pesticides: The new Pesticides List is fully aligned with those of other sustainability standards and focuses on the pesticides which are relevant to and used by coffee farmers. The new Code ensures that at least a minimum level of personal protection is maintained when handling pesticides and enhances internal knowledge on pesticide use and the guidance on Integrated Pest Management (IPM) at 4C Unit level.

Merging of documents and more concrete and explicit requirements. The requirements applicable to 4C Units previously spread between different documents are now all available in the Code. Terminology has been improved to enhance clarity on what is intended.

Certifying Agency: Approved Third-party Inspectors for 4C Association

**Source:** http://www.globalcoffeeplatform.org/latest/2015/new-4c-code-of-conduct



Bird Friendly Smithsonian Migratory Bird Center Standards by: Smithsonian Migratory Bird Center & USDA Organic Supermarket shelves are full of coffee touting their environmental credentials. What makes Bird Friendly coffee different? Several things set Bird Friendly coffees apart from other coffees making environmental claims. First and foremost is a history of and ongoing commitment to criteria based on science. The standards come directly out of ornithological fieldwork conducted by SMBC researchers. Current and future studies by our staff, post-docs and students will continue to gather information that will deepen our understanding of the connections between shade coffee and birds and other wildlife—as well as farmers' livelihoods.

Bird Friendly certification also insists on organic certification as a pre-requisite. It is mandatory. Moreover (and obviously) shade inspection and certification are mandatory for Bird Friendly. And the inspections and certifications are done by agencies accredited by the USDA's National Organic Program, assuring consumers of quality control. Once certified, Bird Friendly farms are monitored on a regular basis by these third parties. Finally, there is the question of product purity. Some certification programs allow a small percentage of non-certified product in their bag, recognizing the difficulty of controlling the process at the farm level. Other so-called sustainable coffee programs permit product dilution, allowing as little as 30 percent to meet their standards and still carry their certification label. Some shade-grown programs don't require shade trees meet a minimum height—a factor studies proved is critical to quality habitat for neotropical migrants and resident birds.

SMBC's Bird Friendly certification is the only one that is 100 percent guaranteed organic and shade-grown, and translates to the healthiest farms.

**Certifying Agency:** Approved Third-party Inspectors for USDA National Organic Program

**Source:** https://nationalzoo.si.edu/migratory-birds/bird-friendly-coffee

C.A.F.E. Practices

Standards by: Conservation International and Starbucks

Coffee and Farmer Equity (C.A.F.E.) Practices, Fairtrade or another externally audited system. Starbucks approach to sourcing responsibly grown and ethically traded coffee is grounded in C.A.F.E. Practices, a comprehensive set of social, economic, environmental and quality guidelines aimed at continuous improvement and developed by Starbucks in collaboration with Conservation International (CI).

**Certifying Agency:** Approved Third-party Inspectors for Conservation International and Starbucks

**Source:** https://www.starbucks.com/responsibility/sourcing/coffee

Rainforest Alliance Certified

Standards by: Sustainable Agriculture Network

Our green frog certification seal indicates that a farm, forest, or tourism enterprise has been audited to meet standards that require environmental, social, and economic sustainability. Thousands of products bearing the Rainforest Alliance Certified seal are found on shelves, in advertisements, and websites around the world.

In order to become certified, farms must meet criteria set by the Sustainable Agriculture Network (SAN), a coalition of leading conservation groups that





work to promote sustainability agriculture. The SAN standard encompasses all three pillars of sustainability—social, economic, and environmental. Rainforest Alliance Certified<sup>TM</sup> farms are audited regularly to verify that farmers are complying with the SAN standard's comprehensive guidelines, which require continual improvement on the journey to sustainable agriculture. The SAN standard is built on these important principles of sustainable farming:

- Biodiversity conservation
- Improved livelihoods and human wellbeing
- Natural resource conservation
- Effective planning and farm management systems

Certifying Agency: Sustainable Agriculture Network

**Source:** <a href="https://www.rainforest-alliance.org/faqs/what-does-rainforest-alliance-certified-mean">https://www.rainforest-alliance.org/faqs/what-does-rainforest-alliance-certified-mean</a>

# **Dairy Production**





Dairy Products Grade AA, A or B, U.S. Extra Grade, ASDA Quality Approved

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

Grade AA, A or B - This shield applies to butter and cheeses that have United States grade standards. These standards are based on measurable attributes, such as flavor, body, and texture that describe the value and utility of the product. USDA must grade the butter and cheese in the final package. The designated grade could be AA, A, or B. Currently, AA is only used for butter.

U.S. Grade AA. U.S. Grade AA butter conforms to the following: Possesses a fine and highly pleasing butter flavor. May possess a slight feed and a definite cooked flavor. It is made from sweet cream of low natural acid to which a culture (starter) may or may not have been added.



The permitted total disratings in body, color, and salt characteristics are limited to one-half ( $\frac{1}{2}$ ).

U.S. Grade A. U.S. Grade A butter conforms to the following: Possesses a pleasing and desirable butter flavor. May possess any of the following flavors to a slight degree: Acid, aged, bitter, coarse, flat, smothered, and storage. May possess feed flavor to a definite degree. The permitted total disratings in body, color, and salt characteristics are limited to one-half (½), except, when the flavor classification is AA, a disrating total of one (1) is permitted.

U.S. Grade B. U.S. Grade B butter conforms to the following: Possesses a fairly pleasing butter flavor. May possess any of the following flavors to a slight degree: Malty, musty, neutralizer, scorched, utensil, weed, and whey. May possess any of the following flavors to a definite degree: Acid, aged, bitter, smothered, storage, and old cream; feed flavor to a pronounced degree. The permitted total disratings in body, color, and salt characteristics are limited to one-half (½), except, when the flavor classification is AA, a disrating total of one and one-half (1½) is permitted and when the flavor classification is A, a disrating total on one (1) is permitted.

U.S. Extra Grade - This shield applies to dairy products, such as non-fat dry milk and bulk American cheese, that have grade designations other than letters. Any product with this label attached would have to be graded prior to the product leaving the control of the manufacturing facility.

USDA Quality Approved - This shield is applied to any dairy product package that does not have an established United States grade standard. This shield could be used on margarine or a non-standardized cheese, and reflects USDA's evaluation of flavor, body, texture, and other quality attributes. Any product with this label attached would have to be graded prior to the product leaving the control of the manufacturing facility.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed grader

**Source:** https://www.ams.usda.gov/grades-standards/dairy-official-quality-shields

# Egg Producton



Egg Grade Shield

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

USDA shell egg grading is a voluntary service paid for by shell egg producers. As an independent third party, USDA is recognized for assuring that eggs meet the U.S. grade standards for quality and sanitary processing. Eggs are categorized into one of three consumer grades:

- Grade AA The freshest and highest quality eggs will receive a Grade AA.
- Grade A Very high quality eggs will receive a Grade A.
- Grade B Grade B eggs are usually used for breaking stock (liquid eggs) and baking, depending on the number of defects.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally licensed Inspector

 $\textbf{Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \\ belFactsheet.pdf$ 



Nest Fresh Certified Cage Free Eggs

Standards by: Nest Fresh

Since our founding, we have refused to use cages, but there have never been federal standards for cage free egg production in the United States. This has confused both farmers, who have no guidelines for what truly constitutes cage free eggs, and consumers, who have no guarantee that their eggs are actually from cage free hens. To ensure that every egg that goes into our 100% cage free cartons comes from hens that were cage free and treated humanely, all of our family farms voluntarily undergo annual inspections by third-party auditors. These farm audits ensure that we are fulfilling the promise to both our hens and our customers to treat our hens as humanely as possible.

Certifying Agency: Approved Third-party Inspectors for Nest Fresh

**Source:** http://www.nestfresh.com/certified.aspx



# United Egg Producers Certified Standards by: United Egg Producers

To achieve an independent assessment of U.S. egg farming, UEP established a mission, which included: (1) A scientific approach to animal welfare guidelines; (2) guidelines that are driven by the industry rather than government mandates or legislation; (3) guidelines that created a level playing field for both egg farmers and our customers.

The committee reviewed all available peer-reviewed scientific literature, visited egg farmers, breeder companies, and equipment manufacturers. They considered all egg production systems (cage and non-cage) but since approximately 95% of U.S. egg-production in the U.S. was in conventional cage systems, the logical starting point was the development of recommendations to ensure welfare guidelines for cage production.

**Certifying Agency:** Approved Third-party Inspectors for United Egg Producers

Source: <a href="http://www.unitedegg.org/">http://www.unitedegg.org/</a>

#### Fair Trade & Fair Labor



#### Certified Fair Labor

Standards by: Scientific Certification Systems

Fair Labor Practices and Community Benefits certification – developed by Scientific Certification Systems (SCS) in conjunction with key stakeholders – validates socially responsible practices in agricultural production and processing. Complementing organic and other environmental certifications, Fair Labor Practices offers a strategy to differentiate your business by meeting the growing consumer demand for products produced in accordance with fair and equitable labor practices. Fundamentals of Fair Labor Practices and Community Benefits Fair Labor Practices includes comprehensive criteria that directly benefit workers, their families and communities. The program helps ensure:

- Equitable hiring and employment practices
- Safe working conditions
- Access to health, education and transportation services
- Support of local and regional communities
- Appreciation of cultural and environmental impacts

Certifying Agency: Scientific Certification Systems

**Source:** https://www.scscertified.com/docs/FLP sellsheet web.pdf



Equal Exchange Fairly Traded **Standards by:** Equal Exchange

Fair Trade is a way of doing business that ultimately aims to keep small farmers an active part of the world marketplace, and aims to empower consumers to make purchases that support their values. Fair Trade is a set of business practices voluntarily adopted by the producers and buyers of agricultural commodities and hand-made crafts that are designed to advance many economic, social and environmental goals, including:

- Raising and stabilizing the incomes of small-scale farmers, farm workers, and artisans
- More equitably distributing the economic gains, opportunities and risks associated with the production and sale of these goods
- Increasing the organizational and commercial capacities of producer groups
- Supporting democratically owned and controlled producer organizations
- Promoting labor rights and the right of workers to organize
- Promoting safe and sustainable farming methods and working conditions
- Connecting consumers and producers
- Increasing consumer awareness and engagement with issues affecting producers

Certifying Agency: Approved Third-party Inspectors for Equal Exchange

**Source:** <a href="http://equalexchange.coop/fair-trade">http://equalexchange.coop/fair-trade</a>



Fair for Life

Standards by: Fair for Life

Certification standard for Fair Trade and responsible supply-chains

Fair for Life promotes an approach of Fair Trade that allows all producers and workers who are at a socio-economic disadvantage to access a wider range of social and economic benefits. Fair Trade is part of a broader context of sustainable development within a region that safeguards and supports the local social fabric, particularly in rural settings. These principles hold true equally well in the Global South as the Global North

and apply throughout the whole supply chain covering producers, traders, manufacturers and brand holders.

#### Fair For Life advantages:

- The possibility to recognize other schemes that can be complementary, enabling synergies and a wider sourcing
- An independent third-party certification
- An internationally recognized programme, based on key baseline reference standards (International definitions of Fair Trade, ISO 26000. ILO conventions, social criteria of IFOAM, etc.)
- An approach of continuous improvement, and the possibility to assess overall performance with regards to fair trade
- The ability to source Fair Trade ingredients from any country (South &

Certifying Agency: Approved Third-party Inspectors for Fair for Life

**Source:**http://www.fairforlife.org/pmws/indexDOM.php?client\_id=fairforli fe&page id=home



Fair Labor Association

Standards by: Fair Labor Association

FLA Participating Companies and Participating Suppliers commit to promoting and complying with international labor standards throughout their supply chains. When Participating Companies and Participating Suppliers sign on, they agree to a two- or three-year implementation schedule, during which they work toward bringing their supply chains into substantial compliance with the FLA Workplace Code of Conduct. At the end of the implementation period, FLA evaluates whether or not the company can be considered for accreditation. To become accredited, companies are assessed on the basis of fulfillment of the Principles of Fair Labor & Responsible Sourcing (for brands) or the Principles of Fair Labor & Responsible Production (for suppliers), which include:

Adopting and communicating workplace standards;

Training staff to assess and remediate noncompliance issues;

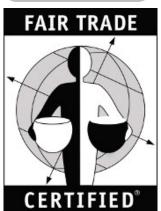
Conducting internal assessments of facilities; and

Providing workers with confidential reporting channels.

Certifying Agency: The FLA does not offer certification, and does not accredit brands or factories. Rather, FLA specifically accredits a company's compliance program to indicate the presence of systems and procedures required for successfully upholding fair labor standards throughout brands' supply chains.

**Source:** http://www.fairlabor.org/accreditation





# Fair Trade Certified

Standards by: Fair Trade USA

Fair Trade USA's standards aim to bring our mission of empowerment, economic development, social development and environmental stewardship to farmers, fishers and workers around the world.

Our approach to certification enables diverse producers across a range of commodities to participate and compete in international markets in ways that are fair and equitable today and help them to progress and acquire greater business capacity over time. We also continue to recognize FLO-CERT certification.

Fair Trade USA continuously works to improve our standards and has recently completed a review of our agricultural standards.

Fair Trade USA's standards will allow the many different producers of agricultural commodities to participate and compete in

international markets in ways that are fair and equitable today and help them to progress and acquire greater business capacity over

time.

Principles:

- Empowerment
- Economic Development
- Social Responsibility
- Environmental Stewardship

Certifying Agency: Approved Third-party Inspectors for Fair Trade USA

**Source:** http://fairtradeusa.org/certification/standards



#### Fair Trade Federation

Standards by: Fair Trade Federation and World Fair Trade Organization

The Fair Trade Federation Principles have been created using the global principles of the World Fair Trade Organization (WFTO) as their foundation. The Fair Trade Federation and the World Fair Trade Organization recognize and uphold each other's principles, and work together as allied organizations to promote greater equity in international trade. Fair Trade Federation members fully commit to the following principles in all of their transactions.

Fair Trade Federation Principles:

 Create Opportunities for Economically and Socially Marginalized Producers

- Develop Transparent and Accountable Relationships
- Build Capacity
- Promote Fair Trade
- Pay Promptly and Fairly
- Support Safe and Empowering Working Conditions
- Ensure the Rights of Children
- Cultivate Environmental Stewardship
- Respect Cultural Identity

**Certifying Agency:** Fair Trade Federation and World Fair Trade Organization

**Source:** <a href="http://www.fairtradefederation.org/fair-trade-federation-principles/">http://www.fairtradefederation.org/fair-trade-federation-principles/</a>



Fair Trade Proof

**Standards by:** Fair Trade Proof is a cooperative rather than certification process

We are a cooperative of independent roasters committed to Fair Trade as a long-term partnership between farmers and roasters. Paying a fair price is just the beginning of this relationship. Our trade model includes prefinancing, sharing information, and working together for higher quality coffee. Transparency makes fairness possible because it makes hiding the truth impossible.

**Certifying Agency:** No certification process cooperative of Fair Trade Farmers and Roasters

**Source:** <a href="http://www.fairtradeproof.org/">http://www.fairtradeproof.org/</a>



FairWild

Standards by: FairWild

FairWild certification means that buyers - from ingredient traders up to consumers - know they are dealing with legally and sustainably harvested products. They are fair traded, meaning that the benefits are felt by all those involved, right down to the local communities harvesting the wild plants.

FairWild certification is a third-party audited system, requiring annual onsite visits by authorized certification bodies. Over a five year period, the certified operations demonstrate their commitment to the FairWild Principles and Criteria, putting in place the building blocks of a sustainability system and meeting increasing requirements year-on-year.

FairWild certification means that buyers - from ingredient traders up to consumers - know they are dealing with legally and sustainably harvested

products. They are fair traded, meaning that the benefits are felt by all those involved, right down to the local communities harvesting the wild plants.

FairWild certification is a third-party audited system, requiring annual onsite visits by authorized certification bodies. Over a five year period, the certified operations demonstrate their commitment to the FairWild Principles and Criteria, putting in place the building blocks of a sustainability system and meeting increasing requirements year-on-year.

**Certifying Agency:** Institute for Marketecology (IMOswiss AG), Switzerland. Audits are available through the international network of offices. IMOswissAG is part of the ECOCERT Group.

Source: <a href="http://www.fairwild.org/">http://www.fairwild.org/</a>



Fairtrade International

Standards by: Fairtrade International

Fairtrade Standards are designed to support the sustainable development of small producer organizations and agricultural workers in the poorest countries in the world.

The key objectives of the standards are to:

- Ensure that producers receive prices that cover their average costs of sustainable production;
- Provide an additional Fairtrade Premium which can be invested in projects that enhance social, economic and environmental development;
- Enable pre-financing for producers who require it;
- Facilitate long-term trading partnerships and enable greater producer control over the trading process;
- Set clear core and development criteria to ensure that the conditions of production and trade of all Fairtrade certified products are socially, economically fair and environmentally responsible.

**Certifying Agency:** Approved Third-party Inspectors for Fairtrade International

**Source:** https://www.fairtrade.net/standards.html



Hand in Hand Organic Rapunzel FairTrade

Standards by: Hand in Hand

HAND IN HAND combines the idea of certified organic products with fair trade. Long-term and guaranteed trade relationships provide new future prospects for our farmers and best organic quality for our customers. RAPUNZEL started the HAND IN HAND project in 1987 with one trade partner – the El Ceibo cooperative. Today, the HAND IN HAND group has grown to 18 partners. They supply us with 12 important fair trade raw materials.

A long-term cooperation based on trust, a continuous exchange of information, personal visits and sustained quality controls guarantees the excellent standard of our products. Inspection by independent external certification bodies provides additional assurance.

- Direct and long term trade relationships which ensure fair prices
- Safe and healthy working conditions, fair wages
- Social security for and humane treatment of the employees / workers
- Physical and documented traceability of the product flow:
- from the farmer to the final product
- Transparency in business activity; Flow of information:
- within the partner organization from and to Rapunzel Naturkost HAND IN HAND Fund

Certifying Agency: Approved Third-party Inspectors for Hand in Hand

**Source:** http://www.rapunzel.de/uk/handinhandprojekt.html



World Fair Trade Organization

Standards by: World Fair Trade Organization

Our brand: a credible Guarantee System that adheres to the goals of Fair Trade - trade that delivers sustainable livelihoods and just economy, and helps Fair Trade Organizations, especially small producers, escape from marginalization.

The injustices in conventional trade stem from the imbalances of power in the international negotiating table and supply chain. Small, disadvantaged producers are discriminated by large, influential players. The discrimination leaves many producers marginalized and unable to work their way out of poverty.

WFTO and its members believe that trade should work for people and the environment, and not at their expense. The 10 Principles of Fair Trade are the fundamental philosophies established by WFTO members to guide their

practices. WFTO prescribes these Principles to organizations as a way of fighting against trade injustices and discrimination.

**Certifying Agency:** Approved Third-party Inspectors for World Fair Trade Organization

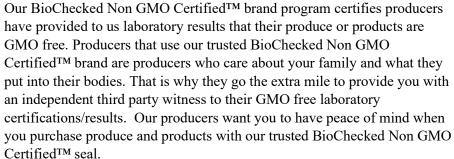
Source: <a href="https://www.wfto.com/standard-and-guarantee-system">https://www.wfto.com/standard-and-guarantee-system</a>

# Geneticly Modified Organisms





Standards by: BioChecked





We allow these same producers and manufacturers to participate in the BioChecked Non GMO Certified<sup>TM</sup> program by having their produce, seeds, feed and processed foods tested by leading, independent, genetic testing laboratories. Once their products meet and maintain our standards/threshold we allow these producers to put our BioChecked Non GMO Certified<sup>TM</sup> brand on their marketing and product labels.

\*BioChecked Non GMO Certified<sup>TM</sup> Threshold/Standards

Threshold -

0.1% – seed

0.5% – human food, ingredients, supplements, personal care products, and other products that are either ingested or used directly on skin

0.8% – animal feed and supplements

Certifying Agency: Approved Third-party Inspectors for BioChecked

**Source:** http://biochecked.com/non-genetically-engineered-certified/



**GMO** Guard Natural Food Certifiers

Standards by: Natural Food Certifiers

The GMO Guard Program has a tolerance level for the accidental presence GMOs of 0.05%, and requires firms to maintain their facilities in a manner that minimizes cross contamination and provide assurances that their suppliers are doing the same. The programs also requires employees to receive documented training in NFC's GMO Guard Program.

**Certifying Agency:** Approved Third-party Inspectors for Natural Food Certifiers

Source: http://www.nfccertification.com



No GMO Ingredients Nestle

Standards by: SGS

The SGS NO GE Ingredients Supply Chain Process Verification Standard (US Version) helps to verify the process of preparing non-genetically engineered (non-GE) ingredients, food and beverage and/or pet food products for sale in the US.

The standard has been developed by SGS, the world's leading inspection, verification, testing and certification company. It can be used by any ingredient, food or pet food manufacturer, vendor, transport and storage provider to confirm that their processes assure that their products are non-GE and are properly separated from GE products.

**Certifying Agency: SGS** 

Source: http://campaigns.sgs.com/en/no-gmo/the-sgs-standard

http://www.nestleusa.com/about-us/gmo



No GMO Ingredients Tribeca Oven

**Standards by:** EU regulations concerning non-GMO, including Directive 2001/18/EC and regulations 1829/2003 and 1830/2003

Premium, artisan bread products earn approval from Non -GMO certifying body, SGS Tribeca Oven, Inc., artisan bread manufacturer, has been assessed and certified as meeting the requirements of no genetically engineered ingredients supply chain process verification standard as of March 22, 2017 by SGS. Certifying body, SGS (http://www.sgs.com/) is an approved laboratory for the US's Non-GMO Project, a non-profit organization committed to preserving and building the Non-GMO food supply, educating consumers, and providing verified Non-GMO choices.

Tribeca Oven's commitment to producing all natural bread products laid the groundwork for this extensive process to be successfully completed. Tribeca Oven's custom seal will serve as a reminder to customers of our commitment to Non-GMO ingredients.

**Certifying Agency: SGS** 

**Source:** https://tribecaoven.com/non-gmo-announcement-april-27-2017/



Non GMO Certified by NSF

Standards by: NSF and EU and Vermont GMO labeling requirements

NSF Non-GMO True North was created to assure the integrity of GMO claims and to grow the breadth and diversity of non-GMO/GE verified products sold at retail, and non-GMO certified ingredients sold throughout the supply chain. True North incorporates elements from the EU and Vermont GMO labeling requirements and pulls best practice from commonly used leading food safety standards.

The basic tenets of the NSF Non-GMO True North program are consistent with other compliance verification programs – segregation, traceability, supplier approval, monitoring and testing. Additionally, to ensure consumer confidence and transparency, NSF Non-GMO True North requires risk assessment-based unannounced audits, unannounced chain of custody sampling and independent testing. It also requires manufacturers to perform routine testing.

Tolerance levels are in place which account for the realities of the broader supply chain risks and limitations, ensuring that a market exists to allow more businesses to enter the non-GMO field in order to meet the growing consumer demands worldwide and driving continuous improvement in the supply of non-GMO agricultural value added product.

True North provides an exacting direction for producers, including ranchers, farmers, processors and manufacturers, to use as a guide for their practices. True North standards require:

- Finished products with less than 0.9 percent GE content (5 percent for feed)
- Lifecycle feed requirements Upon weaning or first feed following birth
- Dairy Milk cows fed non-GMO feed a minimum 30 days prior to first certified milking and thereafter
- Risk-based testing requirements (validated testing method like PCR, ELISA, etc.)

- Annual audit (risk-based desk versus onsite)
- No cloned animals
- Compliance management system with risk assessment

Certifying Agency: NSF

**Source:** http://www.nsf.org/services/by-industry/food-safety-quality/label-claims/gmo-transparency



Non GMO Project Verified Standards by: Non GMO Project

The goal of the Standard is to assist farmers, processors and manufacturers in avoiding GMO contamination by providing consistency of definitions and methodology for investigating source materials, testing high-risk ingredients, and building identity preservation practices into the supply chain. The Standard seeks to balance meaningful change in the supply chain with achievable results for industry. High-risk crops and ingredients derived from those crops are identified in the Standard, as well as a list of monitored GMOs that have not yet reached the marketplace. Analytical testing of high-risk raw material is done at critical points in the supply chain to verify that GMO contamination is below the applicable action threshold:

- Seed and other propagation materials: 0.25%
- Human food and products ingested or used directly on skin: 0.9%
- Cleaning products, textiles, and products not ingested or used directly on skin: 1.5%
- Animal feed and supplements: 5%

Incidents where the action threshold is exceeded unknowingly or unintentionally will result in corrective actions to identify the cause of contamination and eliminate it. Failure to resolve corrective actions may lead to loss of verification. The Standard requires continuous improvements until the long-term action thresholds and overarching goals of the Project are achieved on a consistent basis.

**Certifying Agency:** Approved Third-party Inspectors for Non GMO Project

**Source:** https://www.nongmoproject.org/product-verification/the-standard/



ProTerra Certified Sustainability Non-GMO

Standards by: ProTerra

The Standard covers all the important challenges relating to large-scale production of agricultural commodities along the whole value chain and covers the following key components:

Protection of the Amazon and other High Conservation Value Areas

Good labor practices including workplace safety, equal opportunities, protection of children and absence of forced or analogous forms of labor.

Protection of the rights of communities, indigenous people, and small holders. Good Agricultural Practices regarding soil fertility, water management and reduced input of fertilizers and pesticides

Rigorous Non-GMO requirements (<0.1% to adventitious 0.9% GMO maximum)

The ProTerra Standard v3.0 is applicable for all agricultural commodities worldwide, providing compliance with environmental and social criteria as well as Health and Safety Regulations.

The Certification Protocol together with the ProTerra Standard forms the ProTerra Certification Scheme. In the Certification Protocol technical requirements with regard to the accreditation criteria of certification bodies, requirements for auditors and general requirements for audits such as duration, frequency, sampling methodology and integration of risk assessment are detailed.

Certifying Agency: Approved Third-party Inspectors for ProTerra

**Source:** http://www.proterrafoundation.org/the-standard/

#### Gluten-Free



Gluten-Free Certification Program (GFCP)

Standards by: Gluten-Free Certification Organization

GFCO requires that all finished products using the GFCO Logo contain 10ppm or less of gluten. All ingredients utilized in GFCO certified products are required to go through a stringent review process of approval. All ingredients must contain 10ppm or less of gluten.

Barley-based ingredients are not allowed in GFCO certified products

GFCO requires ongoing testing of finished products and high-risk raw materials and equipment. All manufacturing plants producing GFCO

certified products undergo, at minimum, an annual inspection and are required to submit finished product testing on a regular basis for the GFCO for review. Compliance with all government regulations for allergens, gluten-free labeling and Good Manufacturing Practices is required.

GFCO is not a substitution for meeting the legal requirements set by a government. GFCO standard is stricter than Codex, USA, Canada, the EU and many other country standards for labeling products gluten-free.

Certifying Agency: Gluten-Free Certification Organization

**Source:** <a href="http://www.gfco.org/get-certified/standards/">http://www.gfco.org/get-certified/standards/</a>



Gluten-Free Certification Program (GFCP)

**Standards by:** U.S. Food and Drug Administration (FDA) & Gluten-Free Certification Program (GFCP)



The FDA defines the term "gluten-free" and "gluten" for voluntary food labeling and standardizes the meaning of "gluten-free" claims across the food industry. The term "gluten" refers to proteins that occur naturally in wheat, rye, barley and cross-bred hybrids of these grains. The USFDA requires facilities and distributors recognize that the levels in gluten-free foods must be managed to use the term "gluten-free" on labels and to meet the definition, including that the food must contain less than 20 parts per million of gluten. The rule also requires foods with the claims "no gluten," "free of gluten," and "without gluten" to meet the definition for "gluten-free." There is provision to add specially processed gluten-sourced ingredients if they have been rendered to be themselves as well as the finished product to be <20 ppm using the appropriate laboratory tests.

**Certifying Agency:** Gluten-Free Certification Program (GFCP)

**Source**: http://www.glutenfreecert.com/resources/gluten-free-regulations



Gluten-Free Product Certification

Standards by: Association Of European Coeliac Societies

Consisting of, or made only from, one or more ingredients which do not contain wheat (i.e. all Triticum species, such as durum wheat, spelt, and khorasan wheat, which is also marketed under different trademarks such as KAMUT), rye, barley, oats\* or their crossbred varieties, and the gluten level does not exceed 20 mg/kg in total, based on the food as sold or distributed to the consumer.

and/or consisting of one or more ingredients from wheat (i.e. all Triticum species, such as durum wheat, spelt, and khorasan wheat, which is also

marketed under different trademarks such as KAMUT) rye, barley, oats\* or their crossbred varieties, which have been specially processed to remove gluten, and the gluten level does not exceed 20 mg/kg in total, based on the food as sold or distributed to the consumer.

**Certifying Agency:** To be certified you must test all of the products you wish to certify at least once annually using a United Kingdom Accreditation Service (UKAS) or equivalently accredited laboratory.

**Source:** https://www.coeliac.org.uk/food-industry-professionals/the-crossed-grain-symbol/



National Celiac Association Certified Gluten Free **Standards by:** U.S. Food and Drug Administration (FDA) & National Celiac Association

National Celiac Association values your participation in the Gluten-Free Recognition Seal Program. By displaying the Recognition Seal on your website and products, your customers are assured they are choosing a product, which has undergone the most stringent third-party gluten-free certification available for product, processing and packaging.

**Certifying Agency:** National Celiac Association & approved third-party inspectors

**Source:**https://www.google.com/url?q=https%3A%2F%2Fwww.nationalce liac.org%2Fresources%2Fgluten-free-recognition-seal-program%2F&sa=D



National Celiac Association Certified Gluten Free **Standards by:** U.S. Food and Drug Administration (FDA) & National Science Foundation

To earn gluten-free certification under this program, companies must have a gluten-free compliance plan and undergo onsite inspections of their production and handling facilities. During the onsite audit, accredited inspectors collect a random sample of each product for testing to confirm gluten-free integrity of 20 parts per million (ppm) or less. In addition, the inspector verifies that the company is conducting the appropriate raw ingredient testing or that raw ingredients are being sourced from an NSF International certified gluten-free supplier.

The onsite audit requirement also helps verify that product manufacturers and handlers have procedures to prevent contamination and commingling, which is critically important for those with gluten allergies and gluten-intolerance. Like with all NSF International certification programs, monitoring for ongoing compliance with the standard is an essential part of

certification and includes annual manufacturing facility inspections and product testing.

Certifying Agency: National Science Foundation

**Source:** <a href="http://www.nsf.org/consumer-resources/what-is-nsf-certification/gluten-free-certification">http://www.nsf.org/consumer-resources/what-is-nsf-certification/gluten-free-certification</a>

#### Grassfed

#### American Grassfed

Standards by: American Grassfed

AGA Grassfed Standards for meat and dairy have been developed by a team of animal scientists, veterinarians, ranchers, and range management specialists. They concentrate on four main areas of production:

Diet — Animals are fed only grass and forage from weaning until harvest. Confinement — Animals are raised on pasture without confinement to feedlots.

Antibiotics and hormones — Animals are never treated with antibiotics or growth hormones.

Origin — All animals are born and raised on American family farms. AGA's standards apply to ruminant animals only — beef, bison, goat, lamb and sheep. AGA-Certified producers are audited annually by independent, third parties to ensure continuing compliance with the standards. Only AGA-Certified members are permitted to use the AGA logo, trademark, or other identifying marks on their packaging, marketing materials, or web sites.

**Certifying Agency:** Approved Third-party Inspectors for American Grassfed

**Source:** <a href="http://www.americangrassfed.org/about-us/our-standards/">http://www.americangrassfed.org/about-us/our-standards/</a>



American

#### Certified Grassfed by a Greener World

**Standards by:** The Certified Grassfed by A Greener World (AGW) standards are an optional addition to the Animal Welfare Approved (AWA) beef and dairy cattle, meat and dairy sheep, meat and dairy goat and bison standards. These standards do not stand alone and cannot be applied in isolation. In order for animals to be approved as Certified Grassfed by AGW they must also be approved under the AWA species specific standards.

If grain or other products prohibited under the Certified Grassfed Standards have been fed in order to maintain the health and welfare of some animals within the Certified Grassfed herd or flock; it may be possible to maintain Certified Grassfed status on other, fully grassfed animals in the herd or flock, providing the following conditions are met:

- The farm is open about the fact that some animals have been fed non-forage feed i.e. it is not something the auditor discovers at audit.
- Records of the animals fed the non-forage feed are maintained
- The animals fed non-forage feeds can be clearly identified (this may be by identification mark, numbered tag etc. or it could be by managing the animals in separate areas of the farm)
- No animals or products from the animals fed non-forage feeds are marketed as Certified Grassfed by AGW
- AGW is provided with details of the number of animals that are not compliant with the Certified Grassfed by AGW standards (this can be recorded at audit

Certifying Agency: Approved Third-party Inspectors for A Greener World

**Source:** <a href="https://animalwelfareapproved.us/wp-content/uploads/2017/03/Certified-Grassfed-by-AGW-standards-2017-v1.pdf">https://animalwelfareapproved.us/wp-content/uploads/2017/03/Certified-Grassfed-by-AGW-standards-2017-v1.pdf</a>



Food Alliance Certified Grassfed

Standards by: Food Alliance

All livestock production methods used must meet or exceed Level 3 in each of the standards areas of the Food Alliance Whole Farm/ Ranch evaluation criteria and the relevant Food Alliance livestock production evaluation criteria. All records, including affidavits, must be maintained and available for inspection for 36 months after animal is sold or harvested. All animals are on range, pasture, or in paddocks for their entire lives. Animals may not be confined in pens, feedlots or other areas where forages or crops are not grown during the growing season. Animals cannot be confined to shortterm holding pens for more than 30 days per calendar year. Animals in short-term confinement may be fed stored or green chopped forages. Animals are not fed grain or grain byproducts. Roughage byproducts such as cottonseed hulls, peanut hulls, almond hulls and other roughage products (which are high in fiber) or listed as roughage products by the AAFCO are permitted. Consumption of seeds naturally attached to herbage, forage and browse is considered incidental and is acceptable. Producer Verified that animals have not grazed grain crops or pulse crops containing mature seeds. Additional requirements available from the Food Alliance.

Certifying Agency: Approved Third-party Inspectors for Food Alliance

**Source:** <a href="http://foodalliance.org/livestock-producers/">http://foodalliance.org/livestock-producers/</a>



Northeast Organic Farming Association of New York Certified Grass Fed

**Standards by:** Northeast Organic Farming Association of New York

As a farmer, you may have noticed a new labeling term popping up on store shelves in the meat and dairy departments: "grass fed" or "100% grass fed." Grass fed products are produced from animals only allowed to eat grass and forages, reducing or eliminating the feeding of grains. The grass fed term is currently not regulated by the federal government except in the case of meat production. However, there are certification agencies that have developed their own certification programs and regulations to allow for third-party verification of the labeling term.

Under the NOFA-NY Certified 100% Grass Fed program, animals are not allowed to be fed grain or grain by-products at any time in their lives. Only grass and forages are allowed, with the exception of milk for calves prior to weaning. Beef animals must never have been fed grain. Dairy animals require a 90-day transition to grass fed production before their milk is considered grass fed.

**Certifying Agency:** Approved Third-party Inspectors for Northeast Organic Farming Association of New York

**Source:** <a href="https://www.nofany.org/resources/farmers-and-gardeners/certified-grass-fed">https://www.nofany.org/resources/farmers-and-gardeners/certified-grass-fed</a>



PCO 100% Grassfed Certified

**Standards by:** PCO 100% Grassfed and USDA National Organic Programs

The PCO 100% Grassfed certification program establishes an optional additional certification scope for operations that are certified organic under the USDA National Organic Program regulations. The program standards apply to producers of ruminant livestock and to handlers of meat and dairy products derived from ruminant livestock.

PCO developed the PCO 100% Grassfed certification program in response to membership interest in third-party verification of food products that are sourced from pasture. Throughout the development process, every effort was made to assure the quality and integrity of the standard. The standards were developed by the PCO Standards Committee through research of existing private certification programs, consultations with industry professionals, and information from scientific publications. Members also

had an opportunity to provide comments and feedback prior to finalizing the standard.

Certifying Agency: Approved Third-party Inspectors for PCO

Source: <a href="https://www.paorganic.org/grassfed">https://www.paorganic.org/grassfed</a>



USDA Grass Fed Program for Small and Very Small (SVS) Producers

Standards by: USDA

The USDA Grass Fed Program for Small and Very Small (SVS) Producers was designed to create opportunities for small-scale livestock producers who would like to have their ruminant animals certified as grass fed. This program, is designed for producers who market 49 cattle or less each year or lambs produced from 99 ewes or less.

This program requires that ruminant animals be fed only grass and forage, with the exception of milk consumed prior to weaning. Animals certified under this program cannot be fed grain or grain by-products and must have continuous access to pasture during the growing season.

Approved producers must be listed on this website; each will minimally include the name of the farm or ranch, and the approval date.

AMS reviews a producer's application and detailed farm/ranch plan. If the information is sufficient, AMS approves the producer and the cattle and/or sheep as meeting the requirements of the USDA Grass Fed Program for Small and Very Small (SVS) Producers. Producers certified under this program receive a certificate that allows them to market cattle and sheep as USDA Certified grass-fed.

Certifying Agency: USDA Agricultural Marketing Service

**Source:** <a href="https://www.ams.usda.gov/services/auditing/grass-fed-SVS">https://www.ams.usda.gov/services/auditing/grass-fed-SVS</a>

#### **Integrated Pest Managment**



AvoGreen Assured **Standards by:** AvoGreen

AvoGreen is a responsible and auditable avocado production system which uses the principles of Integrated Pest Management (IPM), an internationally recognized approach, to ensure pesticides are used only when needed. AvoGreen is a requirement of export and all Growers must be AvoGreen compliant in order for their crop to be exported.

Certifying Agency: Approved Third-party Inspectors for AvoGreen

Source: http://industry.nzavocado.co.nz/industry/avogreen.csn



Responsible Choice Standards by: Stemilt

Responsible Choice® is Stemilt's sustainability and social responsibility program. Stemilt founder Tom Mathison launched the program in 1989, long before sustainability was a buzzword. That same year, he transitioned a large number of acres to organic production, and began implementing integrated pest management techniques in orchards to reduce pesticide use.

Tom was a farmer first and foremost, and strongly believed it was Stemilt's job to make the responsible choice when producing apples, pears, cherries and summer fruits.

Three Areas of Responsibility:

From fueling orchards with world-famous compost to providing employees and their dependents with access to a free, on-site health clinic, we focus on three areas of responsibility for program initiatives:

Social Responsibility Efforts – our employees power our business and help make our fruits famous

Sustainability at Our Orchards – we must care for the land and natural resources we rely on to grow fruit

Sustainability in Our Packing Facilities – we must look for efficiencies that ensure Stemilt will be a sustainable business for future generations to come.

**Certifying Agency:** Approved Third-Party Inspectors for Responsible Choice®

**Source:** https://www.stemilt.com/about-us/responsible-choice/

#### **Manufacturing Practices**



Bonsucro Better Sugar Cane Initiative

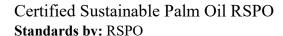
Standards by: Bonsucro

Bonsucro is a global multi-stakeholder non-for-profit initiative dedicated to reducing the environmental and social impacts of sugarcane production while recognizing the need for economic viability. The mission of Bonsucro is to achieve a sugarcane sector that is continuously improving and verified as sustainable by acting collaboratively within the sector and working to continuously improve the three pillars of sustainability: economic, social and environmental viability. Bonsucro aims to achieve this mission through providing the definition for sustainable sugarcane and all sugarcane derived products through a multi-stakeholder approach. Bonsucro also aims at ensuring the integrity of the implementation of the Bonsucro Production Standard, through the

implementation of the Certification Protocol.

Certifying Agency: Approved Third-party Inspectors for Bonsucro

**Source:** <a href="http://www.bonsucro.com/en/production-standard/">http://www.bonsucro.com/en/production-standard/</a>





Palm oil producers are certified through strict verification of the production process to the stringent RSPO Principles & Criteria for Sustainable Palm Oil Production by accredited Certifying Bodies, and can be withdrawn at any time in case of infringement of the rules and standards. All organizations in the supply chain that use RSPO certified sustainable oil products are audited to prevent overselling and mixing palm oil with conventional (or non-sustainable) oil palm products. These organizations can claim the use of RSPO certified sustainable oil palm products "on pack" by using the RSPO Trademark.

Elements of the RSPO certification scheme

Standard: This sets out the requirements which must be met and against which certification assessments are made. The RSPO Standard is the RSPO Principles and Criteria. Supply chain actors are audited against the RSPO Supply Chain Certification Standard.

Accreditation: This is to ensure that the organizations which undertake certification assessment — the Certification Bodies — are competent to undertake credible, consistent audits.

Certifying Agency: Approved Third-party Inspectors for RSPO

**Source:** <a href="http://www.rspo.org/certification">http://www.rspo.org/certification</a>



Certified Vegan

Standards by: Vegan Awareness Foundation

The Certified Vegan Logo is a registered trademark, similar in nature to the kosher mark, for products that do not contain animal products or byproducts and that have not been tested on animals. The certified logo is easily visible to consumers interested in vegan products and helps vegans to shop without constantly consulting ingredient lists. It also helps companies recognize a growing vegan market, as well as bringing the word Vegan—and the lifestyle it represents—into the mainstream. (Please keep in mind, however, that the logo is not yet on every vegan product.) The Certified Vegan Logo is currently on thousands of products manufactured by over 700 companies.

The Certified Vegan Logo is administered by the Vegan Awareness Foundation (official name of Vegan Action), a 501(c)3 nonprofit organization dedicated to educating the public about veganism and assisting vegan-friendly businesses.

Dietary Notes: By ingredients, Certified Vegan products are dairy-free/non-dairy, egg-free, and vegan. However, for those with food allergies, please check with the company on their manufacturing processes for all varieties if potential allergen cross-contamination is an issue for you. Many companies that make vegan products are using shared machinery.

Certifying Agency: Approved Third-party Inspectors for Vegan

Awareness Foundation

Source: <a href="https://vegan.org/certification/">https://vegan.org/certification/</a>



Round Table on Responsible Soy (RTRS) **Standards by:** Round Table on Responsible Soy

The RTRS Standard for Responsible Soy Production was created thanks to the effort of players such as producers, industry, and civil society, involved in the soy value chain, who were able to discuss and reach consensus on a series of Principles and Criteria for certifying soy as a responsible crop. The pillars of the RTRS Standard of Production are:

- Legal Compliance and Good Business Practices
- Responsible Labor Conditions
- Responsible community Relations
- Environmental Responsibility
- Good Agricultural Practices

**Certifying Agency:** Approved Third-party Inspectors for Round Table on Responsible Soy

**Source:** <a href="http://www.responsiblesoy.org/about-rtrs/about-us/?lang=en">http://www.responsiblesoy.org/about-rtrs/about-us/?lang=en</a>



#### WindMade

Standards by: WindMade

The WindMade Product Label can be applied to all products using a minimum share of 75% of renewable energy in their total electricity consumption, with wind power representing the largest share. A cradle-togate approach was adopted, which means that the label will cover the entire power consumption for all product components, from the extraction of the raw materials all the way to the product leaving the factory gate. From now on, companies can apply for displaying the WindMade label on individual products.

**Certifying Agency:** Approved Third-party Inspectors for WindMade **Source:** http://www.windmade.org/labeling-program.aspx

### Meat & Poultry



Accepted as Specified

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

Under the certification service, meat, poultry and egg products are officially accepted as specified by AMS employees according to detailed specification requirements. These services ensure that volume buyers receive products that meet their specifications and comply with contractual

requirements. These services also fill various market niches requiring export certification or various foreign country requirements.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed grader

**Source:** https://www.ams.usda.gov/grades-standards/beef/shields-and-marbling-pictures



Beef Grades Prime, Choice, and Select

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

Prime beef is produced from young, well-fed beef cattle. It has slightly abundant marbling (the amount of fat interspersed with lean meat), and is generally sold in upscale restaurants. View the marbling images for Moderately Abundant (jpg) and Slightly Abundant (jpg)

Choice beef is high quality, but has less marbling than Prime. It has at least a Small amount of marbling. View the marbling images for <u>Moderate</u> (jpg), <u>Modest (jpg)</u> and <u>Small (jpg)</u>

Select beef is very uniform in quality and normally leaner than the higher grades. It is fairly tender, but because it has less marbling, it may lack some of the juiciness and flavor of the higher grades. It has at least a Slight amount of marbling. View the marbling image for Slight (jpg).

Standard and Commercial Standard and Commercial grades of beef are frequently sold as ungraded or as store brand meat. Utility, Cutter, and Canner grades of beef are seldom, if ever, sold at retail. Instead they are used to make ground beef and processed products.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed grader

**Source:** https://www.ams.usda.gov/grades-standards/beef/shields-and-marbling-pictures



Certified Angus Beef®

Standards By: Certified Angus Beef®

To earn the *Certified Angus Beef* brand name, cattle must first be Angus-influenced, with a predominantly black coat. Then, beef must pass our 10 exacting specifications:

Marbling and Maturity

1. Modest or higher marbling – for the taste that ensures customer satisfaction

- 2. Medium or fine marbling texture the white "flecks of flavor" in the beef that ensure consistent flavor and juiciness in every bite
- 3. Only the youngest classification of product qualifies as "A" maturity for superior color, texture and tenderness

**Consistent Sizing** 

- 4. 10- to 16-square-inch ribeye area
- 5. 1,050-pound hot carcass weight or less
- 6. Less than 1-inch fat thickness

Quality Appearance and Tenderness

- 7. Superior muscling (restricts influence of dairy cattle)
- 8. Practically free of capillary ruptures (ensures the most visually appealing steak)
- 9. No dark cutters (ensures the most visually appealing steak)
- 10. No neck hump exceeding 2 inches (safeguards against cattle with more variability in tenderness)

Source: <a href="https://www.certifiedangusbeef.com/brand/specs.php">https://www.certifiedangusbeef.com/brand/specs.php</a>

Inspection mark on raw meat, Inspection mark on raw poultry, and Inspection mark on Processed products

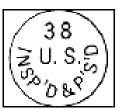
Standards by: U.S. Department of Agriculture (USDA)

Every establishment is required to reassess the adequacy of its HACCP plan at least annually and whenever any changes occur that could affect its hazard analysis or alter its HACCP plan. The establishment may reassess its HACCP plan, or plans, any time during the calendar year to meet the annual reassessment requirement.

Meat that has been federally inspected and passed for wholesomeness is stamped with a round purple mark. The dye used to stamp the grade and inspection marks onto a meat carcass is made from a food-grade vegetable dye and is not harmful. (The exact formula is proprietary/owned by the maker of the dye.) The mark is put on carcasses and major cuts. After trimming, the mark might not appear on retail cuts such as roasts and steaks. However, meat that is packaged in an inspected facility will have an inspection mark which identifies the plant on the label.

**Certifying Agency:** Food Safety and Inspection Service (FSIS)

**Source:** <a href="https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/production-and-inspection/inspection-and-grading-of-meat-and-poultry-what-are-the-differences/inspection-and-grading-differences/inspec









Poultry Grade Shield

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

USDA poultry grading is a voluntary service paid for by poultry producers. As an independent third party, USDA is recognized for assuring that poultry meet the U.S. grade standards. While there are other grades, Grade A is the most common grade sold in supermarkets. What makes poultry products qualify for Grade A depends on the absence of "defects," such as the presence of feathers or bruising and discoloration. As poultry is graded, it either meets Grade A criteria for quality or it is downgraded to lesser grades (B &C) depending on the number of defects.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally licensed Inspector

 $\textbf{Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \\ \underline{belFactsheet.pdf}$ 



**Process Control Certification Program** 

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

This program is intended to add value to processed, donated red meat commodities through audit based process control. One AMS agent per shift will be required to monitor the PCCP operations of the entire production facility. The PCCP emblem may be used in advertising and promotional literature for finished goods distributed to States or State school systems, as well as commercial products produced with AMS Verification.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed grader

**Source:** https://www.ams.usda.gov/grades-standards/beef/shields-and-marbling-pictures



**Process Verified Program** 

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

Built upon the ISO 9001 Quality Management Systems Standard, Process Verified Programs (PVP) involve a comprehensive quality management system review, which allow companies to market their products using the USDA PVP shield. The PVP allows companies to develop their own marketing claims, such as a feeding claim, or use an established standard such as Never Ever 3 (never ever given hormones, antibiotics, or animal byproducts).

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed grader

**Source:** https://www.ams.usda.gov/grades-standards/beef/shields-and-marbling-pictures



Safe Handling Instructions

Standards by: U.S. Department of Agriculture (USDA)

The requirements in the "Pathogen Reduction; Hazard Analysis and Critical Control Point (HACCP) Systems" final rule are designed to minimize the likelihood of harmful bacteria contaminating raw meat and poultry products. However, some bacteria could be present and might become a problem if meat and poultry are not handled safely. To assist food handlers, the USDA requires that safe handling instructions be put on all packages of raw and not fully cooked meat and poultry

**Certifying Agency:** Food Safety and Inspection Service (FSIS)

**Source:** <a href="https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/production-and-inspection/inspection-and-grading-of-meat-and-poultry-what-are-the-differences/inspection-and-grading-differences/inspec



Tender & Very Tender Shields

Standards By: United States Department of Agriculture, Agriculture Marketing Service (AMS)

USDA Certified Tender or Very Tender is a marketing program that aids consumers in making decisions on which beef cuts to purchase, and allows beef processors to market products as USDA Certified Tender or Very Tender. In order to become qualified to carry the Tender or Very Tender label, wholesalers or retailers are required to have certain beef muscles pass a slice shear force test that determines the tenderness of the muscle and associated muscles.

Certifying Agency: United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed grader

Source: https://www.ams.usda.gov/grades-standards/beef/shields-andmarbling-pictures





Voluntary Federal Inspection

Standards by: U.S. Department of Agriculture (USDA)

Voluntary Federal Inspection for animals not covered under mandatory inspection (i.e., buffalo, rabbit, reindeer, elk, deer, antelope) is handled under the Agricultural Marketing Act. This Act gives the Secretary of Agriculture the authority to take whatever steps are necessary to make the product marketable. The FSIS inspector must have knowledge about that particular species and the carcass must fit available equipment in the plant. Businesses that request voluntary inspection must pay an hourly fee for the service whereas mandatory inspection is funded by tax dollars.

For voluntary inspection, the mark of inspection (as referenced in 9 CFR 352.7-Marking Inspected Products) illustrates the mark to be the shape of a triangle for exotic species. For application to exotic animal carcasses, primal parts and cuts therefrom, exotic animal livers, exotic animal tongues, and exotic animal hearts.

The establishment number of the official exotic animal establishment where the product is prepared shall be used in lieu thereof.

For the inspection of rabbits, as per 9 CFR 354.63 the mark of inspection is the same as the inspection mark for raw poultry.

Certifying Agency: Food Safety and Inspection Service (FSIS)

**Source:** https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safetyeducation/get-answers/food-safety-fact-sheets/production-and<u>inspection/inspection-and-grading-of-meat-and-poultry-what-are-the-differences</u> /inspection-and-grading-differences

#### Other Market Claims



American Heart Association Heart-Check Food Certification **Standards by:** Food and Drug Administration & American Heart Association

The Heart-Check Food Certification Program's nutrition requirements for certification are based on the sound science of the American Heart Association regarding healthy dietary recommendations including food categories, specific product ingredients and nutrient values.

To be certified, a product must meet specific nutrition requirements. The Heart-Check program has seven different categories of certification, and each category has a different set of nutrition requirements. All products must also meet government regulatory requirements for making a coronary heart disease health claim. When a product is close to exceeding the limits for fat, saturated fat, cholesterol, trans fat or sodium, independent third-party lab testing is conducted to verify that it meets our nutrition requirements.

Total Fat: Less than 6.5 g

Saturated Fat: 1 g or less and 15% or less calories from saturated fat

Trans Fat: Less than 0.5 g (also per label serving\*). Products containing partially hydrogenated oils are not eligible for certification.

Cholesterol: 20 mg or less

Sodium: One of four sodium limits applies depending on the particular food category: up to 140 mg, 240 mg or 360 mg per label serving\*, or 480 mg per label serving and per RACC\*. See Sodium Limits by Category for details.

Beneficial Nutrients (naturally occurring): 10% or more of the Daily Value of 1 of 6 nutrients (vitamin A, vitamin C, iron, calcium, protein or dietary fiber)

**Certifying Agency:** American Heart Association

#### Source:

http://www.heart.org/HEARTORG/HealthyLiving/HealthyEating/Heart-CheckMarkCertification/Heart-Check-Food-Certification-Program-Nutrition-Requirements UCM 300914 Article.jsp#.Wc-knVtSypo



#### Appalachian Grown

Standards by: Appalachian Sustainable Agriculture Project

The Appalachian Grown logo is a trademark of ASAP (Appalachian Sustainable Agriculture Project). To protect the integrity of the logo and the local food market, local producers, food processors, retailers, and wholesalers must meet particular standards and comply with logo-use restrictions. The standards and restrictions are meant to protect the mark. The Appalachian Grown logo may only be used to represent food and agricultural products grown or raised by certified Appalachian Grown farms.

**Certifying Agency:** Approved Third-party Inspectors for Appalachian Sustainable Agriculture Project

**Source:** <a href="http://asapconnections.org/resources/appalachian-grown-certification/">http://asapconnections.org/resources/appalachian-grown-certification/</a>



## Chicago Rabbinical Council Kosher Certification Standards by: Chicago Rabbinical Council

The foods that can be kosher when supervised are those of most concern to food processors desiring to carry kosher certification for their products. To produce a kosher-certified product, all of the component ingredients must be kosher certified - including any processing aids that contact the food. The equipment on which the product will be made must be kosher as well.

In order to identify the finished product as kosher, many certification agencies have trademarked symbols that indicate the kosher status of a product as well as identifying the agency certifying the food. Some products intended for use only on the industrial market (not for retail sales) do not bear a kosher symbol and are certified by letter instead.

In addition, all kosher food can be grouped into three categories-meat, dairy or pareve (neutral). Kosher law prohibits the mixing of meat and milk, so foods like cheeseburgers and chicken parmesan are unacceptable.

Dairy - Milk, cheese and other dairy products must come from a kosher animal in order to be kosher. Milk derivatives like casein are considered dairy when used in kosher foods, even though the USDA may classify them as "non-dairy."

Meat - Only meat and meat by-products from kosher species of animals are permitted, and then only if they are slaughtered by a specially trained

"shochet" (ritual slaughterer). Kosher species include cattle, sheep, chicken and turkey.

Pareve - Some foods are inherently kosher in their natural state such as fresh fruits, vegetables and grains. These foods, produced without meat or dairy content, are designated with the pareve status and may be eaten with either dairy or meat products.

Certifying Agency: Chicago Rabbinical Council

Source: <a href="http://www.crcweb.org/applyforcertif.php">http://www.crcweb.org/applyforcertif.php</a>



#### Food Justice Certified

**Standards by:** Declaration of Human Rights, the conventions of the International Labor Organization (ILO)

The Food Justice Certification standards guarantee just working and living conditions for all agricultural and food and fiber system workers and just financial returns, equity, and fair pricing and contracts for farmers, their families and other food businesses.

Standards are outlined for both labor and trade practices of the operation including: working conditions, pay and benefits, participation and training for workers and interns, negotiations, pricing, and contracting between buyers and sellers.

**Certifying Agency:** Approved Third-Party Inspectors for Food Justice Certified

**Source:** https://www.agriculturaljusticeproject.org/en/certification/



#### Green Field Farms Certification Seal

Standards by: Green Field Farms

The Green Field Farms certification seal guarantees this product was produced to our specifications by Amish and conservative Mennonite farmers that use horse and buggy for transportation. This seal is unique to Green Field Farms products and ensures that the product you are getting is Beyond Organic.

Our products are grown from soil abundant in minerals and enriched by cover crops, compost and trace elements. Soil is plowed and weeds are cultivated with horse drawn implements. Each farmer has multiple third party inspections to insure that standards are being upheld.

First and foremost, farmers must pass an organic inspection in order to become certified. The National Organic Program (NOP) standards require the farmer to be able to document that there have been no chemical inputs, treated seeds or any other prohibited substances used on the soil for a period of three years prior to the harvesting of organic crops.

Certified organic farmers have to maintain a buffer zone between their certified organic fields and any non-organic neighboring fields. This prevents contamination from any potential drift of harmful chemicals when spraying.

Our farmers are also required to be audited by a third party inspection agency, and meet Good Agricultural Practices (GAP) standards for food safety. GAP standards require all water, used for washing produce, to be tested annually for bacteria and E-coli. Each farm is evaluated to prevent any risk of contamination and to insure that all products are kept safe and free from contamination.

**Certifying Agency:** Approved Third-Party Inspectors for Green Field Farms

Source: <a href="http://www.gffarms.com/beyond-organic">http://www.gffarms.com/beyond-organic</a>



#### Halal Food Council USA Halal Certification

Standards by: Codex Alimentarius

Halal Food Council USA provides:

Halal certification and supervision services for qualifying poultry and poultry products. Halal certification and supervision services for qualifying foods, drinks, cosmetics, pharmaceuticals, personal care products, chemicals, packaging materials, and other consumer products.

HFC-USA follows the guidelines given in the Codex Alimentarius (1997) for Halal that has been approved by all Muslim countries in the world, including Malaysia, Singapore, and Indonesia. These guidelines include the standard for halal slaughter, halal foods, halal cosmetics, and usable halal goods.

Our certification is accepted by all halal importing regions in the world, including all Muslim countries, and is recognized as a professionally credible and religiously trusted halal certifying body.

Certifying Agency: Halal Food Council USA

**Source:** http://www.halalfoodcouncilusa.com/



#### Islamic Food and Nutrition Council of America Halal Certification

Standards by: The Islamic Food and Nutrition Council of America

Halal is an Arabic word meaning lawful or permitted. The opposite of halal is haram, which means unlawful or prohibited. Halal and haram are universal terms that apply to all facets of life but this discussion will be limited to food products, meat products, cosmetics, personal care products, pharmaceuticals, food ingredients, and food contact materials.

While many things are clearly halal or haram, there are some things which are not clear. Further information is needed to categorize them as halal or haram. Such items are often referred to as mashbooh, which means doubtful or questionable.

All foods are considered halal except the following sources:

- Swine/Pork and its by-products
- Animals NOT properly slaughtered according to Islamic method or dead before slaughtering
- Alcoholic drinks and intoxicants
- Carnivorous animals and birds of prey
- Blood and blood by-products
- Foods contaminated with any materials from above categories
- Foods containing ingredients such as gelatin, enzymes, emulsifiers, and flavors are questionable (mashbooh), because the origin of these ingredients or components there of, may be haram.

Meat and poultry should be processed according to Islamic requirements. This is commonly referred to as Zabiha or Dhabiha. Zabiha refers to slaughtering of an animal or bird by a Muslim according to Islamic requirements. In USA and Canada, Halal meat must also meet all federal and/or state meat inspection laws before it can be sold. The Islamic Food and Nutrition Council of America (IFANCA®) (www.ifanca.org) is the leading halal-certifying organization in the United States. Products certified by IFANCA normally display the registered Crescent-M service mark on the label.

**Certifying Agency:** Approved Third-party Inspectors for The Islamic Food and Nutrition Council of America

Source: <a href="http://www.ifanca.org">http://www.ifanca.org</a>



Islamic Services of America Halal Certification **Standards by:** Islamic Services of America

Islamic Services of America's (ISA) research shows that there is a growing desire worldwide for US consumable products. Consumers overseas want the US products and foreign governments want certified Halal compliance. At ISA, religious compliance and science are not mutually exclusive. The two meet in a complementary manner that ensures compliance through the use and understanding of scientific techniques and religious guidelines. With over 35 years as a Halal certifier, ISA has developed a reputation for upholding Halal integrity. The methods and processes ISA uses are streamlined and integrated, making it efficient from a business standpoint.

**Certifying Agency:** Approved Third-party Inspectors for Islamic Services of America

Source: www.isaiowa.org/



Islamic Society of North America's Halal Certification **Standards by:** Islamic Society of North America

The following conditions for Halal/Zabiha certification by ISNA® Canada are the standards to be followed by the Abbattoires and other Food Manufacturing Industries in order to produce Halal Food for the Muslims:

Animals will be blessed by Muslims recommended and authorized by ISNA® or by its designated agent;

Any stunning shall be only to render the animal unconscious momentarily and is not to cause death. This is established by Agriculture Canada requirements and sworn to by the Veterinarian in charge for slaughter operations.

The animals are to be cut immediately after stunning to ensure bleeding time in excess of 90 seconds.

The Halal identification is to be monitored and strictly regulated to ensure it is affixed only to the products from the Zabiha animals.

ISNA® is to have the right of access to the business premises without prior notice to ensure that the requirements are being adhered to.

Any Halal certification shall be limited to only the Halal operations and not a blanket certification of all meat producing operations.

will terminate the Halal certification if the producer fails to make its products Halal.

In its standards for Halal certification, ISNA® will treat all producers and distributors equally, whether they are Muslim or Non-Muslim.

Certifying Agency: Approved Third-party Inspectors for Islamic Society of North America

Source: <a href="http://www.isnahalal.ca/certification.html">http://www.isnahalal.ca/certification.html</a>

#### Trademark Not Avialable

Islamic Society of the Washington Area Halal Certification **Standards by:** GSO 993 Standard, UAE/GSO 2055-1 Standard, and MS 1500: 2009 Standard

The purpose of a Halal Standard being created (existence) and made available within a halal certification body (HCB) is to lay a solid foundation of an individual HCB written doctrine and principles of judgement in dealing with its day to day halal operations. This Halal Standard, in

compliance with the Islamic Sharia principles based on all four Madhabs and as defined by the relevant Islamic scholars collectively (Fatwa/Ijma) shall be the main reference point for a HCB to make almost all of its decision for its day to day operations. An Integrated Halal Standard consists of a mixed principle between the local standard with others

overseas available in the market such as the followings:

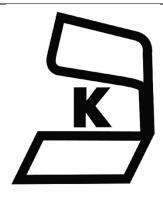
a. GSO 993 Standard

b. UAE/GSO 2055-1 Standard

c. MS 1500: 2009 Standard

**Certifying Agency:** Approved Third-party Inspectors for Islamic Society of the Washington Area

Source: <a href="http://www.ushalalcertification.com/guidelines.html">http://www.ushalalcertification.com/guidelines.html</a>



#### **KOF-K Kosher Certified**

Standards by: Vaad Halacha, a rabbinic committee

Their decisions are binding and determine KOF-K policy. The principles governing what is kosher and what is not, are rooted in the Written Torah (the Bible) and the Oral Torah. These laws have been observed by Jews for over 3,000 years. Over the centuries, the Rabbis have explained, detailed and organized these Divine laws, applying them to ever-changing situations and developing the technologies to properly apply them to food preparation down through the ages. The laws relating to kosher foods are intricate and detailed, and it takes years to master the subject in depth, but the basics are easily understood, as we shall see below.

Although, as we mentioned previously, kosher law is complex and could fill many book shelves, the basics can be broken down into the following categories:

- Permitted and prohibited food sources
- Preparation of meat
- Separation of meat and dairy
- Kosher ingredients and utensils/equipment
- Kosher for Passover
- Additional areas
- Kosher Certification

Certifying Agency: KOF-K Kosher Supervision

**Source:** <a href="https://www.kof-k.org/">https://www.kof-k.org/</a>



#### Ohio Proud

Standards by: Ohio Department of Agriculture

To qualify, your products must be at least 50% raised, grown, or processed in Ohio and meet all inspection and labeling requirements. When you see the Ohio Proud logo, you know you are getting Ohio-made and grown products. From fresh meats, fruits and vegetables, to dairy products and snack foods, you can find Ohio Proud products in your favorite grocery store and at your local Farm Market. Ohio Proud is a quick and reliable way for you to identify Ohio-made and grown goods.

Ohio produces more than just the food we eat. Our location at the eastern edge of the corn belt allows for substantial grain production and a strong supply of animal feed products. Ohio is a leader in nursery stock production, particularly African violets and poinsettias. Ohio is also the largest sheep producing state east of the Mississippi River, providing quality wool products. Additionally, the southeastern Appalachian region

supplies lumber and wood used in furniture, construction, and housing in Ohio, around the nation and throughout the world.

Certifying Agency: Applications are accepted by Ohio Proud

**Source:** <a href="http://ohioproud.org/">http://ohioproud.org/</a>



Organized Kashrut Laboratories

Standards by: Organized Kashrut Laboratories

Kosher foods are divided into three categories: meat, dairy and pareve. The following descriptions offer practical information for how your product or establishment can be classified.

MEAT: All meat and fowl and their byproducts, such as bones, soup or gravy are classified as Meat. Thus includes products that contain meat or fowl derivatives such as liver pills.

Items designated "Meat" must meet the following requirements to be considered kosher: Kosher meat must come from an animal that chews its cud and has split hooves. (Cows, sheep and goats are kosher; rabbits, kangaroos and fox are not).

Kosher fowl are identified by a universally accepted tradition and include the domesticated species of chickens, Cornish hens, ducks, geese and turkeys. The Torah names the species of fowl that are forbidden, including all predatory and scavenger birds.

Animal and fowl must be slaughtered with precision and examined by a skilled shochet, an individual extensively trained in the rituals kosher slaughtering.

Permissible portions of the animal and fowl must be properly prepared (soaked and to remove any trace of blood) before cooking.

All utensils used in slaughtering, cleaning, preparing and packaging must be kosher.

DAIRY: All foods derived from, or containing, milk are classified as dairy, including milk, butter, yogurt and all cheese – hard, soft and cream. Even a trace amount of dairy can cause a food to be considered dairy.

Dairy products must meet the following criteria in order to be certified kosher: They must come from a kosher animal.

All ingredients must be kosher and free of meat derivatives. (Conventional rennet, gelatin, etc., are of animal origin and may not be used in kosher

dairy.) They must be produced, processed and packaged on kosher equipment.

PAREVE: Foods that are neither meat nor dairy are called pareve. Common pareve foods are eggs, fish, fruit, vegetables, grains, unprocessed juices, pasta, soft drinks, coffee and tea and many candies and snacks. Pareve presents fewer kosher complexities than meat or dairy, but certain points must be known: Foods may lose their pareve status if processed on meat or dairy equipment or when additives are used. Pure Chocolate, cookies and other snacks may not be processed with meat or meaty foods unless they are certified pareve.

Certain fruits, vegetables and grains must be checked for the presence of small insects and larvae, which are not kosher. Eggs must be checked for the presence of blood spots, which are not kosher.

year.

Certifying Agency: Approved Third-party Inspectors for Organized

Kashrut Laboratories

Source: <a href="http://www.ok.org/">http://www.ok.org/</a>



Orthodox Union Hechsher Mark Standards by: Orthodox Union

The Union of Orthodox Jewish Congregations of America (the "Orthodox Union") is the sole and exclusive owner of the OU Kosher Logo certification mark, a federally and internationally registered trademark for kosher certification. It may only be used with the express written permission of the Orthodox Union Kosher Division.

Products are endorsed as kosher only when bearing the OU emblem on the label. Consumers are directed to check the ingredient panel of products on a regular basis for changes in the Kosher status that may occur as a result of reformulation.

U Kosher Logo – The products are Pareve (contain neither milk or meat ingredients). OU Pareve may contain fish or eggs.

U-D – The products are Dairy. These products either contain dairy ingredients or have been processed on dairy equipment.

U-M Kosher Logo – The products are Meat/Poultry. Alternatively, they may contain meat/poultry ingredients or have been processed on meat equipment.

Certifying Agency: Approved Third-Party Inspectors for the Orthodox

Union

**Source:** <a href="https://oukosher.org/">https://oukosher.org/</a>



Star-K Kosher Certified Standards by: STAR-K Kosher

STAR-K Kosher Certification is a guarantee that food products and ingredients meet all kosher requirements. This certification also authorizes the manufacturer to display the STAR-K emblem on the product to advertise its kosher status.

The procedure for acquiring kosher certification is relatively simple. Upon receipt of your application, a representative of STAR-K will evaluate your company's ingredients and products. Then a contract will be drafted, detailing all the requirements and obligations of both parties. All kosher requirements, as well as a list of all your ingredients and products, will be enumerated. A signed contract guarantees that regular visits will be made periodically by a Rabbinic field representative of the STAR-K. The purpose of the Rabbi's visit is to monitor compliance with the terms of the agreement by checking ingredients, products, labels, etc.

Kosher certification requires a detailed study of:

- a) all ingredients used in the plant,
- b) the method of production, and
- c) all products produced there.

STAR-K field representatives familiar with the food industry and ingredients will visit the plants. This completes the initial inspection phase of the certification process.

Certifying Agency: Approved Third-Party Inspectors for STAR-K

**Source:** <a href="https://www.star-k.org/home">https://www.star-k.org/home</a> certified

#### **Plant Variety Protection**



Plant Variety Protection

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

Used only on Plant Variety Protection certificates which are issued by USDA. Similar to a patent, but verifies plant varieties.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

 $\begin{tabular}{ll} \textbf{Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \\ \underline{belFactsheet.pdf} \end{tabular}$ 

#### **Production Practices**



Certified Naturally Grown

Standards by: Certified Naturally Grown

Certified Naturally Grown farmers don't use synthetic fertilizers, pesticides, herbicide, or GMOs, just like certified organic farmers. The main difference between CNG and organic is our certification model, which relies on peer inspections, transparency, and direct relationships.

The Certified Naturally Grown Livestock Standards are based on the National Organic Program standards with a few significant modifications, as noted below.

We clarified and strengthened the standards for living conditions and access to pasture. The organic rules were worded in such a way that agribusiness growers got away with their animals never actually going outside. If your animals are primarily pasture raised, then we'd love to hear from you.

Another difference is in feed requirements. The feed must be grown according to CNG standards - without synthetic fertililzers, pesticides, herbicides or GMO seeds - but it does not have to be certified. When you can find a local source that's growing according to these standards and will affirm their practices in a signed declaration, we think you should have the option to use that local source.

**Certifying Agency:** Inspections are typically done by other CNG producers, but they may also be conducted by certified organic farmers, or non-certified producers using natural methods.

**Source:** http://www.cngfarming.org/requirements





A federal-state licensed employee uses the following shields in facilities packing under continuous inspection, and the product meets a U.S. Grade of No. 1. Two examples of shields with packer identification numbers are provided here.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federal-state licensed employee

 $\textbf{Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \underline{belFactsheet.pdf}$ 



PACKER NO. 01
PACKED UNDER CONTINUOUS
FEDERAL-STATE INSPECTION





Continuous Inspection Grades

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

The Continuous Inspection Grades and Inspection Marks are for use by plants operating under USDA continuous inspection contracts for processed fruits and vegetables. The grade mark would indicate the quality level of the product. The designated grade could be Grade A or Grade B.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed inspector

 ${\bf Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \underline{belFactsheet.pdf}$ 



Continuous Inspection Marks

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

The Continuous Inspection Marks are for use by plants operating under

USDA continuous inspection contracts. No grade is designated, and the statement may be used inside a shield or without the use

of an emblem or shield.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed inspector

 $\textbf{Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \underline{belFactsheet.pdf}$ 

## U.S. DEPT. OF AGRICULTURE INSPECTED

Fresh Produce Inspected Lots

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

Fresh produce that is inspected on a lot-by-lot basis is identified by the official inspection mark. The mark is

stamped on a container.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federal licensed Inspector

 $\textbf{Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \\ belFactsheet.pdf$ 

## U.S. DEPT. OF AGRICULTURE INSPECTED

Friend of the Earth

Standards By: Friend of the Earth

The exponential increase in world population and growth in food demand can result in significant environmental impacts when sustainable agricultural practices are not properly followed:

SOIL erosion, sealing, contamination with harmful substances, compaction, desertification.

WATER pollution by harmful substances, eutrophication, overexploitation. Approximately 70% of the water used in the world is destined to agriculture.

BIODIVERSITY loss, ecosystems degradation, endangered species.

CLIMATE change, GHG emissions, in particular carbon dioxide and methane.

The pollution and degradation of natural resources caused by unsustainable farming practices, threaten to reduce productivity and impair agriculture itself, as well as to create irreparable social and environmental damage.

Friend of the Earth's mission is to drive agricultural production toward sustainable practices.

Friend of the Earth's certification standard rewards those companies that operate in accordance with the practices of sustainable agriculture and farming:

- reducing the impact on the ecosystem to a negligible level,
- improve energy efficiency and waste management,
- use integrated pest management practices,
- comply with the regulations
- implement social responsibility practices.

**Certifying Agency:** Approved Third-Party Inspectors for Friend of the Earth

Source: <a href="http://www.friendoftheearth.org/">http://www.friendoftheearth.org/</a>



Global G.A.P.

Standards by: GLOBALG.A.P.

GLOBALG.A.P. is the internationally recognized standard for farm production. Our core product is the result of years of intensive research and collaboration with industry experts, producers and retailers around the globe. Our goal is safe and sustainable agricultural production to benefit farmers, retailers and consumers throughout the world.

#### GLOBALG.A.P. Certification covers:

- Food safety and traceability
- Environment (including biodiversity)
- Workers' health, safety and welfare
- Animal welfare
- Includes Integrated Crop Management (ICM), Integrated Pest Control (IPC),
- Quality Management System (QMS), and Hazard Analysis and Critical Control Points (HACCP)

Our standard demands, among other things, greater efficiency in production. It improves business performance and reduces waste of vital resources. It also requires a general approach to farming that builds in best practices for generations to come.

Certifying Agency: Approved Third-party Inspectors for GLOBALG.A.P.

**Source:** <a href="http://www.globalgap.org/uk">http://www.globalgap.org/uk</a> en/



Good Agricultural Practices (GAP) and Good Handling Practices (GHP)

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

This logo is used to designate participation in Specialty Crop Good Agricultural Practices (GAPs) and Good Handling Practices (GHP) audit programs.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

 $\begin{tabular}{ll} \textbf{Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \\ \underline{belFactsheet.pdf} \end{tabular}$ 



Graded Product Packed Under Continuous Inspection **Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

The approved shield with the appropriate U.S. grade designation may be used on containers, labels, or other packaging. Usage is when the product is packed under continuous inspection by the USDA inspection service, the plant in which the product is packed is maintained under good commercial sanitary practices and the product has been certified by an inspector as meeting the requirements of the U.S. Grade A, Grade No. 1 or a higher designated grade.



**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed inspector

 ${\bf Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \underline{belFactsheet.pdf}$ 



Identity Preservation (IP)

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

The Identity Preservation (IP) Program logo is used by clients that are enrolled in the IP Program. It is used to verify client claims about certain unique values of a product.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

 $\begin{tabular}{ll} \textbf{Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \\ \underline{belFactsheet.pdf} \end{tabular}$ 



**Inspection Grades** 

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

Inspection Grades are for use by plants operating under USDA inspection service contracts. The grade mark indicates the quality level of the product. The Grade A shield is typically tri-colored in blue, white, and red from top to bottom.



**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed inspector

 $\textbf{Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \underline{belFactsheet.pdf}$ 



**Inspection Marks** 

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

Inspection Marks are for use by plants operating under USDA inspection service contracts. They are used without a grade, and can be used with the shield and without the shield.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed inspector

**Source:** https://www.ams.usda.gov/sites/default/files/media/AMSProductLabelFactsheet.pdf

# PACKED UNDER INSPECTION OF THE U.S. DEPT. OF AGRICULTURE



## Linking Environment and Farming Standards by: Linking Environment and Farming

Produce identified with a LEAF Marque logo indicates it has been through an assurance scheme that means it has been produced by farmers whilst caring for the environment. By buying LEAF Marque produce, you are enjoying food from farmers who care for the countryside and wildlife — whilst doing your bit for the environment too. You will find LEAF Marque produce on products sold nationwide in supermarkets, farm shops and farmers' markets.

Here are some ways LEAF Marque farmers care for the environment by:

- Carefully managing hedgerows to provide habitats and food for wildlife
- Using pesticides and fertilizers only when absolutely necessary
- Leaving a strip of land between hedgerows and crops to act as a habitat for as a wildlife
- Recycling on-farm waste and conserving energy
- Improving water efficiency and quality

Certifying Agency: Linking Environment and Farming

**Source:** https://archive.leafuk.org/leaf/consumers/theLEAFmarquecons.eb



#### Organic Seal

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

Organic certification verifies that farms and businesses comply with the USDA organic regulations and allows businesses to sell, label, and represent their products as organic. There are three distinct labeling categories for organic products:

• 100 Percent Organic - Agricultural products in the "100 percent organic" category contain only

ingredients that are certified organic, including any processing aids.

• Organic - Agricultural products in the "organic" category must contain no less than 95 percent of

certified organic ingredients (excluding salt and water). The remaining five percent of ingredients

must be organically produced, unless commercially unavailable or allowed on the National List.

• "Made With" Organic - Multi-ingredient agricultural products in the "made with" category contain at

least 70 percent certified organic ingredients (excluding salt and water). Any remaining agricultural products are not required to be organically produced, but must be produced without excluded

methods – for example, genetic engineering

**Certifying Agency:** Both government agencies and authorized third-party agencies have ability to issue the USDA Organic label. For a full list of agencies visit:

**Source:**<a href="https://organic.ams.usda.gov/integrity/Certifiers/CertifiersLocations">https://organic.ams.usda.gov/integrity/Certifiers/CertifiersLocations</a> SearchPage.aspx

 $\frac{https://www.ams.usda.gov/sites/default/files/media/AMSProductLabelFacts}{heet.pdf}$ 



Partners in Quality (PIQ)

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

The Partners in Quality (PIQ) shield designates a client's participation in programs that USDA licensed personnel audit. Auditors document intensive systems used by packinghouses to ensure the quality of the commodities passing through them.

**Certifying Agency:** United States Department of Agriculture licensed personnel auditors

 $\textbf{Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \underline{belFactsheet.pdf}$ 



Processed Product Grade Marks

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

Inspection Grade and Inspection marks indicate the processed fruits and vegetable products have been produced in an approved plant and inspected and certified by an inspector on a lot basis. The grade mark indicates the quality level of the product. Grades are typically Grade A, B, or C.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed inspector **Source:** <a href="https://www.ams.usda.gov/sites/default/files/media/AMSProductLabelFactsheet.pdf">https://www.ams.usda.gov/sites/default/files/media/AMSProductLabelFactsheet.pdf</a>



INSPECTED BY THE U.S. DEPT. OF AGRICULTURE Processed Product Inspection Marks

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

This inspection mark is for processed products produced in an approved plant and inspected and certified by an inspector on a lot basis. They are used without a grade, and can be used with the shield and without the shield.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed inspector

 ${\bf Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \underline{belFactsheet.pdf}$ 



Qualified Through Verification (QTV)

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

The Qualified Through Verification (QTV) shield is used to designate participation in the QTV program. The QTV program is a food safety based program with a foundation of Hazard Analysis Critical Control Point (HACCP) principles, Good Manufacturing Practices (GMP's), AMS's "Good Agricultural Practices" and "Good Handling Practices" (GAP and GHP) Verification, effective sanitation programs, product recall planning, and microbiological testing.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally licensed Inspector

 $\begin{tabular}{ll} \textbf{Source:} & \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \\ & \underline{belFactsheet.pdf} \end{tabular}$ 



Quality Assurance Program (QAP)

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

The Quality Assurance Program (QAP) shield is used to designate

participation in the QAP service. The facility under contract is operated

with USDA oversight, their quality control program is reliable, and capable of producing sound and wholesome product of the desired quality under sanitary conditions.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed inspector

 $\textbf{Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \\ belFactsheet.pdf$ 



Quality Monitoring Program (QMP)

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

The Quality Monitoring Program (QMP) logo is used to designate participation in the QMP. QMP provides a supplier with an objective, third party assessment of the product's quality. These evaluations may be based on official U.S. grade standards or customer quality specifications.

**Certifying Agency:** United States Department of Agriculture approved third-party auditor

 $\textbf{Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \underline{belFactsheet.pdf}$ 



Sampling Marks

**Standards By:** United States Department of Agriculture, Agriculture Marketing Service (AMS)

Official sampling marks identify products that have been officially sampled by a particular field office indicated by a code mark identifying the field office performing the sampling.

**Certifying Agency:** United States Department of Agriculture, Agriculture Marketing Service (AMS) Federally Licensed inspector

 $\textbf{Source:} \underline{https://www.ams.usda.gov/sites/default/files/media/AMSProductLa} \underline{belFactsheet.pdf}$ 

#### Seafood



#### **ASC Farmed Responsibly**

Standards by: Aquaculture Stewardship Council

The current eight ASC standards cover 12 species: abalone, bivalves (clams, mussels, oyster, scallop), freshwater trout, pangasius, salmon, shrimp, tilapia, seriola and cobia.

The ASC standards focus on both the environmental and social impact of farming. Environmentally, farms must show that they actively minimise their impact on the surrounding natural environment. This extends to careful management of the fish health and resources. Socially, farms must be a good and conscientious neighbor; that means operating their farm in a socially responsible manner, caring for their employees and working with the local community.

**Certifying Agency:** Approved Third-party Inspectors for Aquaculture Stewardship Council

 $\textbf{Source:} \ \underline{\text{https://www.asc-aqua.org/what-we-do/our-standards/farm-standards/}}$ 



#### Best Aquaculture Practices Certified

Standards by: Global Aquaculture Alliance Best Aquaculture Practices

It's important to note that the BAP program encompasses the entire seafood production chain. The progression starts at a feed mill, then moves to the hatchery and onto a farm. Then, the seafood is brought to a processing plant before being delivered to you.

BAP is capable of certifying each stage of this journey, and our star system signifies this level of certification. Our 4-star product means your seafood was BAP-certified all the way through the process!

- considerate of the health of the animal and consumer (animal welfare and food safety)
- socially responsible toward the people and communities farming and processing the seafood
- respective and protective of the surrounding environment

**Certifying Agency:** Approved Third-party Inspectors for Best Aquaculture Practices

Source: <a href="https://www.bapcertification.org/">https://www.bapcertification.org/</a>



# Certified Sustainable Seafood Marine Stewardship Council (MSC)

**Standards by:** United Nations Food and Agriculture Organization (UNFAO) and ISEAL

Wild, traceable, sustainable: the blue fish label is only applied to wild fish or seafood from fisheries that have been certified to the MSC Fisheries Standard, a science-based set of requirements for sustainable fishing.

#### A certified sustainable source

Each MSC certified fishery has been independently assessed on its specific impacts to wild fish populations and the ecosystems they're part of. Handled with care: All along the supply chain, from ocean to plate, MSC certified fish and seafood is separated from non-certified. It is clearly labelled so it can be traced to a certified sustainable fishery.

Trustworthy: Regular DNA testing has shown that MSC labelled products are correctly labelled. So, you can trust that the fish is what its packaging or menu says it is.

Credible: For over 20 years we've worked with scientists, fisheries, seafood producers and brands to develop our standards and promote sustainable fishing. The MSC is the only wild-capture fisheries certification and ecolabelling program that meets best practice requirements set by both the United Nations Food and Agriculture Organization (UNFAO) and ISEAL, the global membership association for sustainability standards. In March 2017, the MSC became the first global seafood certification program to be recognized for rigor and credibility by the Global Sustainable Seafood Initiative (GSSI).

**Certifying Agency:** Approved Third-party Inspectors for Marine Stewardship Council

Source: <a href="https://20.msc.org/home">https://20.msc.org/home</a>



# Dolphin Safe United States Department of Commerce **Standards by:** United States Department of Commerce

Every U.S. tuna purse seine vessel greater than 400 short tons carrying capacity fishing in the ETP must have an IATTC approved observer onboard to oversee every fishing trip. The vessel owners or management of such vessels are responsible for notifying NMFS of the location and expected time of arrival for each completed ETP trip. Upon request, the TTVP will issue a dolphin-safe certificate bearing the Official Mark.

When delivering dolphin-safe tuna to U.S. canneries, American Samoa longline vessels are required to do the following:

- For fishing trips that begin on or after May 21, 2016, provide a signed captain's statement to the cannery to certify:
  - That no purse seine net or other fishing gear was intentionally deployed on or used to encircle dolphins during the fishing trip and that no dolphins were killed or seriously injured in the sets or other gear deployments in which the tuna were caught.
  - Completion of the National Marine Fisheries Service Tuna Tracking and Verification Program's Dolphin-safe Captain's Training Course.
- If a dolphin was killed or seriously injured as a result of becoming incidentally hooked or entangled in gear, tuna from the set(s) in which the interaction occurred ("non-dolphin-safe" tuna) must be stored physically separate from the rest of the tuna ("dolphin-safe" tuna") from the time of capture through unloading.

**Certifying Agency:** The NOAA Fisheries Service Tuna Tracking & Verification Program (TTVP)

**Source:** http://www.nmfs.noaa.gov/pr/dolphinsafe/dsp.htm

http://www.nmfs.noaa.gov/pr/dolphinsafe/docs/ds\_faq\_for\_asll\_june7\_201\_6.pdf



Dolphin Safe

Standards by: International Marine Mammal Project

We established the Dolphin Safe tuna program, setting the worldwide standards to stop the setting of nets on dolphins. More than 95 percent of the world's tuna companies are now committed to Dolphin Safe fishing practices, and the Dolphin Safe label is now on canned tuna in markets throughout the world. We maintain the International Dolphin Safe Monitoring Program, with monitors around the world covering more than 750 companies, to ensure that tuna is caught without chasing or netting of dolphins. Certifying Agency: Approved Third-party Inspectors for International Marine Mammal Project

Source: http://savedolphins.eii.org/



Friend of the Sea

Standards by: Friend of the Sea

Environmental impact concerns include waste handling, side-effects of antibiotics, competition between farmed and wild animals, and using other fish to feed more marketable carnivorous fish. However, researches and commercial feed improvements f for the past twenty years have downsized many of these.

Friend of the Sea Sustainable Aquaculture Criteria require:

- no impact on critical habitat (e.g.: mangroves, wetlands, etc)
- compliance with waste water parameters
- reduction of escapes and by-catches to a negligible level
- no use of harmful anti-foulants nor growth hormones
- compliance with Social Accountability
- gradual reduction of carbon footprint

Certifying Agency: Approved Third-party Inspectors for Friend of the Sea

**Source:** http://www.friendofthesea.org/



Global Trust

Standards by: Global Trust

Global Trust has delivered ISO accredited certification for a variety of seafood programs now spanning across 23 countries and it remains independent of these sometimes competitive programs. The programs now include Certified Quality Salmon, Trout and Mussels, GAA Best Aquaculture Practice (BAP), Organic Aquaculture, Seafood Trust Eco-Standard, Label Rouge, GlobalGAP, MSC Sustainable Fisheries, FAO Responsible Fishery Management, IFFO Responsible Supply, as well as the supply chain standards of chain of custody and BRC, etc.

Global Trust has also been engaging with the new standards in development, e.g., WWF dialogues, and will seek to deliver certification against emerging standards when and if requested. Global Trust is ISO accredited as independent and competent.

Global Trust Certification offers the most comprehensive range of recognized and accredited certifications and standards services to international seafood businesses. We have services that can be tailored to suit existing or emerging markets and needs.

Global Trust is NOT a standards owner nor is the Global Trust logo a specific eco-label, we are an ISO Accredited independent Certification body delivering certification to specific standards. Global Trust's certifications are used to communicate specifics such as Food Safety, Organic, Superior Quality, Eco and Responsible Management.

Global Trust does assist many standards owners with accreditation and certification criteria for standards and also acts as Certification Managers for a number of national and international programs.

Given its expertise in Seafood and Certification Standards, Global Trust is well positioned to assist seafood buyers with Responsible Sourcing Strategies based on available standards.

Certifying Agency: Global Trust

**Source:** http://www.gtcert.com/seafood\_trust/



IFFO Assured Responsible Sourcing, Responsible Production Standards by: IFFO RS Global Standard for Responsible Supply

As the fishmeal and fish oil industry has continued to expand there has been an increasing need for the industry as a whole to demonstrate its commitment to responsible practices in the way of sourcing, manufacture and supply. In order to support sustainable market growth, decrease the impact the industry has on the environment and to provide stakeholders with a tool to demonstrate responsible practice, the IFFO Governance Board (IFFO RS GB) put together a multi-stakeholder Technical Advisory Committee (TAC) to develop a business-to-business Global Standard for the Responsible Supply (IFFO RS) of marine ingredients.

By way of factory audits and fisheries assessments (full audit year 1, surveillance audits years 2 and 3) the IFFO RS Standard Certificate credibility is up held and lasts 3 years given compliance to all IFFO RS Standard requirements. Certification to the requirements under this Standard allows successful production factories to use the unique certification mark "IFFO RS Assured" to signify compliance and commitment to the IFFO RS Standard.

Eradication of Illegal, unregulated and unreported fishing material being used as IFFO RS approved raw material. Ensure that whole fish used in the production of marine ingredients are sourced from responsibly managed fisheries. Ensure the safe manufacture of marine ingredients.

To have effective traceability systems in place to ensure that the IFFO RS compliant marine ingredients can be traced back to the approved IFFO RS raw material fishery.

**Certifying Agency:** Approved Third-party Inspectors for IFFO RS Global Standard for Responsible Supply

Source: https://www.iffors.com/iffo-rs-standard





Monterey Bay Aquarium Seafood Watch Standards by: Monterey Bay Aquarium Seafood Watch

The Seafood Watch Standard for Fisheries is used to produce assessments for wild-capture fisheries resulting in a Seafood Watch rating of Best Choice (green), Good Alternative (yellow), or Avoid (red). Seafood Watch uses the assessment criteria to determine a final numerical score as well as numerical subscores and color ratings for each criterion. These scores are translated to a final Seafood Watch color rating according to the methodology described in the table below. The table also describes how

Seafood Watch defines each of these categories. The narrative descriptions of each Seafood Watch color rating category, and the guiding principles listed below, compose the framework the criteria are based on, and should be considered when providing feedback on any aspect of the criteria. Sustainable wild capture fisheries:

- 1. Follow the principles of ecosystem-based fisheries management The fishery is managed to ensure the integrity of the entire ecosystem, rather than solely focusing on maintenance of single species stock productivity. To the extent allowed by the current state of the science, ecological interactions affected by the fishery are understood and protected, and the structure and function of the ecosystem is maintained.
- 2. Ensure all affected stocks 1 are healthy and abundant Abundance, size, sex, age and genetic structure of the main species affected by the fishery (not limited to target species) is maintained at levels that do not impair recruitment or long-term productivity of the stocks or fulfillment of their role in the ecosystem and food web. Abundance of the main species affected by the fishery should be at, above, or fluctuating around levels that allow for the long-term production of maximum sustainable yield. Higher abundances are necessary in the case of forage species, in order to allow the species to fulfill its ecological role.
- 3. Fish all affected stocks at sustainable levels Fishing mortality for the main species affected by the fishery should be appropriate given current abundance and inherent resilience to fishing while accounting for scientific uncertainty, management uncertainty, and non-fishery impacts such as habitat degradation.

Certifying Agency: Monterey Bay Aquarium Seafood Watch

**Source:** <a href="http://www.seafoodwatch.org/seafood-recommendations/ourstandards">http://www.seafoodwatch.org/seafood-recommendations/ourstandards</a>



Ocean Wise Recommended Standards by: Ocean Wise

Our oceans are facing a number of threats: overfishing, climate change, pollution and urban development. The global conservation organization Ocean Wise aims to tackle these issues, through its engagement, research, education, and visitor connections.

Its Ocean Wise sustainable seafood program helps to ensure that ocean life will be abundant for generations to come.

Our partners make the commitment to clearly label all Ocean Wise products so consumers can make sustainable choices. If you see the Ocean Wise symbol next to a seafood item, you know that option is the best choice for the health of our oceans.

Our team works individually with each partner business to help it make sustainable seafood purchasing decisions. In turn, partners identify these options on their menus or display cases with the Ocean Wise symbol. While partners are not required to only provide Ocean Wise seafood choices upon joining the program, partners are required to clearly label seafood items that are identified as sustainable and Ocean Wise. The aim is to bring partners along a path of continuous improvement with the ultimate goal of becoming 100 per cent Ocean Wise.

Sustainable seafood can be defined as species that are caught or farmed in a way that ensures the long-term health and stability of that species, as well as the greater marine ecosystem. For many consumers, sustainable seafood is not on their radar. Ensuring you are making a healthy and sustainable choice for our oceans when it comes to buying seafood can be difficult. Without the proper information about where your food is coming from, how can you know for sure that you are purchasing sustainable seafood? Most seafood is caught out in the open ocean and you don't always know where it's coming from, how it's caught or what species it is. The Ocean Wise seafood program logo on seafood items makes it easier for consumers to pick out sustainable seafood options at grocery stores and in restaurants.

Certifying Agency: Ocean Wise

**Source:** http://seafood.ocean.org/about-ocean-wise/



Salmon-Safe

Standards by: Salmon-Safe

Salmon-Safe offers a series of peer-reviewed certification and accreditation programs linking site development land management practices with the protection of agricultural and urban watersheds. Whether the site is a biodynamic farm in northern California, a Walla Walla vineyard, or a downtown Seattle commercial development, certification requires management practices that protect water quality and restore habitat. Most recently, Salmon-Safe has introduced innovative new programs focused on site design and development, as well as accreditation programs for developers and for pollution prevention in large-scale construction management.

Salmon-Safe works with farmers to encourage the adoption of ecologically sustainable agricultural practices that protect water quality and wildlife habitat in West Coast salmon watersheds. Operations endorsed by our independent professional certifiers are promoted with the Salmon-Safe label.

The Salmon-Safe farm certification program is focused on management practices in six primary areas: riparian area management, water use management, erosion and sediment control, integrated pest management and water quality protection, animal management, and biodiversity conservation. Our standards were developed over a two-year period with biologists, agronomists, and farmers, and have been tested in the field since the late 1990s at more than 700 farms in Oregon, Washington, California, Idaho, and British Columbia across a variety of crops.

Certifying Agency: Salmon-Safe

Source: <a href="https://www.salmonsafe.org/getcertified">https://www.salmonsafe.org/getcertified</a>



SeaChoice

Standards by: SeaChoice

The success of our retailer commitments means we have reached a limit relating to our ability to help them further influence change on the water, as the majority of "red-ranked" seafood products have already been replaced with more sustainable alternatives. In order to ensure that sustainable seafood demand and supply continue to increase in Canada, SeaChoice recognizes that it is necessary to increase pressure at different places along the seafood supply chain, instead of primarily focusing at the retailer level.

In the shift away from holding direct retail partnerships, SeaChoice is taking several paths to continue improving the sustainability of seafood available in Canada. Moving forward, SeaChoice will be directing more effort and resources into:

- Transparency and traceability, seeking improvements in seafood labelling regulations.
- Verifying seafood labelling through DNA testing in Canadian markets.
- Using market leverage to improve some of the least sustainable fisheries and aquaculture production.

 Providing retailers the tools and incentives necessary to improve their sustainable seafood commitments and create their own policies in-house.

This work will be supported by SeaChoice member organization engagement in fisheries and aquaculture management, policy improvements and incentives for improved fishing and farming practices.

Certifying Agency: Approved Third-party Inspectors for SeaChoice

Source: <a href="http://www.seachoice.org/">http://www.seachoice.org/</a>



#### Seafood Safe

**Standards by:** EPA's Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories

Seafood Safe is the solution consumers need. Seafood Safe is a testing program for mercury and PCBs in seafood, two of the most prevalent contaminants found in seafood today. The program helps inform consumers of how many meals they can consume per month, without exposing themselves to dangerous levels of these contaminants. The recommendation is derived from EPA's Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. To protect those adults that are at highest risk, women of childbearing age, the Seafood Safe label reflects safe consumption levels for this sub-population.

Certifying Agency: Approved laboratories for Seafood Safe

**Source:** http://www.seafoodsafe.com/

#### Wine



Bio Garantie Delinat

Standards by: Bio Garantie Delinat

Delinat Bio Garantie is a product label for the company Delinat, which makes wine from controlled organic production. The Delinat standards are centered around the concept of "biodiversity" and go beyond the general organic standards to include social requirements.

Certifying Agency: Delinat

**Source:** <a href="https://www.delinat.com/">https://www.delinat.com/</a>



Deutsches Güteband Wein

Standards by: Deutsches Güteband Wein

The DLG quality label German Ribbon of Quality for Wine (Deutsches Güteband Wein) sets quality standards for wine that go beyond the statutory requirements. In addition to sensory demands made of the wine, the label also covers requirements regarding wine growing and further processing of the wine. Wine growing must be pursued in an environmentally sound manner, with restricted use of pesticides, herbicides, or fertilizers. This ensures long-term preservation of the vineyard habitat. This label offers consumers good orientation in selecting high quality wines that are cultivated in environmentally sound conditions.

**Certifying Agency:** Approved Third-party Inspectors for Deutsches Güteband Wein

**Source:** <a href="http://www.ecolabelindex.com/ecolabel/deutsches-guteband-weindlg">http://www.ecolabelindex.com/ecolabel/deutsches-guteband-weindlg</a>

https://www.wein.de/de/



LIVE Certified Sustainable

Standards by: LIVE

Each year, LIVE members complete a checklist of practices and a set of reporting documents. This annual process enables our third-party inspectors to verify that sustainability goals are being met.

- The farm documents and monitors all key pressure occurrences. A key
  pressure is defined as an agricultural pressure that (1) causes regionwide and significant economic damage and (2) requires annual
  monitoring and treatment. Refer to the LIVE Green List for regional
  lists of key pressures in vineyards.
- The vineyard uses appropriate cultural and biological control measures, consistent with the LIVE Green List. The Green List outlines cultural and biological pest prevention and control methods for key pressures.
- The farm documents all applications of EPA-registered pesticides—including insecticides, herbicides, fungicides, etc. The Pesticide Reporting Form is provided as a template. Please note that foliar fertilizers should be reported on the Fertilizer Reporting Form, and adjuvants/surfactants should be reported on the Other Inputs Reporting Form. Refer to item explanation for detailed documentation requirements.
- The farm documents all fertilizer applications. This includes groundapplied, fertigated, and foliar products. The LIVE Fertilizer Reporting

- Form is provided as a template. Refer to item explanation for detailed documentation requirements.
- The farm documents all irrigation applications. The LIVE Irrigation Reporting Form is provided as a template. Refer to item explanation for detailed documentation requirements.
- The farm operates with a traceability system that allows its products and their certification status to be identified and traced from point of sale back to the farm's production records. The farm maintains adequate documentation of this system. Product purchased from other farms is clearly identified for tracking purposes.
- The farm is maintaining all other documentation necessary to demonstrate compliance with LIVE requirements. This includes, but is not limited to: other inputs (in addition to pesticides, fertilizers, and water for irrigation), sprayer calibration and service records, training attendance certificates, soil and petiole analysis, etc.
- The farm is maintaining truthful documentation demonstrating its compliance with LIVE requirements for a minimum of three years, and is providing access to documentation (upon request) to LIVE and LIVE inspectors.
- The farm is operating in accordance with LIVE's whole-farm requirements. This includes meeting Salmon-Safe requirements for the property. Refer to item explanation for details and definition of wholefarm.
- The farm has submitted its annual reporting ten or more days prior to the deadline (i.e. by November 30 of the current growing season).

Certifying Agency: Approved Third-party Inspectors for LIVE

**Source:** <a href="https://livecertified.org/standards">https://livecertified.org/standards</a>



Sip Certified Sustainability in Practice Standards by: Sip Certified

Sustainability in Practice (SIP) Certified helps farmers and winemakers demonstrate their dedication to preserving and protecting natural and human resources. SIP Certified is a rigorous sustainable vineyard and winery certification with strict, non-negotiable requirements, committed to standards based on science and expert input, independent verification, transparency, and absence of conflict of interest.

The program's award winning rigor and integrity have earned it the reputation of being the gold standard for sustainable certification. That's why we can offer you great wines you can trust are made in a way that protects the people and the planet.

Certifying Agency: Approved Third-party Inspectors for Sip Certified

**Source:** http://www.sipcertified.org/

SUSTAINABLE SEALAND NEW ZEALAND NEW ZEALAN

Sustainable Winegrowing New Zeeland
Standards by: Sustainable Winegrowing New Zeeland

The program is based on continuous improvement and adherence to the Sustainable Winegrowing NZ standards, which ensures members meet international guidelines for sustainability practices in the vineyard and winery. The standards have seven 'pillars', or key focus areas, which include: • Biodiversity • Soil, water and air • Energy • Chemicals • Byproducts • People • Business practices Sustainable Winegrowing NZ members submit Winery and Vineyard Scorecards annually (entered online via WiSE – our Wine Industry Sustainability Engine tool), in order to demonstrate compliance with the standards. The Scorecards have two question categories, 'Compulsory' and 'Voluntary'. 'Compulsory' questions cover sustainable practices that form the minimum requirements of the program, and must be undertaken (if relevant) to gain or keep accreditation.

**Certifying Agency:** Approved Third-party Inspectors for Sustainable Winegrowing New Zeeland

**Source:** <a href="https://www.nzwine.com/en/sustainability/sustainable-winegrowing-nz">https://www.nzwine.com/en/sustainability/sustainable-winegrowing-nz</a>

## **Appendix B: Inventory Food Labeling Educational Tools and Resources**

 Table 2: Inventory of food labeling educational tools and resources

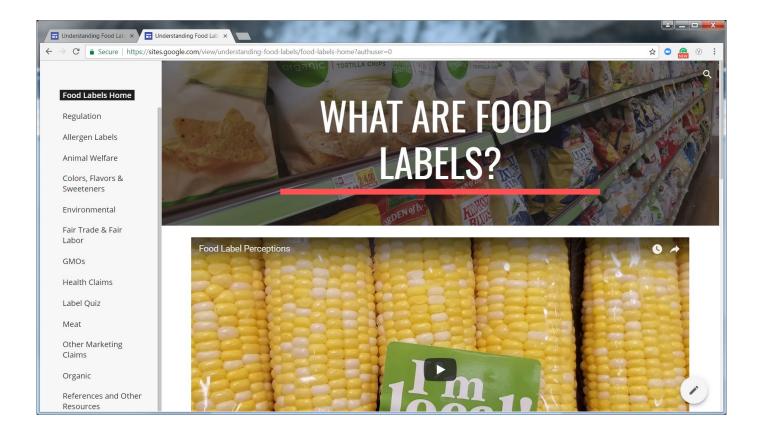
						Τ,	Τ,	1,5	7	Ζ,	Τ,	
						/		Sel .	/	/	/	Manual Resource Access Inttps://awionline.org/content/consumers-guide-food
				/		/		/	S)	<b></b>	/	
			/	A STORY	,e/	2					//	
		/	//			18	<b>%</b>			/	/,	
	90	Heit	1	1/6	10	N.	9	Z.5	Z.		S.	
Resource Title	/	TIE!		N.		3		A.	S.	NI)	339	Resource Access
A Consumer's Guide to Food Labels and		Х			~	Ť	7		ř –	~	7	https://awionline.org/content/consumers-guide-food
Animal Welfare												labels-and-animal-welfare
Animal Rights and Welfare: A Documentary and Reference Guide		Х			*							Baker, L. W. (2015). Animal rights and weifare: a documentary and reference guide . Santa Barbara, CA Greenwood, an imprint of ABC-CLIO, LLC.
Children's Aid Society: Food Justice Program		Х	3					Х	Х	Х		http://www.childrensaidsociety.org/files/upload- docs/fj_curriculum1.pdf
Choose Health: Food, Fun, and Fitness, Lesson 3: Read It Before You Eat It!									Х			https://cfacaa.human.cornell.edu/dns.fnec/files/chfff /CHFFF_3_Nutrition_Facts_Label_2015.pdf
Community Voices for Health: Integrating Nutrition into Core Subjects									Х			http://esba.worksmartsuite.com/UserContentQuickOrder.aspx?category=18
Consumerism- Food Labeling									Х			http://www.uen.org/Lessonplan/preview.cgi?LPid=53 51
Creative Activities and Curriculum for Young Children – Creative Food Experience									Х	Х	Х	Mayesky, M., & Mayesky, M. (2015). Creative activities and curriculum for young children. Stamford, CT: Cengage Learning.
Dairy Council of California Curriculum									Х			http://www.tulsaplay.org/CMS_Files/Nutrition- Curriculum-Descriptions.pdf
Dine for life: Label Reading									Х			http://www.dineforlife.org/elementary-school-
Discovering Healthy Choices: Food Labels									Χ			http://cns.ucdavis.edu/content/shcp/curriculum/nutr
Eating Smart- Being Active									Х			http://esba.worksmartsuite.com/UserContentQuickOrder.aspx?category=18
Edible GMOs? A social science investigation of genetically modified corn chips					*	X						https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=7&cad=rja&uact=8&ved=0ahUKEwj Nr4- yicPWAhWEsVQKHWE3B3cQFghMMAY&url=https%3 A%2F%2Fwww.uaf.edu%2Fcase%2Flessons- 1%2FGMOs.pdf&usg=AFQjCNHV7r3saOcrCcui6hvocT4 v0XoIXQ
Enlightened- Food Labels —Fact and Fiction							Х		Х	Х		https://www.learningzonexpress.com/enlightened- mini-unit.html
Evaluating Perspectives About GMOs						Х						https://www.agclassroom.org/teacher/matrix/lesson plan.cfm?lpid=86
Exploring a Vision: Integrating Knowledge for Food and Health							х					Rouse, T. I., & Davis, D. P. (2004). Exploring a vision: integrating knowledge for food and health: a workshop summary. Washington, D.C.: National Academies Press.
Fair Trade Students Training the Next Generation of Social Justice Advocates					Х							https://fairtradesports.files.wordpress.com/2009/04/ curriculum-secondaryschool-public-teachersnotes.pd
Focus on Fair Trade					Χ							http://www.fairtradeusa.org/
Food Ingredients & Colors			X									https://www.fda.gov/downloads/food/foodingredien spackaging/ucm094249.pdf
Food Label Reading Lesson and							Х		Х	Х		http://lessonplanspage.com/food-label-reading-
PowerPoint: Is This Product Healthy?										_		lesson-and-powerpoint-is-this-product-healthy/
Food Labels and Serving Sizes									Х			http://www.learnnc.org/lp/editions/nutrition/6425
Food Safety Preventive Controls Training	Х											https://www.ifsh.iit.edu/fspca/fspca-preventive-
Curriculum FOODSPAN		H	-	v		_	v	H		Х	V	controls-human-food http://www.foodspanlearning.org/lesson-plans/
FUODSPAN Fundamentals of Food Allergies and	Х			Х		_	Х			<u> </u>	Х	file:///C:/Users/keck.85/Downloads/FAI Full-
Intolerances - Understanding Labels	^											Curriculum.pdf

					_	_	_	_	_	_	_	
				/	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	//			15/	//	//	
			/	//	//	Nee		8		//	/,	Resource Access
			/	10	13	7	1	18		/	/	
		/	/3	10 P	270	er's	et/.	100	SILL	/	/	
	/	No see		105	inon		Tell.	THE	3/	Julie C	100	
Resource Title	1	× ×		7 6	7 4	X	<u> </u>	<u> </u>	7 3	70	7	Resource Access
Generation GMO: The Good, the Bad and the Genetically Modified												http://teachersinstitute.yale.edu/curriculum/units/20 14/4/14.04.08.x.html
Genetic Engineering & Genetically Modified		_				Х		H				https://www.uaf.edu/case/lessons-1/GMOs.pdf
Organisms: Forming Informed Opinions												7,
Genetic Engineering of Crop Plants						Х						http://teachersinstitute.yale.edu/curriculum/units/20 00/7/00.07.02.x.html
GET IT!, Global Education to Improve					Х							https://www.heifer.org/what-you-can-do/school/get-
Tomorrow												it.html
GMO's Go Global: Should they be labeled?						Х						https://grownextgen.org/curriculum/unit/gmo-s-go- global-should-they-be-labeled/
Guide to US Food Laws and Regulations	Х	Х		Х		Х	Х	Х	Х	Х	Х	Curtis, P. (2013). Guide to US food laws and regulations . John Wiley & Sons.
Health Literacy Curriculum: Reading Food Labels									Х			http://m.queenslibrary.org/sites/default/files/health_ literacy/PDF_teachers/Session_17-We.pdf
IFSS Food Protection Professionals	Х											http://www.afdo.org/resources/Documents/NCS/NCS
Curriculum				_								Competencies-GenEd.pdf
Inspection & Grading								Х				http://www.thecookinginn.com/ig.html
Inspection & Grading of Meat and Poultry:								Х				https://www.fsis.usda.gov/wps/portal/fsis/topics/foo
What Are the Differences?												d-safety-education/get-answers/food-safety-fact- sheets/production-and-inspection/inspection-and-
												grading-of-meat-and-poultry-what-are-the-
												differences_/inspection-and-grading-differences
Label Reading									Х			http://hlnces.ncdpi.wikispaces.net/file/view/lesson7+- +label+reading.pdf
Labeling Certification Program			Х				Х		Х	Х		https://primelabel.regfox.com/training-order
Learning, Food, and Sustainability in the					Х		Х	П				Sumner, J. (2016). Learning, food, and sustainability:
School Curriculum												sites for resistance and change . New York: Palgrave Macmillan.
Lesson Plan: Evaluating Information on									Х			http://www.pbs.org/pov/foodinc/lesson-plan-1/
Food Labels												
Manual 2000: the ethical consumer guide		Х		Х	Х	X				X	X	Elkington, J., Hailes, J., & Gillis, F. (1998). Manual
												2000: the ethical consumer guide . Toronto: Key Porter Books.
Market Ready for Grocery, Wholesale, and		<del>                                     </del>						Х	-	$\vdash$		http://www.uky.edu/Ag/AgEcon/pubs/extMRGroc12.
Foodservice Sales								153				pdf
Meat Processing: Pricing, Labeling, and								Х				http://www.la-
Displaying Food Products												ffa.org/download/MeatsProcessing.pdf
National Agricultural Literacy Curriculum- Farmland: GMOs and Organic Agriculture						Х					Х	https://www.agclassroom.org/teacher/matrix/lesson plan.cfm?lpid=397
Nutrition Facts Label: Read the Label Youth Outreach Campaign									Х			https://www.fda.gov/food/ingredientspackaginglabeling/labelingnutrition/ucm281746.htm
Nutrition Lesson Plan - Reading Food Labels		T		H		T		Н	Х	T		http://www.nourishinteractive.com/nutrition-
												education/teachers-lesson-plans/17-food-labeling- nutrition-lesson-plan-reading-understanding-food- labels
OMG it's a GMO! (CTE)						Х						https://www.cteonline.org/curriculum/lessonplan/omg-its-a-gmo-cte/FLT9gL
Personal Health Series: Food Labels							Х		Х			http://classroom.kidshealth.org/6to8/personal/nutrition/food_labels.pdf
Reading Food Labels, Calculating Phe									Х			https://depts.washington.edu/pku/management/curr iculum/teen/readinglabels.html

												Resource Access
Resource Title	R	P		3/4		0	2 X	3	1	35/c	3	Resource Access
Science and Our Food Supply – Using the Nutrition Facts Label to make Healthy Food Choices							Х		Х			https://www.fda.gov/downloads/Food/FoodScienceR esearch/ToolsMaterials/UCM483350.pdf
Teaching Nutrition through Family and Consumer Sciences: A Curriculum Guide for Middle Schools			Х						х			https://dpi.wi.gov/sites/default/files/imce/school- nutrition/pdf/tncurr.pdf
Teaching the Food System				Х						Х	Х	https://casn.berkeley.edu/curriculum- detail.php?c=976
The Food Folks Nutrition Curriculum: Reading Food Labels			*						Х			http://www.childrenshungeralliance.org/assets/childr enshungeralliance/files/%24cms%24/100/1665.pdf
The Science of Poultry and Meat Processing: Chapter 7 Inspection and Grading								х				http://download.poultryandmeatprocessing.com/v01 /SciPoultryAndMeatProcessing%20-%20Barbut%20- %2007%20Inspection%20and%20Grading%20- %20v01.pdf
Toward a Sustainable Agriculture											Х	https://www.cias.wisc.edu/curriculum-new/module-v section-a/
Understanding Fair Trade					Х							http://equalexchange.coop/sites/default/files/import /pdfs/downloads/curriculum/EEcurriculum_Unit2.pdf
University of Missouri Extension Fifth Grade Curriculum: Exploring the Food Groups, Lesson 3									X			http://extension.missouri.edu/p/N182
USDA Beef Quality and Yield Grades								Х				http://meat.tamu.edu/beefgrading/
What's the story of your food?				Х						Х	Х	https://www.ecoliteracy.org/sites/default/files/Nouri sh-Curriculum-Guide.pdf
Win Win Solutions Fair Trade Curriculum					Х							http://equalexchange.coop/programs/education/for- your-classroom

#### **Appendix C: Website Content**

http://go.osu.edu/understandingfoodlabels



#### **Appendix D: Facilitator Guide**

#### OHIO STATE UNIVERSITY EXTENSION

## **Understanding Food Labels Facilitator Guide**

Carol Hamilton, Program Coordinator, Delaware County Extension, The Ohio State University.

#### Overview

On average supermarkets offer over 38,900 products to choose from with each of these products having a unique product label [1]. Understanding the information found on food labels is important for consumers to make purchasing decisions. This lesson gives consumers basic food label knowledge to help navigate the hundreds of statements claims and certifications seen on food packages. The lesson also offers a complementary consumer web resource for additional information.

#### Audience

The primary audience consists of adult consumers. Teens may also benefit from this lesson by learning how to become informed consumers.

#### **Lesson Time**

This lesson takes approximately 65-70 minutes to facilitate but can be extended to include more participant discussion.

#### **Supplies**

- · Paper and pencils
- · Flipchart or whiteboard with markers
- Variety of food packages with different claims and logos
- Computer and projector for PowerPoint Presentation (optional)

#### Preparation

- Review this guide to decide how best to use lesson materials with your participants.
- Familiarize yourself with the "Understanding Food Labels" website and links for additional information
- Decide whether you want to supply your own food packages for the activity or use the PowerPoint presentation with photographs of food packages.





Example food labels should come from a variety of product categories for example meats, beverages, and snack food, etc. Look for different types of claims too.

#### **Lesson Outline**

- 1. Welcome and Introductions (5-10 minutes; Slide 1) Begin by introducing yourself and welcoming the group. For small groups, invite participants to introduce themselves and state what they hope to learn about food labels from this program. Make a note of topic areas participants mention and make sure to address them later in the workshop. If the group is larger you can ask for a show of hands for topic areas participants are interested in knowing more about.
- Review Objectives (5 minute; Slide 2) Provide a general description of the lesson and review the lesson objectives:
  - To know the five required components of food labels.
  - To know the two governing bodies regulating food labels.
  - Be able to recognize the difference between producer, third-party and government labels and claims.
  - Learn how to verify food label claims and statements.
  - Understand common food label terminology.
  - Become more confident consumers.

#### **Lesson Outline Continued**

#### 3. Discussion: (15 minutes; slides 3-9)

Start the discussion by asking the participants:

- What kinds of food products do you purchase on a regular basis?
- Are there any labels you look for when making a food purchase? For example, grassfed, organic, local, heart healthy, all natural.
- Are there any labels you see that you are unsure what they actually mean?
- Are there any labels you don't trust? If so why?
   Allow time for some discussion and write down responses on a flipchart or whiteboard. Feel free to address any specific concerns and provide feedback on responses.
- Go over basic label requirements and explain the FDA and USDA's role in food label regulation.
- Go over the concept of additional label information and the three contributors of this information producers, third-party organizations, and government agencies.
  - Ask if anyone can give an example of a thirdparty or government issued claim?
  - Show example slides of producers, thirdparty organizations, and government agency labels.
- Go over common "regulated" and "unregulated" food labeling terms.

# 4. Activity 1: (20 minutes; Food product packages or example slides)

- Ask the participants to form groups of two or three
- Then allow participants to select one or two product packages or assign product slides from the PowerPoint (print slides for this portion of the lesson). Provide each group with flipchart paper or whiteboard space.
- 3. Ask the group to look at the product label and identify and write down all the different elements, claims and logos.
- 4. Then ask participants to categorize whether each element was regulated by the producer, third-party organization or government. Remind participants of the five FDA package requirements prior to starting.
- Once the groups have finished analyzing their packages each group can present their findings. If the class disagrees with a group's determination have a discussion to find the correct element placement.

Understanding Food labels Facilitators Guide—page 2

# 5. Activity 2: (10 minutes; Food product packages or example slides)

- Using the food label elements found in activity1 have the participants as a group categorize the different claims they found. Suggested categories include but are not limited to: allergen, animal welfare, environmental, fair trade, genetically modified organisms, health claims, meat, other marketing and organic.
- Discuss any common labeling trends participants noticed.

# **6. Take Away (5 minutes; slide 10)** Encourage participants to look for labels discussed today the next time they go grocery shopping.

- Ask participants if they have any further comments or questions that were not addressed.
- Provide participants with the website resource http://go.osu.edu/understandingfoodlabels to
- · Summarize key points for participants

#### 7. Evaluation (5 minutes)

The evaluation is a way for you to:

further explore food labels.

- Determine whether learning objectives were met
- Receive feedback on your teaching and facilitation
- · Assess future needs.

#### References

[1] "Supermarket Facts." FMI | Food Marketing Institute | Supermarket Facts, www.fmi.org/our-research/supermarket-facts. Accessed 3 Oct. 2017.





# Understanding Food Labels

Carol Hamilton



# **Objectives**

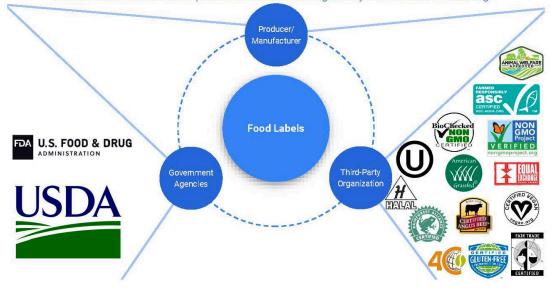
- •To know the five required components of food labels.
- •To know the two governing bodies regulating food labels.
- •Be able to recognize the difference between producer, third-party and government labels and claims.
- Learn how to verify food label claims and statements.
- •Understand common food label terminology.
- •Become more confident consumers.

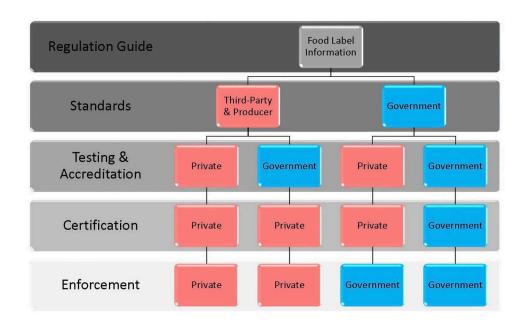
What kinds of food products do you purchase on a regular basis?

Are there any labels you look for when making a purchase?

# Are there any labels or terms that you are unsure of the meaning?

Producers must follow federal guidelines when labeling food products. However, there are numerous terms and claims that can be used at the producer's discretion as long as they are not false or misleading.











Try to identify whether each of these labels was issued by a government agency, third-party organization or a producer.

# Can you think of any third-party claims?

# To learn more visit:

http://go.osu.edu/understandingfoodlabels

























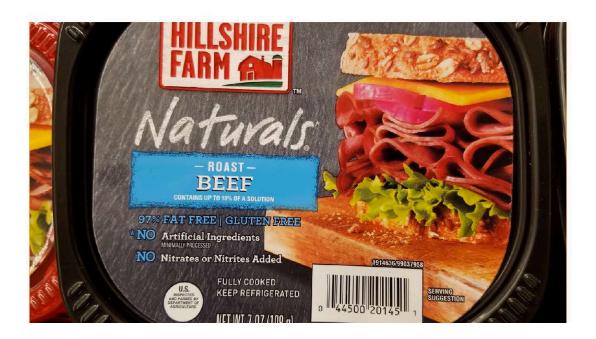


















## **Appendix E: Evaluation Tool**

# **Understanding Food Labels Evaluation**

Sta	art of Bloc	k: Program Content					
Q4	What are	the five required components of a food label?					
	O Produc Line (1)	ct Identity, Net Content, Nutrition Facts, Environmental Statement, and a Signature					
		ct Identity, Net Content, Nutrition Facts, Ingredients/ Allergen Statement, and elfare Claim (2)					
	O Product Identity, Net Content, Health Claim, Ingredients/ Allergen Statement, and a Signature Line (3)						
	O Produc Signature	ct Identity, Net Content, Nutrition Facts, Ingredients/ Allergen Statement, and a Line (4)					
Q5	What two	government agencies regulate food labels?					
		United States Department of Commerce (1)					
		United States Department of Health and Human Services (2)					
		United States Department of Agriculture (USDA) (3)					
		The Food and Drug Administration (FDA) (4)					

## Q6 Which of theses labels is a third-party regulated label?









#### Q7 Which of these gluten-free labels cannot be verified?









Q8 True or False "The terms "environmentally-friendly", "eco-friendly", "environmentally responsible" and "green" are <u>not</u> legally defined by the federal government."
○ True (1)
O False (2)
Q9 What percentage of a product needs to be organic for it to be labeled "certified organic?"
○ 0% Organic is not legally defined. (1)
O 50% (2)
O 75% (3)
O 95% (4)



Q10 What product logos, claims or statements are present on the above label?

Fair Trade (1)
Certified Vegan (2)
Verified Non-GMO Project (3)
All Natural (4)
Kosher (5)
Organic (6)

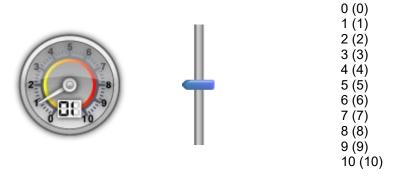
**End of Block: Program Content** 

**Start of Block: Consumer Confidence** 

Q11 Please indicate how your understanding of food labels has changed as a result of participating in this workshop?

	Extremely knowledgeable (1)	Very knowledgeable (2)	Moderately knowledgeable (3)	Slightly knowledgeable (4)	Not knowledgeable at all (5)
Who regulates food labels (1)	0	0	0	0	0
What kinds of information can be found on food packages (2)	0	0	0	0	0
How to determine the organization responsible for certification (3)	0	0	0	0	0
Food labeling terminology (4)	0	0	0	0	0

Q12 Has this program made you a more confident consumer? 0 being "No" and 10 being "Absolutely"



Understanding Food Labels
Q13 What changes would you suggest to improve the "Understanding Food Labels" workshop?
End of Block: Consumer Confidence
Start of Block: Demographic Information (only used in summary for statistical reporting)
Start of Block. Demographic information (only used in summary for statistical reporting)
*
Q1 Age:
Q2 Ethnic Background:
O Hispanic (1)
O Non-Hispanic (2)
O Abstain (3)

llní	dercta	nding	Food	Labels
$\mathbf{o}$	acista	HUIHE	1 000	Labels

Q3 Race (check all that apply):						
	American Indian/ Alaskan Native (1)					
	Asian (2)					
	Black (3)					
	Hawaiian/ Pacific Islander (4)					
	White (5)					
End of Block:	: Demographic Information (only used in summary for statistical reporting)					