



# Certification and Labeling Considerations for Agricultural Producers

## Project Authors

Russell Tronstad, University of Arizona  
Ramiro Lobo, University of California, Davis  
Wendy Umberger, Colorado State University  
Stuart T. Nakamoto, University of Hawaii  
Kynnda R. Curtis, University of Nevada, Reno  
Larry Lev, Oregon State University  
DeeVon Bailey, Utah State University  
Ruby Ward, Utah State University  
Chris Bastian, University of Wyoming

## Sponsor

Western Center for Risk Management Education

## Editing and Design

Nancy Bannister, University of Arizona



**Western Extension  
Marketing Committee**

**The Western Center for  
Risk Management Education**  
Washington State University Cooperative Extension  
222 North Havana  
Spokane, Washington, 99202  
509-477-2168  
<http://westrme.wsu.edu>



**Cooperative Extension**

**Publication 1372**

THE UNIVERSITY OF ARIZONA<sup>®</sup>

Copies of this publication are available for purchase through the University of Arizona College of Agriculture and Life Science's publications system. Please visit <http://cals.arizona.edu/pubs/> or write to the following address:

CALSmart  
4101 N. Campbell Avenue  
Tucson, AZ 85719-1111  
Phone: (520) 318-7275  
Fax: (520) 795-8508  
Toll free: 1-877-763-5315

In addition, you may freely download and print copies of the book from the Western Extension Marketing Committee site:  
<http://cals.arizona.edu/arec/wemc/certification.html>

## **Certification and Labeling Considerations for Agricultural Producers**

Published 2005 by the Western Extension Marketing Committee

©2005 All rights reserved by authors.

ISBN 0-9748669-1-1

### *Photo Credits*

Doug Wilson, pp. 5–7

USDA, p. 16

Dennis Moroney, p. 25, bottom photo

Aaron Silverman, p. 28

Stuart T. Nakamoto, p. 30, top and middle photos

Ben Williams, p. 34, bottom photo

Russell Tronstad, all other photos

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, James A. Christenson, Director, Cooperative Extension, College of Agriculture and Life Sciences, The University of Arizona.

The University of Arizona is an equal opportunity, affirmative action institution. The University does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, veteran status, or sexual orientation in its programs and activities.

# Table of Contents

## Part One

- 3 Introduction**
  - 5 *Wyoming Wheat Grower Goes Organic* 
- 8 Branding versus Certification**
- 9 Changing Consumer Demand for Food Products**
- 11 External Events Increase Demand for Certification**
  - 13 *Social Responsibility Labels* 
- 13 What Food Attributes Do Consumers Value?**
  - 14 *Does the Food Product Affect the Health of My Family?*
  - 15 *National Organic Program* 
  - 17 *Does the Production of the Food Product Treat Animals in a Humane Way?*
  - 17 *Are the Production Processes Environmentally “Safe” or “Friendly”?*
  - 18 *Dolphin Safe Tuna* 
  - 19 *Social Responsibility: Are Others Affected by the Production and Processing Techniques?*
  - 19 *Does the Consumption of the Product Conform to My Religious Beliefs?*
  - 20 *Food Alliance* 
- 21 Does Third-Party Certification Add Value to Food Products?**
  - 22 *Religious Responsibility* 
- 24 Types of Certifications**
  - 26 *Third-Party Certified Pesticide-Free Greenhouse Tomatoes* 
  - 28 *Greener Pastures Poultry: No Certification Strategy* 
  - 29 *Geographic Certification: Country of Origin Labeling* 
  - 30 *Kona Coffee Geographic Certification* 
- 31 Types of Third-Party Agents**
  - 32 *California Certified Organic Farmers (CCOF): More than an Organic Certifier* 
- 36 Certification: Whom Do Consumers Trust?**
- 37 Summary**

## **Part Two**

### **39 A Flowchart Guide for Third-Party Certification**

*39 Mandatory Certification*

*40 Producer Objectives*

*40 Product Attributes*

### **50 References**

## **Tables and Figures**

35 Table 1. Examples of Certification of Various Product Attributes and Certifying Bodies

48 Table 2. Relative Producer Costs and Benefits of Selected Certification Programs

10 Figure 1. The Hierarchy of Consumers' Food Preferences

44 Figure 2. A Flowchart Guide for Certification



ORGANIC Certified Organic Produce

Organic  
Romaine  
Lettuce  
99¢  
EACH



ORGANIC VALLEY  
ORGANIC  
LOWFAT MILK  
1% MILKFAT

Grade A • Vit. A&D • Ultra Pasteurized

Produced without antibiotics,  
synthetic hormones or pesticides

ORGANIC  
VALLEY®



Family of Farms



**PART ONE**

Certify: To confirm formally as true, accurate, or genuine.  
To guarantee as meeting a standard: *butter that was certified Grade A.*

—*The American Heritage Dictionary of the English Language*,  
Third Edition (1992).

## Introduction

Low and volatile commodity prices coupled with an overall increase in input costs continue to squeeze producer profitability. Given this market and production environment, many producers are searching for ways to improve their bottom line. A common strategy is to work at lowering production costs through expanding the size of the operation and spreading management and equipment purchases over more acres or producing units. Due to pressure from competing nonagriculture land uses, expansion of agricultural operations is often infeasible and increasingly risky. But given that opportunities for expanding land holdings are often limited, and considering the need for increased financing with growth, most producers are unable to reduce costs through expansion. If opportunities for decreasing production costs through expansion are limited, can producers improve their economic viability by differentiating their products to attain higher prices? Branding and certification are strategies that many producers are using to distinguish their production and obtain higher and hopefully less volatile prices than those obtained in traditional commodity markets.

Given the numerous certification and branding programs available, how does one decide whether branding and/or a certification strategy should be pursued, and if so, which one? The answer lies in understanding food industry trends and in choosing a strategy that exploits competitive cost advantages and fits the owner's goals of each operation. Branding and certification capitalize on three distinct food industry trends: (1) a growing separation between agricultural producers and food consumers; (2) increasing food safety concerns; and (3) rising disposable household incomes. When combined, these trends fuel consumer demand for differentiated food products. Both branding and certification programs provide consumers with more information for their food purchasing decisions. These programs provide opportunities for producers to distinguish their product from the ordinary, potentially improve market prices and access, and lower price volatility for their products.

The first part of this chapter explains subtle differences between branding and certification programs, and then considers several consumer motivations for seeking out different kinds of

**Three distinct food industry trends...fuel consumer demand for differentiated food products.**

labeled products in the marketplace. The following section considers the type of certifications and certifying agents that are available. A flowchart guide is presented in the last chapter to help producers determine whether third-party certification may be a worthwhile business strategy to pursue. Different sidebars and cases, drawn primarily from examples in the West, help illustrate various points and concepts.





## **WYOMING WHEAT GROWER GOES ORGANIC**

*(To preserve requested anonymity, the farm and operator names for this Wyoming operation are fictitious.)*

In recent years, the manager of Flat Top Farm was becoming more and more disappointed at how much he was able to receive for his wheat. As John assessed his situation, he recognized that his average yield of 27 bushels per acre from his 1,500-acre farm was not going to meet minimum living standards for his family. Something had to change.

**Alternatives for Flat Top Farm.** John decided he had to do something, and he began to gather information on his alternatives. His two basic options were to get bigger and try to make it on more acres or to find a way to make his current production more valuable. Given rising land and equipment prices, getting bigger did not seem all that attractive to John. Thus, he concentrated on investigating ways of adding value to his wheat crop. The problem with many of the value-added strategies for transforming his wheat into a higher-valued product was that they often required additional investment capital, management, and marketing. He identified the transition to organic wheat production as relatively easy since he had quit using fertilizers and herbicides on his ground four years before as a way to reduce costs and potentially increase his profits.

**Finding a Market for Organic Wheat.** During his search for information about alternatives, John mentioned to a nearby grain cleaner that he was thinking about producing organic wheat. The grain cleaner knew John had quit using synthetic fertilizers and chemicals and mentioned his name to a buyer that was looking for organically produced wheat in the area. The buyer contacted John directly and encouraged him to think seriously about getting his wheat certified as organic. The buyer told John that he had a relationship with an artisan baker in California who was demanding organic wheat. He also quoted John a price for organically certified wheat that was a substantial premium to what he was receiving for conventionally produced wheat he sold at the local elevator. The chance contact from the buyer offering a potential premium market outlet for his wheat was just the added motivation John needed to research more seriously what he would need to do to meet third-party organic certification guidelines.

**Getting Certified.** The first step in getting certified was to find an agency or individual that was qualified to certify wheat from Flat Top Farm as organically produced. John first contacted the Wyoming Department of Agriculture (WDA) and discovered they did not provide that service. WDA contacted the Colorado Department of Agriculture to see if John could be certified through Colorado's program. The answer was no. The WDA did some more research for John and provided a list of organizations that would certify organic production in John's area. John

contacted these certifiers. Annual fees for certification varied between \$150 and \$5,000 annually. He was also required to pay a small commission to the certifier on wheat sold as organic. During a conversation with one person on the list, John was encouraged to join an organization of organic wheat producers that met in Nebraska not too far from his operation. After joining that group, John had access to yet another list of certifiers and it was from this second list that he found someone who now certifies his wheat as organic.

John had to supply lots of production records to his certifier regarding input use for each field on his farm. Additionally, the certifier took spot soil samples that were tested for chemical residue. The certification process required a minimum of three years of verifiable organic production practices before the operation could be certified "organic." Once John was certified, any production sold went with an organic certificate for the buyer. Moreover, the certifier kept track of the amount of organic production and the production sold with organic certificates. These records were audited every year to make sure the volume of wheat sold as organic was not more than was actually certified. John paid 0.3 percent of his gross sales of certified wheat production to his certifier in addition to an up-front annual fee. The practice of receiving a commission and the amount asked for may vary across products and third-party certifiers, so John recommends checking around.

***Benefits Versus Costs of Being Certified.*** John feels the move to organic production has been positive for the future of Flat Top Farm. He believes his yields are comparable to what they were historically. However, he admits he has changed his tillage practices to compensate in part for not using herbicides. According to a number of University studies, it is not uncommon for producers to have yields at 90 to 95 percent of original levels after making the switch to organic. John feels the costs associated with certification are more than offset by the 50 percent increase in the value of the wheat he now sells compared to conventional wheat prices, and he believes this has improved his bottom line. The added value also makes worthwhile the additional time and effort spent on production records and detailed information, such as receipts regarding volume sold as organic, that must be provided to his certifier. John also thinks he has seen some soil changes on his farm from his organic production practices that may improve his yields over time.

***Major Considerations for Others Thinking About Becoming Organically Certified.*** John feels that the relationship with his buyer, ultimately the artisan baker, will continue to be a major key in the success of his strategy. The artisan baker relies on the organic certification of inputs as well as the consistent baking qualities of John's and other producers' wheat used in his flour to bake a product that meets his customers' demands. John has been to both the elevator and mill that process and blend his grain for the artisan baker. The elevator and processing facilities are closer to the artisan baker rather than near where John produces his wheat. John visited these facilities because he felt he needed to be sure his grain was handled properly and not mixed with noncertified grain. After all, if that trust relationship was broken with the baker, John's market would potentially dry

up. Thus, John feels any producer thinking about this strategy will have to spend more time on the marketing and the record keeping it takes to make sure their production can be certified.

John also recommends producers join a group of organic growers. John has found the networking and support from his organic growers' group to be invaluable. Often times when John is considering changing something in his operation, he can get answers from someone else in the group. This is quite useful to John since he has found that many of the traditional sources of information that producers go to for help don't have much to offer on organic production.

A drawback that John has experienced with the organic strategy has been selling grain on the open market at a lower price when the protein levels were low. He feels, however, that his relationship with his buyer will create some long-term commitments that will mitigate this risk. The baker has agreed to pay some premium for John's wheat if it doesn't have high enough protein levels as long as John promises to sell to him year in and year out.

"It's exciting to know where your product is going and to see the end product being produced from your grain," John says, summing up his organic experience thus far. "I have gone to the baker, seen his operation, and seen my grain's qualities compared to other growers'. It's exciting to see my grain do well." Moreover, John is excited by the change in demand he has seen for his wheat since he switched to organic production. "I'm getting a reputation and more people know I grow organic wheat. I now get buyers calling me once a week during the summer offering to buy my grain, but I am sticking with my current buyer for now. Before I grew organic wheat I had only an occasional buyer contact me. Usually I had to find a buyer to sell my wheat."

**Branding is very broad and includes certification.**



**Certification provides an alternative that allows individual producers to be included under an established umbrella program and label.**

## Branding Versus Certification

What is branding? The definition of a *brand* in the marketing literature is “a name, term, design, symbol, or any other feature that identifies one seller’s good or service as distinct from those of other sellers” ([marketing.about.com/library/glossary/Marketing\\_Terms/bldef-brand.htm](http://marketing.about.com/library/glossary/Marketing_Terms/bldef-brand.htm)). In the Old West, cowboys branded their cattle to differentiate them from those of other ranches. The practice continues today to identify appropriate cattle owners and reduce theft, but now branding is also done with labels, packaging, and other materials.

The concept of branding is very broad and includes certification as one method for distinguishing a set of products from others in the marketplace. Consumers must be able to associate a brand with high quality or other valued food characteristics for the brand to establish identity and succeed. For example, if Mike has a reputation for growing produce of superior quality, buyers might search out his farm. As a result, a label such as “Mike’s Melons” will most likely be successful in establishing a brand identity, especially for repeat buyers. Then, consumers searching for high quality need only to look for the “Mike’s Melons” label in their local market. Apple Annie’s is a regional brand label that has local recognition for more than just apples. Oregon Country Beef is another example of a regional brand that has gained market share by providing what consumers perceive to be high-quality beef.

If Mike seeks to market beyond the local level, however, he may not have the resources to support his brand. Consumers typically do not have direct interaction with individual producers at the regional or national level, so promotion and advertising are more essential for a brand to be successful. At the national level, developing and marketing branded products is most successful for companies with deep pockets and a well-established reputation such as Nabisco, Chiquita, or Tyson Foods.

What is certification? Certification provides an alternative that allows individual producers to be included under an established umbrella program and label. Examples of two well-known certification labels are the Good Housekeeping and Underwriters Laboratories (UL) seals. Like every other certification label, these labels depend on establishing a set of production processes and quality standards that define how the certified product is different. Producers who meet the established standards qualify for certification. Certified products provide assurance to buyers that those products have certain qualities or attributes that are valued by customers. A grower might similarly produce products for a brand, where the owners of the brand determine the standards and types of products that qual-

ify to carry the specific brand label. However, brands are usually privately owned and managed. In contrast, third-party certification refers to the assurance being provided by a party with no direct interest in the product; that is, the certifying party does not directly benefit from the sale. Where brands are associated with desired product qualities and that brand's reputation, third-party certification also relies on the reputation of the third party. Self-certification with promotion through oral testimony is another method that some producers have used to differentiate their production (see the section on Types of Certifications). However, the focus of this book is on third-party certification as a marketing and product differentiation strategy.

To choose a successful marketing strategy using third-party certification, we first consider current factors that drive consumers' choices and that will ultimately determine your product price received. We also look at what kind of alternative market access your product may have. The next section provides additional information on product characteristics that consumers demand and how certification relates to different categories of food product attributes.

### Changing Consumer Demand for Food Products

The consumer's food demand pyramid illustrated in figure 1 (next page) presents a simple model of the consumer choice process. This model suggests that low-income consumers focus first on meeting their survival needs (the base of the pyramid). At higher income levels, consumers begin to use their dollars to purchase products that satisfy concerns above and beyond basic needs. As incomes rise, consumers desire additional characteristics in their food beyond mere nutrition, including better tasting foods in a myriad of varieties that can be consumed in convenient ways. Additionally, at high-income levels, consumers also look for expanded information about their food and how food production affects their own health and lifestyle. High-income consumers are also concerned about the impact that individual food production decisions have on other people, the environment, and animals. This suggests that as incomes increase, the demand for food products with different characteristics evolves. This evolution presents both opportunities and threats to existing and potential food producers. Producers who are able to recognize and address emerging opportunities as markets evolve may be able to overcome the disadvantages inherent either in being relatively small compared to producers in the general market or in entering a mature industry such as food production.



**At high-income levels, consumers also look for expanded information about their food.**

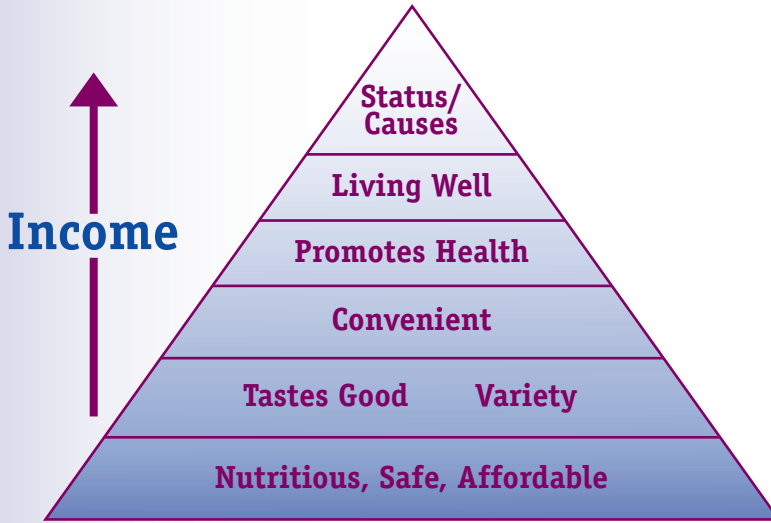


Figure 1. The Hierarchy of Consumers' Food Preferences  
Source: Jean Kinsey, University of Minnesota

Food is not just food anymore, and food labels provide more than just the product name and ingredient list. The complexity of obtaining safe and nutritious food (the bottom of the consumers' food demand pyramid) has come to light, due to recent, serious food safety concerns including *Bovine Spongiform Encephalopathy* (BSE or "Mad Cow" Disease), E-coli 0157:H7 outbreaks in the United States, worldwide apprehension over pesticide contamination, and the introduction of genetically modified organisms (GMOs) into the food supply. Some consumer strategies for obtaining safe food include selecting products with guarantees beyond typical government inspection, including those that are certified by third-party inspectors, to address some aspect of their perceived health risks.

Traditionally, food products have been differentiated through 1) *appearance attributes* readily identifiable by sight, touch, or smell, and 2) *experience attributes* such as taste, flavor, tenderness, sweetness, and related characteristics that can be evaluated only after consuming the product. However, as disposable incomes in the United States have increased, consumers have increasingly incorporated other factors that cannot be perceived through visual inspection or experience into their demand for food products. These characteristics include a desire for information about food production and processing practices and the potential personal health consequences associated with consuming different foods. These "extra-sensory" product characteristics are classified as 3)

**"Extra-sensory" product characteristics are classified as credence attributes.**

*credence attributes* (Caswell 1998). Because these attributes are neither observed nor experienced by the consumer, they must be communicated by a trusted source through proper food labeling. Examples of credence attributes include animal welfare, biotechnology, use of growth promotants, antibiotics and feed additives, organic practices, traceability, and the region or country of origin of a food. Typically, consumers cannot directly determine the existence of such production and process attributes before, during, or after consumption because the attributes do not necessarily affect the visual or sensory characteristics of the food. The emergence of credence attributes as an important marketing component in food products marks a new era in food marketing and has the potential for revolutionizing how food is produced and marketed. Food certification is a critical part of how credence attributes are established and communicated to consumers.

As consumers seek more than simply a description of the *appearance* and *experience* attributes of their food, certification and other assurances represent a means for providing them with information they value and are willing to search out and/or pay more for when they have a choice. Thus, third-party certification provides information to help a consumer decide whether a product has the *credence* characteristics that he or she desires.

### External Events Increase Demand for Certification

The issue of trust is central to many of the current discussions about food quality, safety, and certification. Two important events, one from the meat industry and one from the grain industry, provide dramatic illustrations on how important trust is for communicating and certifying food characteristics to consumers. The *BSE* crisis in Europe in the 1990s demonstrated how incorrect and misleading government claims and assurances can lead to serious food system problems. Near the beginning of the *BSE* crisis, some European governments assured the public that beef products were safe to eat. However, when strong scientific evidence emerged linking the human disease, new Variant Creutzfeld-Jakob Disease (vCJD), with the eating of *BSE*-contaminated beef (Christensen 2002, Baines 2002), this led to a virtual collapse in the European beef market and a shattering of consumer confidence in the governments' capacity and capability in making these types of assessments.

A similar case occurred in the grain industry with a bioengineered variety of corn, StarLink. StarLink had not been approved by the US government for human consumption because it contained a possible human allergen (Cry9C). But, an environmental activist group documented that StarLink had been

**The emergence of credence attributes has the potential for revolutionizing how food is produced and marketed.**



**Most American consumers continue to have a high degree of confidence in food safety assurances from the federal government.**



**Consumers may inaccurately assume that "organic" means "pesticide-free."**

introduced into the human food chain in spite of government inspections. The result was a very broad-scaled and costly recall program initiated by Adventis, the inventor of StarLink, which by some estimates cost the company \$500 million to complete.

Even though significant food safety breakdowns in the US food system have and will continue to occur (see Salin and Hooker 2001), most American consumers continue to have a high degree of confidence in food safety assurances from the federal government (Christensen 2002, Loureiro and Umberger 2003, Wessells, Johnston, and Donath 1999). In addition, a range of different groups have responded to consumer demand by providing additional types of certification beyond just nutritional, health, and food safety claims. These new food certification efforts address various consumer concerns including humane animal treatment, environmental responsibility, and social responsibility. In this way, certification claims related to these issues are used to signal quality to consumers who place a value on how their food is produced.

Food certifications are typically performed by an unassociated "third-party" certifier who validates, usually through audits, that the inputs and/or processes used to produce food products are as claimed on the label. Since it is essentially impossible for individual consumers to verify credence attributes, the reputation of the agent providing the product certification is very important (e.g., United States Department of Agriculture [USDA] Inspected, Food Alliance Certification, etc.). In this respect, certifications made through advertising, labeling, or point-of-sale information can be powerful tools for establishing product, producer, processor, and handler reputation(s).

Not all information implied by advertising, labeling, or point-of-sale information is necessarily true or accurate. Firms often have economic incentives to make misleading or false claims about their products. Even when firms don't intentionally mislead consumers, consumers may still have erroneous perceptions about what is actually guaranteed or certified for a certain product. For example, consumers may inaccurately assume that "organic" means "pesticide-free." Consequently, it is important for food marketers to first understand the different attributes consumers are willing to pay for, and then to effectively and accurately convey these product characteristics to consumers. Furthermore, if certifications beyond traditional government inspections are important to consumers, the selection of the appropriate certification agency is an important task for US food producers and businesses wishing to convey quality characteristics, other than food safety, to consumers. The rest of this publication will address these issues.



### Social Responsibility Labels

Ben & Jerry's, a primary producer of specialty ice cream, frozen yogurt, and sorbet, puts social responsibility at the forefront of its business decisions. The company's mission is to produce high-quality natural ice creams, while incorporating business practices that respect the environment and improve the quality of life nationally and internationally. Programs range from product lines which support local grower cooperatives and environmentally friendly growing practices, such as in the "For a Change" and "Organic" ice cream lines, to the use of clean energy production practices, ice cream cups that can be composted, and low environmental impact polyester resin tamper-evident shrink bands. Ben & Jerry's supports the economic viability of family farms in rural communities by paying a price premium to the farmers of the St. Albans Cooperative for milk produced by cows untreated by recombinant Bovine Growth Hormone (rBGH). Ben & Jerry's goes to great lengths in its promotional and reporting activities to show the environmentally conscious and socially responsible consumer that its creed of similar values is indeed true.

**Organic Line.** Ben & Jerry's currently has four flavors in its "Organic" line. All ingredients in this line are third-party certified organic. This requires that the forage and grain inputs the dairy cows consume, the strawberries used in strawberry ice cream, and all other ingredients be certified as organic. The company promotes its organic line as being wholesome and produced under methods that reduce environmental degradation and maintain land productivity.

**For A Change Line.** Flavors in the "For a Change" line include smooth vanilla, chocolate, and coffee. Ingredient purchase decisions for these products are made with the goal of promoting positive social change. In an effort to provide suppliers with a vehicle to sustain their farms and communities, Ben & Jerry's pays higher than market prices for ingredients, provides long-term production contracts, and uses nontraditional financing options. For example, the coffee flavor is made using Fair Trade Certified coffee extract to ensure that farmers receive a fair price for their coffee and workers have decent living and working conditions.



### What Food Attributes Do Consumers Value?

In addition to standard product characteristics, what other food product attributes are important to consumers? Consumers' cultural norms and personal values influence how they evaluate available food products in the marketplace. In evaluating products, consumers consider one or more of the following five screening questions:

**A five-digit number that starts with a "9" indicates that the produce was grown following organic standards.**



**Some consumers believe, either rightly or wrongly, organic products are healthier than nonorganic products**

**1. Does the food product affect the health of my family?**

This question is associated with consumers' concerns about food product safety. That is, are consumers concerned about whether the food product might have an adverse impact on their and their family's health and well-being? Labels that identify the origin of the product, certify it as organic, GMO-free, or guarantee some level of food safety may provide information to help consumers answer this question. The National Organic Program and government policies on non-GMO products explicitly state that no human health claims can be made for either. However, multiple surveys have concluded that some consumers choose these products because they believe, either rightly or wrongly, that organic products are healthier than nonorganic products and non-GMO products are healthier than GMO products (Harris, Burrell, and Eicher 2000). Consumers have varying perceptions and beliefs about what constitutes a health risk. Some may view health risk only in relation to short-term nutritional benefits while others may view the possible inclusion of residual insecticides or chemicals on their food as a long-term threat to their health. Certification provides assurance to the consumer that food has been produced in a manner that is consistent with product claims; this is especially important for health-related product attributes that cannot be readily determined by the consumer at the point of sale.

The Food Safety and Inspection Service ([www.fsis.usda.gov](http://www.fsis.usda.gov)) is a public health regulatory agency of the USDA that inspects all raw meat sold in interstate and foreign commerce. USDA inspection and certification (conducted by FSIS) is mandatory for essentially all meat, poultry, and egg products sold. This mandatory certification gives the consumer assurances that the food has been handled in a manner consistent with USDA guidelines for food safety.

Another example of a health-related certification program is the American Heart Association's (AHA) heart-check mark food certification program ([www.americanheart.org/presenter.jhtml?identifier=2115](http://www.americanheart.org/presenter.jhtml?identifier=2115)). This certification program was established by the AHA to help consumers find foods that meet FDA established "heart healthy" levels of fat, saturated fat, cholesterol, sodium, and naturally occurring nutrients. Manufacturers of food products that meet the AHA's certification program guidelines can use the heart-check mark as a label certifying that it is "heart healthy."

### National Organic Program

The USDA recently adopted the National Organic Program (NOP) to regulate the use of the term organic. Most synthetic pesticides and fertilizers, all antibiotics, genetic engineering, sewage sludge, and irradiation are excluded from organic production. In addition, organic animals must have access to the outdoors, except for poultry.

The following three organic labels may be found: “100% Organic,” “Organic,” and “Made With Organic Ingredients.” The three labels are used to distinguish among the percentage of organic ingredients used. Fresh produce is obviously all organic or not organic, so the labels of “100% Organic” and “Made With Organic Ingredients” are found on processed or manufactured products with mixed ingredients. “100% Organic” requires that all product ingredients be grown using organic standards. The “Organic” label requires that at least 95 percent of food product ingredients be grown organically, excluding water and salt by weight. However, the nonorganic ingredients (less than 5 percent) must be on the approved National List (see [www.ams.usda.gov/nop/NOP/standards/LisReg.html](http://www.ams.usda.gov/nop/NOP/standards/LisReg.html)). The National List delineates synthetic materials that can be used for organic production and prohibited nonsynthetic items, as approved by the National Organic Standards Board. Items are removed from the National List after five years unless they are reviewed again and re-listed.

Products designated “100% Organic” and “Organic” may carry both the certifier’s logo and the National Organic logo. Products labeled “Made With Organic Ingredients” must be made with at least 70 percent organic ingredients, of which at least three must be listed on the back of the package, and the remaining ingredients (less than 30 percent) must be on the approved National List. These products may carry the certifier’s logo but may not display the USDA organic logo. Food products that have some organic ingredients, but less than 70 percent of total ingredients, cannot display the word organic on the front of the package but can list the organic items as such on the side of the package.

Individual stickers placed on fresh produce also have meaning for how it was grown. For example, a five-digit number that starts with a “9” indicates that the produce was grown following organic standards. A five-digit number that starts with an “8” indicates the produce was derived from genetically altered seeds or plant material. A sticker with only four digits means the produce was grown “conventionally,” even though it may still have been grown without pesticides and is advertised as such.

The USDA Organic label can only be applied to food that is third-party certified as meeting NOP standards. Some entities label as “certified organic” rather than just “organic,” but both are equally third-party



**The USDA Organic label can only be applied to food that is third-party certified as meeting organic standards.**



**“Free-farmed” includes animal living standards related to food and water management criteria, living environment, and animal health.**

**Seventh GENERATION.**

**YOU ARE MAKING A DIFFERENCE™**

If every household in the U. S. replaced just one roll of 120 ct. virgin fiber paper towels with 100% recycled ones, we could save:

- 933,000 trees
- 2.4 million cubic feet of landfill space, equal to 3,700 full garbage trucks
- 350 million gallons of water, a year's supply for 2,700 families of four
- and avoid 59,600 tons of emissions

Seventh Generation paper towels are made from 100% recycled paper, with a minimum of 90% post-consumer materials. Your choice of our jumbo roll natural paper towels makes an important difference today, and for the next seven generations. Here's how:

**Recycling paper prevents unnecessary landfills.**

**There are no USDA standards for free-range eggs or beef.**

certified if the USDA Organic label is displayed. Produce is certified organic according to USDA standards by private companies and state agencies that have been approved by the USDA. Oregon Tilth is one example of a USDA-approved private company. A current list of accredited organic certifying agents can be viewed by state at [www.ams.usda.gov/nop/CertifyingAgents/Accredited.html](http://www.ams.usda.gov/nop/CertifyingAgents/Accredited.html).

Farms or handlers with less than \$5,000 a year in organic agricultural products may label their goods as organic without undergoing third-party certification, but they are not able to display the USDA Organic label or use a label of “certified organic.” Both the producer and handler must be third-party certified to display “certified organic” or the USDA Organic label. The USDA makes no claims that organic certified food is healthier or more nutritious than conventional foods, but only that the way it is grown, handled, and processed differs. For more information on the program visit [www.ams.usda.gov/nop](http://www.ams.usda.gov/nop).

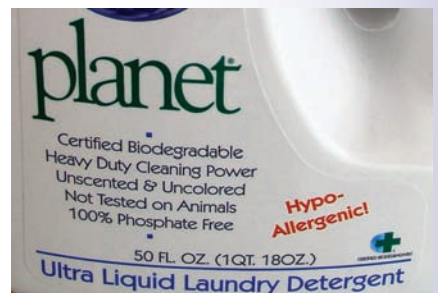
## 2. Does the production of the food product treat animals in a humane way?

Labels certifying animal handling conditions and quality of life during production such as “free-range,” “dolphin safe,” “cruelty-free,” and “free-farmed” are used to assure consumers that animal food products come from animals that were treated in a humane manner. For example, “free-farmed” includes animal living standards related to food and water management criteria, living environment, and animal health. The USDA has standards for free-range or free-roaming poultry products (excluding eggs) that require poultry to have open-air access for an unspecified period each day. Currently, there are no USDA standards for free-range eggs or beef. Cage-free is a fairly common label that also has no USDA standard or regulation. Another certification is “Certified Humane Raised and Handled” which provides certification that animals have 1) been able to engage in their natural behaviors, 2) have sufficient space, shelter, and gentle handling to limit stress, and 3) have ample fresh water and a healthy diet without added antibiotics or hormones (see [www.certifiedhumane.com](http://www.certifiedhumane.com)). The Certified Humane Raised and Handled website provides a list of retailers by state that carry products with this certification.

## 3. Are the production processes environmentally “safe” or “friendly”?

Certification programs have been developed in response to consumers’ concerns regarding the impact of specific production practices on the natural environment. Organic labeling is by far the most important certification relating to environmentally friendly food production. Growth in consumption of organic foods in the United States has been phenomenal (around 20 percent per year but from a small base) and demonstrates that a growing number of Americans perceive organic food as being healthy and environmentally friendly.

The Rainforest Alliance ([www.rainforest-alliance.org](http://www.rainforest-alliance.org)) offers one labeling program that promotes tropical forest conservation by using standards provided by the Sustainable Agriculture Network, thus informing consumers of the production process’s impact on tropical environments. The Alliance’s mission is “to protect ecosystems and the people and wildlife that depend on them by transforming land-use practices, business practices and consumer behavior.” Another example is “Conservation Beef” (





**Dolphin-Safe Tuna** ✨

“Dolphin-Safe” tuna provides an example of animal welfare concerns focused on the treatment of an animal not directly associated with the product. On Starkist’s website ([www.starkist.com](http://www.starkist.com)), the first question under the “FAQs” section reiterates Starkist’s policy that they will only buy tuna that is certified as “Dolphin-Safe.” The “Dolphin-Safe” label is regulated by the US Department of Commerce and is not the same as the “Flipper Seal.” The “Flipper Seal” is a program of Earthtrust ([www.earthtrust.org](http://www.earthtrust.org)), a nonprofit wildlife conservation organization located in Hawaii. This program requires not only that a tuna firm meet “Dolphin-Safe” standards, but that it also contribute licensing fees to a nonprofit dolphin-saving program and that it initiate other activities such as dolphin education or research on alternative fishing methods. These two certification programs represent different levels of animal welfare that consumers can choose to support by the tuna products they purchase.

**Growth in consumption of organic foods demonstrates that a growing number of Americans perceive organic food as being healthy and environmentally friendly.**



conservationbeef.org), a labeling program sponsored by the Nature Conservancy that provides an opportunity for consumers to purchase beef products from a “landscape conservation program.”

A third example is Demeter Certified Biodynamic®, a certification process that guarantees the product has been raised using biodynamic production processes. Demeter ([www.demeter-usa.org](http://www.demeter-usa.org)) describes biodynamic farm management as relying on “close attention to the interrelation of the farm’s parts (i.e., fertility management, water management, pest control, etc.), rather than solely isolating and concentrating on its individual parts.” The entire farm needs to be managed as a system so that inputs “arise from within the living dynamics of the farm itself” rather than be purchased as off-farm inputs. For example, 80 percent of livestock feed must be produced on the farm that is certified; composting is emphasized as a fertilizer source; an entire farm must be certified as no provisions exist for partial certification or parallel production of another kind; and the introduction of new livestock from off the farm is limited to 3 percent of the herd each month. Demeter’s certification program addresses issues related to negative environmental and societal welfare impacts. These are just a few of the many diverse certification efforts verifying that specific production methods and/or procedures do not harm the environment.

#### 4. *Social Responsibility: Are others affected by the production and processing techniques?*

Labels that address this issue respond to social concerns consumers may have about the economic, physical, or emotional harm that may be inflicted on those who produce the food they are purchasing. Human welfare concerns the quality of life and working conditions of agricultural workers that grow, harvest, and perform other tasks that lead to the final consumer-ready food product. For example, TransFair USA certifies that for the products under the Fair Trade Certified label ([www.transfairusa.org](http://www.transfairusa.org)) farmers have worked under fair conditions and received a fair price, thus assuring consumers that they are helping producers when purchasing products that carry this label. Third-party certified programs can provide consumer assurances that agricultural workers have received a minimum standard of living for the products the consumers buy. Product claims may also indicate that farmers and/or agricultural workers receive enough benefit from producing a product to sustain and grow their local communities.

#### 5. *Does the consumption of the product conform to my religious beliefs?*

People may want to have assurances that a food product was produced, prepared, and handled according to their religious beliefs. An example of a religious certification is Kosher (Jewish). Kosher is derived from the Hebrew word “kasher,” which means “pure” or “proper.” Different certifying bodies mark products to assure that the product meets the criteria to be considered Kosher. Over 300 different organizations certify whether products are Kosher and most utilize different logos. For example, the Orthodox Union is a nonprofit communal organization that uses the hecksher or “OU” mark to certify that foods have been produced following Kosher practices.

While all certifying agencies have similar standards, there are differences in how the certification is done and what is allowed. Practitioners of many faiths, including Muslims, Seventh-day Adventists, and Latter-day Saints, have concerns about food and beverages meeting religious guidelines. It is also noted that over one-third of Kosher consumers are estimated to be individuals with allergies, vegetarians, or at-risk health groups who perceive Kosher products as cleaner or purer and healthier for their well-being. Kosher food sales have increased more than 10 percent annually in recent years whereas overall food

### The entire farm needs to be managed as a system.



**Kosher food sales have increased more than 10 percent annually in recent years.**



**Seek evidence that the certification process will provide some bottom line benefits.**

**Example of a NonProfit Eco-label:**

**The Food Alliance ([www.thefoodalliance.org](http://www.thefoodalliance.org))** ✪

The Food Alliance (FA), with headquarters in Portland, Oregon and a regional office in Minneapolis, Minnesota, defines itself as a “nonprofit organization that promotes sustainable agriculture by recognizing and rewarding farmers who produce food in environmentally friendly and socially responsible ways, and educating consumers and others in the food system about the benefits of sustainable agriculture.” The FA strives to accomplish this goal by serving as a third-party certification agency for farmers and by establishing partnerships with food retailers, restaurants, and other food distributors. To qualify for FA certification, producers must satisfy three fixed standards and receive a passing mark on each of four “scored standards.” Certified producers pay an initial \$500 certification fee plus a sliding scale program fee that is based on product sales.

The fixed standards are

- no use of genetically modified seed varieties or livestock breeds;
- no use of hormones or feed additive (sub-therapeutic) antibiotics in livestock production; and
- continual improvement of management and production practices.

The scored standards are

- reduced pesticide use;
- soil and water conservation;
- safe and fair working conditions; and
- wildlife habitat conservation.

A sixty-one-page manual, available on the website, provides full details of the certification process. All of the inspection documents are also available on the web.

According to the FA, farmer benefits from certification are

- credibility through third-party recognition;
- brand building and consumer loyalty;
- consumer education, recognition, and goodwill; and
- market access and increased national and regional appeal.

While farmers may support the intent of the FA standards, most will also seek evidence that the certification process will provide some bottom line benefits. To achieve that bottom line result, FA must overcome the daunting challenge of developing consumer awareness and support for the certification process it has established.





sales have increased only 1 to 2 percent. To take advantage of this trend, the Florida Department of Agriculture and Consumer Services has instituted a “Kosher from Florida” logo program.

### Does Third-Party Certification Add Value to Food Products?

A number of studies have assessed the economic value of different kinds of certification programs and suggest that certifying food characteristics may increase the value of food products. For example, a study of eco-labeled apples found that consumers were willing to pay a small premium for them (Loureiro, McCluskey, and Mittelhammer 2001, 2002). The authors concluded that the eco-label premium is somewhere between that for organic and conventional apples. Loureiro and McCluskey (2000) also found some price premium for regional and origin labeling such as Protected Geographical Identification (PGI) (see note 1, p. 51) and Washington Apples. The Economic Research Service (ERS) recently completed a report (Oberholtzer, Dimitri, and Greene 2005) of organic price trends and margins and concluded that wholesale and farmgate premiums for broccoli and carrots were remaining strong but had narrowed for leafy greens used in gourmet salad mixes. Other studies have found a positive willingness to pay for BSE-tested beef in Japan (McCluskey et al. 2003) and apples certified as being produced by “farm workers who enjoy fair and safe working conditions” (Loureiro and McCluskey 2000). Dickinson and Bailey (2002, 2005) also found evidence of a positive willingness to pay for traceability, animal welfare, and enhanced food safety certifications in beef and pork products. It should also be noted that most of these studies examined what consumers said they would pay rather than their actual purchases. Actual consumer demand for certified products may not rise to the level indicated by their reported attitudes. (Some historical data of farmgate and wholesale organic prices are available from ERS at [www.ers.usda.gov/data/OrganicPrices/](http://www.ers.usda.gov/data/OrganicPrices/).)

While these studies suggest that different certifications add value to food products, consumers must still have a high-quality consumption experience to maintain demand for these products. This is especially true for origin-based certifications such as PGI and traceability (McCluskey et al. 2003, Dickinson and Bailey 2002). For example, Dickinson and Bailey (2002) suggest that traceability could be successfully “bundled” with other characteristics such as enhanced food safety or animal welfare, resulting in a higher value for the product than with simple traceability alone.

**People may want... assurances that a food product was produced, prepared, and handled according to their religious beliefs.**



**Religious Responsibility** ✨

Vegetarians and religious organizations that prohibit beef consumption, such as is the case with Hindus, seek out and patronize restaurants with vegetarian options. Restaurants looking to attract these groups often provide their own certification (i.e., first-party) and/or pledges that their vegetarian options do not include meat products. However, these pledges or claims are not always correct. In March of 2002, McDonald’s agreed to pay \$10 million to settle a class-action suit regarding its use of beef extract in its French fries. The Illinois State court called for McDonald’s to apologize to customers and pay \$10 million to vegetarian and Hindu organizations.

Pizza Hut, America’s leading pizza restaurant chain, markets its Veggie Lovers pizza as a vegetarian option in its product lineup. In May of 2002, a class-action suit was filed in Seattle against Pizza Hut, claiming the use of beef products in its Veggie Lovers pizza. The complaint stated that “defendants intentionally marketed their pizza to the vegetarian community knowing that the foods were not vegetarian.” The lawyer for the plaintiffs told the *Seattle Post Intelligencer* that “the beef product is in the cheese.”



Producers approach the question of added value from a somewhat different perspective since they must take into account both the benefits and the costs of becoming certified. In the discussion that follows, producers must recognize that they will probably not be able to obtain precise values for all the benefit and cost data that they will need to use in their decision making. Still, it will be worthwhile to spend the time and effort to work toward developing solid estimates of these benefits and costs.



**Unlike an endorsement, certification involves standards, testing, and enforcement as integral components.**

On the benefits side of the ledger, producers should think about the sum of three benefits. First, producers hope to receive higher prices as a consequence of consumers’ positive willingness-to-pay for selected product attributes. Producers should recognize, however, that little research has been done to date that really documents the extent of these higher prices and returns. In addition to higher prices, two other benefits that producers might gain through certification are increased market access and improved price stabilization. The producer should assign a dollar value to these two benefits if they will help the business.

The cost side also has three major components. First, there is the actual price of obtaining certification. As was portrayed in the Wyoming wheat example, these prices can vary dramatically even among alternative certifiers offering largely the same

certification, so it makes sense to do your own research. Direct certification costs involve multiple elements including application fees, inspection fees, and sometimes percentage of sales fees. Often the initial certification is more expensive than recertification. These out of pocket costs generally total \$300 and up and do change over time. Most certifiers offer some guidance on their fees on their websites. Currently, many states are offering 75 percent cost shares up to \$500 for organic certification. In Oregon, as an example, this offer extends through 2008.

The second group of additional costs that producers must analyze are those associated with changing their production practices in order to meet the required standards. Each producer must think through and estimate these costs for each potential set of certification standards. The third cost area to be analyzed includes costs (both out-of-pocket and in time) required to maintain the records needed to meet certification standards. As was true for the benefits, producers must sum these three costs to get the overall implications of the negative side of the ledger.

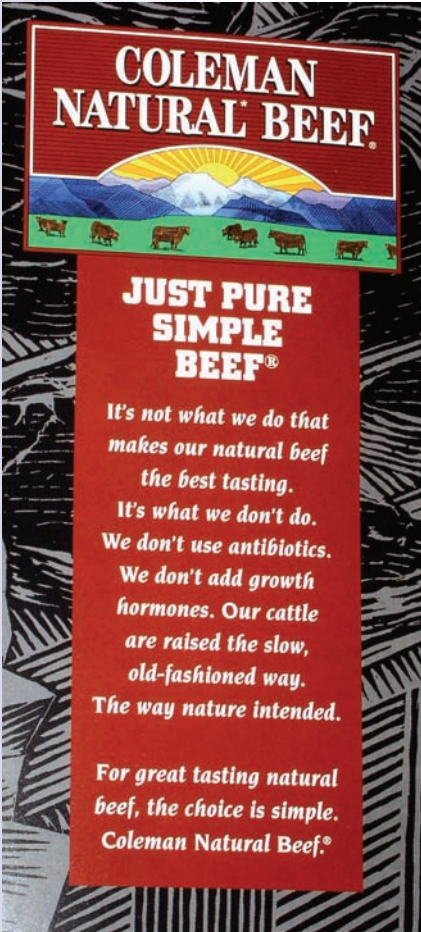
The final step is to compare overall benefits and overall costs. This comparison must be done for a reasonable multiyear time horizon since over time and with experience, benefits may increase while costs may decrease.

How third-party certification adds value to food products can be better understood by examining four key functions of certification. These functions are 1) standard setting, 2) testing, 3) certification of producers and processors, and 4) enforcement.

*Standards* set by reputable third parties establish a specific level of quality that the product must possess to carry a third-party certified label. Additionally, these third-party standards facilitate market transactions by creating a recognizable and well-defined terminology that consumers can easily understand. For example, purchasing produce labeled as “certified organic” or with the USDA organic label means that a third-party inspector approved by USDA has verified that the restricted set of USDA standards and practices has been followed in the produce production, handling, and processing. Organic producers and handlers with less than \$5,000 in annual sales may “self-certify” their practices and may label their product as organic, but they may not say “certified organic” or display the USDA Organic label.

*Testing* services offered by third parties provide an objective measure of a food product’s quality. These testing services may reduce both the producer’s and consumer’s costs of validating claims that certain quality standards have been reached and will increase the value of the information provided by the label. For example, corn can now be tested to determine if it is nongenetically modified.





**Consumers may prefer first-party claims, particularly if reputations and personal relationships of trust develop over time.**

*Certification* provided by accredited third parties assures consumers that the producers' and processors' labeling information is valid. Producers and processors get the value of the third party's reputation, similar to how a product endorsement by a celebrity or other party can add value to a product. Unlike an endorsement, certification involves standards, testing, and enforcement as integral components. Additionally, certification establishes the credibility of a firm's claims.

The final service provided by third parties is the *enforcement* of truthful quality standards. In order to maintain credible and certified standards, third parties must offer supervisory monitoring services to guard against fraudulent quality claims. Third-party enforcement is a way to insure producers and processors follow guidelines. This is particularly important for credence characteristics, such as source verification, where labels are the only means to provide information. The third party must be willing to penalize a firm with either legal action or de-certification to discourage fraud.

### Types of Certifications

If certification is important to some consumers, these consumers are also interested in who provides the certification. Two primary methods are available for value-based food label certification: self-certification and third-party certification. Self-certifications, also known as first-party certifications, are direct claims made about a food product by the firm that produced it. The variety of such claims is nearly endless. Examples include "healthy," "homegrown," "Mom's favorite," "Nature's best," "environmentally friendly," "individually harvested," "cage-free," and "no antibiotics." Private firms often use labels to self-certify certain food characteristics. Typically, first-party certification requires no generally accepted standards to make a specific claim about a food product. The firm is subject to truth-in-labeling laws (depending on the product, label claims need to be approved by the USDA or FDA), but there is no independent organization verifying the firm's claims about the product. In some cases, the proliferation of self-certifications and especially their actual/potential abuse has led to legislation controlling the use of such claims. Examples are "organic" and claims involving the fat content of products and what constitutes "no/low fat," "light," etc.

Producers who sell less than \$5,000 per year of organic farm products are in essence self-certifiers since they are not subject to certification by a third-party, but they are still required to follow organic practices in order to sell their product as or-

ganic. The credibility of self-certification claims may be suspect at first glance because of the conflict of interest that exists. However, many consumers may prefer first-party claims, particularly if reputations and personal relationships of trust develop over time through repeated consumer-producer transactions. This was the case in the earlier example with Mike's Melons. Similarly, a produce seller at a farmers' market may work to build trust with buyers by making claims about his/her products and then providing individualized education to the buyer. The seller may provide product samples, invite buyers to see his/her operation, or in some other way communicate to buyers that their claims are true. For many customers, this personal, first-party relationship may be the most trusted form of food quality communication.

Third-party certification provides product or production claims' verification that is not directly tied to the firm or organization producing the product. Consumer credibility and reputation is something that well-recognized certifiers work at for years to establish and protect. Thus, securing a reputable third-party certifier to test and place their label or stamp of approval on your product is a way to obtain consumer credibility very quickly compared to establishing a brand or first-party product claims. In the past, government inspectors have often been seen as independent third-party inspectors for food transactions because they perform many food safety inspections. However, as consumer concerns have broadened beyond just food safety and have intensified in the area of unproven long-term food safety issues, some consumers have questioned the efficacy of government inspections and grading in making third-party certifications.

**Self-certifications, also known as first-party certifications, are direct claims.**



## **★ THIRD-PARTY CERTIFIED PESTICIDE-FREE GREENHOUSE TOMATOES**

Eurofresh, a US corporation with Dutch roots, is located in southeastern Arizona. It is no surprise that the greenhouse has ties to Holland since over 90 percent of the world's greenhouse acreage is located there. The owners wanted to start production in the United States because they felt that they could easily undercut Dutch imports that require costly airfreight shipping. Eurofresh started with a 10-acre greenhouse facility in Pennsylvania, but the site was not feasible for winter production and the sunshine was not reliable. Thus, they moved to Willcox, Arizona in 1992 and built a new 10-acre greenhouse. They quickly expanded to 40 acres and then began adding acreage in 20-acre increments. By the end of 2004, Eurofresh had expanded their Willcox operation to 192 acres, making this facility the single largest glass greenhouse center of its kind in the world. They have plans underway to expand even more. These greenhouses will allow them to supply a consistent quality and large retail volume of tomatoes year-round.

***Inseparable Production and Marketing.*** Eurofresh says its mission statement is "a company wide commitment to growing and marketing a consistently high-quality, nutritional, flavorful, American, pesticide-free hydroponic greenhouse tomato all year round." Dwight Ferguson, Chief Marketing Officer, explains that production is key to their marketing. "Consistency is the key word that supermarket retailers are looking for." Consistency in quality (safety, healthiness, taste, looks, etc.), price (competitive within seasonal market), and quantity (available to stock shelves year round) are all needed to maintain a successful long-term relationship with retail buyers. Everything from seed selection through harvest and post-harvest grading and shipping needs to be done at high standards to ensure a desirable product. Eurofresh's tomatoes are grown pesticide free and are randomly monitored for pesticides through the NutriClean program of Scientific Certification Systems (SCS). The NutriClean seal can be placed with a brand label, but Eurofresh mainly uses their third-party certification to stand behind the claims on their pesticide-free Eurofresh label.

SCS was established in 1984 as the first third-party certifying entity for testing pesticide residues in fresh produce. The NutriClean program certifies grower practices and tolerance limits for chemical residues on random product samples that are more stringent than Environmental Protection Agency (EPA) levels. NutriClean certification requires full disclosure of all spray records and growers are required to consult with SCS scientists before using any chemicals on their crop. This is to help ensure that nontoxic or least-toxic chemicals are used where biological pest control options are not available and that residue levels remain extremely low.

The greenhouse environment reduces the plants' exposure to outside pests and allows Eurofresh to create a balance between predators and beneficial insects. Tomatoes are grown hydroponically so that they extract their nutrients from a water solution and artificial medium rather than from soil. Because many of the nutrients put in the water solution are not available or certifiable as organic, the company has no immediate plans to grow and certify their tomatoes as organic.

**Pesticide Residue Concerns.** Every tomato sold by Eurofresh receives a pesticide-free label. Eurofresh has purchased research information from the Perishables Group to help better educate their retail buyers. Some of these buyers have told Eurofresh that their consumers don't really care about food safety issues. The research indicates, says the Perishables, that 65 percent of consumers feel it is important or very important that products be grown without pesticides. However, only 39 percent indicate that they are likely or very likely to pay more to purchase products grown without pesticides. Eurofresh also makes the claim that their variety of on-the-vine tomatoes has more cancer-fighting lycopene than other varieties. "You'll love every healthy bite" is one of their slogans. "Garden Fresh Flavor" is a labeling slogan on their cartons as well.

Although Eurofresh has experienced huge ups and downs in tomato prices, their greatest perceived risks are a crop failure from a virus outbreak, product liability, or a boycott campaign. Because Eurofresh markets their product as a pesticide-free product, they feel very exposed to product liability cases. For this reason, Eurofresh spends over a million dollars every year on independent random testing and monitoring of pesticide residues, wasp predators for insects, and other costly production techniques so that they can stand behind their claim of a pesticide-free product. If an individual were to become ill from eating one of their tomatoes and a company could detect pesticide residue in their product, Eurofresh feels that this could shut them down for good. The facilities might possibly be used to produce under a different name, but all of the market investment made in developing the brand of Eurofresh would be history.

**Certification Highlights.** Eurofresh was named "America's Best Tasting Tomato" by American Culinary Chefsbest (an independent, national organization of America's chefs) for 1998, 1999, and 2000. But in addition to having great tasting tomatoes, Eurofresh recognizes that pesticide-free certification from a third-party certifier greatly enhances the company's reputation for quality and reduces their liability risks. Pesticide-free certification is one piece of many components they have used in developing a successful production-marketing plan. Because Eurofresh has so much invested in developing their brand name, they feel third-party certification from a long established and recognized agency has been worth it. They believe that no substitute exists for developing good long-term relationships with retailers and consumers. Such relationships are built on the consistency of their entire product package, which includes consumers' taste experiences and food-safety perceptions.

More information about Eurofresh can be found at [www.eurofresh.com](http://www.eurofresh.com).



**“Our product does very well in the marketplace when it is next to organic poultry.”**

**Carefully examine both the costs and benefits from any certification program.**

### *Greener Pastures Poultry: A Case of NOT Certifying* ✪

Some agricultural producers achieve marketplace differentiation *without* obtaining third-party certification. Greener Pastures Poultry (GPP) is a collaboration of family farms in Western Oregon that supplies premium, pasture-raised chickens and turkeys to individual customers, restaurants, retailers, and food service buyers. Through intense direct marketing efforts, GPP products have gained a devoted clientele willing to pay a significant premium. An important component of that effort is providing a detailed description of their poultry production process.

GPP has chosen to do this on their own, but only after conducting market research and engaging in discussions with key customers. GPP’s General Manager, Aaron Silverman, provides this analysis of the various certification options: “We start by recognizing that all of these certification programs have costs and therefore we want to study whether the benefits they provide will actually be large enough. Organic certification for poultry has developed with a focus solely on feed supply. That focus does not allow us to highlight the story behind our products—produced on pasture by family farms in a specific local region. Even more important, we have been pleased to find that our product does very well in the marketplace when it is next to organic poultry, even when the organic goes on sale and sells for the same price as our products. To us that means our message has taken hold. While other certifiers could potentially help us get our message across, none that we have examined really has developed a following in the marketplace. As a result, at this point we feel that we can be most successful by going it alone.”

Aaron recognizes that he must continue to monitor what is going on in the market and is the first to admit that if GPP customers become interested in certification, GPP must be ready to quickly respond. Even now GPP is actively engaged in discussions on the one potential set of certification standards that most closely relates to their approach—the USDA effort to develop standards for “grass-fed” for meat.

There are three lessons to be drawn from the GPP experience:

Producers should carefully examine both the costs and benefits from any certification program;

The market changes quickly so producers must be continually monitoring how it is developing; and

Producers often have the opportunity to influence the development of new certification standards (as is the case here with the grass-fed standards).

More information about GPP can be found at [www.greenerpasturespoultry.com](http://www.greenerpasturespoultry.com).



### *Geographic Certification: Country of Origin Labeling* ✪

Country-of-origin labeling (COOL) is one example of a national geographical third party certification program. The 2002 Farm Security and Rural Investment Act (2002 Farm Bill) included a provision mandating that retailers provide country-of-origin information (in the form of a label or placard) at the point of purchase for specific fresh food items. Whole muscle and ground cuts of beef, pork, and lamb; seafood; peanuts; and fruits and vegetables sold through retailers were all included in the mandatory COOL provision. The 2002 COOL Act was scheduled to become mandatory in September of 2004. However, due to industry concerns about a mandatory COOL program, in January 2004, legislation was signed postponing implementation of a mandatory COOL program for all food products except wild and farm-raised fish and shellfish. There continues to be a debate regarding whether or not a mandatory COOL should be implemented. A discussion of several of the issues surrounding the COOL debate can be found in the fourth quarter 2004 issue of *Choices Magazine* (online at <http://www.choicesmagazine.org/2004-4/index.htm>). Regardless of this debate, various voluntary, state, and local government origin-labeling programs currently exist or are being developed so that consumers can purchase according to their beliefs about the safety and quality of food from specific geographical areas (for example, Vidalia onions, Copper River salmon, Nebraska Corn-fed beef).

**Consumers can purchase according to their beliefs about the safety and quality of food from specific geographical areas.**



**It is difficult to identify Kona Coffee by only visual inspection.**



**Geographic Certification: Kona Coffee** ✨

Kona Coffee is recognized as one of the world's finest coffees and also has the corresponding distinction of being one of the most expensive coffees. Some Kona Coffee fetches a retail price of over \$50 per pound.

Prices depend on top quality, in turn a function of climatic conditions in the Kona area, the coffee variety, agronomic practices including hand harvesting, and processing methods. Unfortunately, it is difficult to identify Kona Coffee by only visual inspection, and other methods are usually costly and/or destroy the product. It can be lucrative to blend Kona with other coffees, or to engage in questionable practices such as Kona-style coffee, or outright deception by fraudulently labeling other coffees as Kona Coffee.

The coffee industry and the state of Hawaii have a multi-pronged effort to counter these activities.

- The state of Hawaii has legislation that stipulates how Kona as well as other Hawaiian coffees must be labeled. To extend protection outside Hawaii, the state of Hawaii and the Hawaii Coffee Association have federal trademarks for Kona Coffee (as well as other Hawaiian coffees). These signify and assure that the product was grown within a defined geographic area.
- At the processor level, the state of Hawaii inspects and certifies each bag of green (unroasted) coffee as being genuine Kona Coffee. Such coffee must meet minimum quality and grade standards. Each 100 lb. burlap bag has a cardboard tag sewn onto it with the seal of the Hawaii Department of Agriculture and a registration number.
- In Hawaii, a "Kona Coffee blend" must contain at least 10 percent Kona Coffee.
- The Kona Coffee Council runs the 100% Kona Coffee Seal of Approval program for Kona farmers and processors. This seal is applied to bags of roasted coffee, and assures consumers that they are buying 100 percent pure Kona Coffee.

For more information:

The Kona Coffee Council

[www.kona-coffee-council.com](http://www.kona-coffee-council.com)

Federal trademarks for 100% Hawaii green coffee

[www.hawaiiag.org/hdoa/pdf/qad-coffeebrochure.pdf](http://www.hawaiiag.org/hdoa/pdf/qad-coffeebrochure.pdf)

Labeling law for Hawaii-grown roasted and instant coffee

[www.hawaiiag.org/hdoa/qad\\_ms\\_coffee](http://www.hawaiiag.org/hdoa/qad_ms_coffee)

## Types of Third-Party Agents

Food certifications vary both in the type of attributes certified and the body providing the certification. Certifying bodies include government agencies, nongovernment organizations (NGOs), religious organizations, and private companies. The government is the most common third-party agent. Federal, state, and local governments have established both voluntary and mandatory labeling standards to protect against fraudulent claims. The government may take complete responsibility for the certification process, or it may use a private entity to test, certify, and enforce the standards. Several levels of government certification are available. The national standards for organic foods mandated by the USDA are an example of a national-level, third-party certification program. The USDA organic standards initiated in October 2002 are designed to provide a stringent definition of “certified organic.” Thus, the USDA is the third-party responsible for overseeing the certification of food products that carry the “organic” label. However, the USDA also accredits private and not-for-profit organizations to certify organic food in the United States. The USDA then requires accredited certifying organizations to maintain and submit records annually to the USDA.

The USDA through its Process Verified Program allows producers of agricultural products to certify the processes for those products. Companies must submit a documented quality management system. The company then goes through a review and audit. (See [www.processverified.usda.gov](http://www.processverified.usda.gov) for a description of the program and links to the documentation required.) Once a company has gone through the process and been approved, they can display the USDA process-verified shield on the labels and other promotional materials. The use of promotional materials must be approved and any use of the shield must have information about the process verified adjacent or at the point of sale with an \* note indicating this. There are a series of fact sheets on this topic at [www.agmanager.info/agribus/process\\_verify/default.asp](http://www.agmanager.info/agribus/process_verify/default.asp).

There are also numerous state, regional, and local programs which are validated by a reputable government third party. These regional programs may provide consumers with information such as the origin of their food and with the opportunity to support state and locally grown products. Colorado Department of Agriculture’s Colorado Proud Program, the Arizona Grown label, and the Hawaii Department of Agriculture’s Island Fresh program all promote products at the state level.

Nongovernment organizations (NGOs) such as the Food Alliance, Orthodox Union, World Wildlife Fund, and the Salmon



**USDA also accredits private and not-for-profit organizations to certify organic food in the United States.**

## ***★ CALIFORNIA CERTIFIED ORGANIC FARMERS (CCOF): MORE THAN AN ORGANIC CERTIFIER***

Founded in 1973 and headquartered in Santa Cruz, California, CCOF is a non-profit, democratically organized member association that has regional chapters that work locally with potential and existing certifying clients. The chapters are staffed by volunteers that are essential to the basic functions of CCOF. Chapter volunteers meet periodically to review inspection reports of local growers and assign certification status.

Third-party certification is a big step for any producer who wants to differentiate his or her product in the marketplace. For more than thirty years CCOF has promoted organic production practices and provided organic certification services to farmers, handlers, livestock producers, processors, and retailers. People have trusted California Certified Organic Farmers (CCOF) to ensure their organic food is produced to the highest standards. From apples to zucchini, from almond oil to wine, CCOF certifies a variety of organic products.

***CCOF, the Organic Movement and the Organic Community.*** CCOF is a pioneer of the organic movement. It was one of the first certifiers to develop and set uniform guidelines for organic production and one of the first organizations that certified organic farms and farmers in North America. It was instrumental in developing a legal definition for “organic” and became the most recognized organic certifier in the process. As a result, The California Organic Foods Act of 1990 was modeled after CCOF’s own standards, and the California Standards became the basis of what is now the National Organic Program (NOP).

CCOF is a member of the Organic Trade Association (OTA), OTA’s Certifiers Council (OCC), and the International Federation of Organic Agricultural Movements (IFOAM). CCOF participates with these organizations to develop consistent national and international standards for organic food production. CCOF is accredited by IFOAM and by USDA for ISO Guide 65 compliance ([www.ams.usda.gov/lsg/arc/iso65.htm](http://www.ams.usda.gov/lsg/arc/iso65.htm)) and for compliance with the National Organic Program.

***CCOF Certification Services.*** CCOF certifies all stages of organic production and sales, organic farmers, processors, wholesalers, and retailers in California, the United States, and overseas. CCOF only certifies organic farmers, processors, retailers, and wholesalers who comply with USDA and CCOF International organic standards. CCOF inspectors examine the crops, the land, the facility, the process, and the paperwork. Their inspection reports are reviewed by two different groups of experts.

***Seven Steps to Organic Certification in California.*** When healthy organic foods are produced, a commitment is made to customers. CCOF honors that commitment, offering certification that customers can trust. A farm or operation can earn “Certified Organic” recognition in just seven steps:

1. Contact CCOF. To request an application package, call CCOF at (888) 423-2263, email [ccof@ccof.org](mailto:ccof@ccof.org), or download pdf versions of the forms at [www.ccof.org](http://www.ccof.org).
2. Read the CCOF manual. The manuals (1–4) contain a list of the organic standards that are required of CCOF clients, plus helpful information on the certification process.
3. Register the operation with the county or Department of Health Services. If the intention is to sell any product as organic, the operation must comply with CCOF’s standards under the National Organic Program and the California Organic Program. Information on organic registration is available from County Agricultural Commissioners (growers), Department of Health Services (handlers/processors), or from the California Department of Food and Agriculture (CDFA).
4. Send in the application consisting of the application form, CCOF affidavit, and the Organic System Plan (OSP). The general information portion of the application and the required sections of the application should be completed according to the type of operation (grower, handler, livestock, retailer). Growers should include three years of land history verification and maps of the land parcels intended for organic production. Applications should be mailed to the CCOF home office with the one-time \$250 application fee. Annual fees are detailed in Manual One, Section 2 and on the certification fees page of the certified clients corner. CCOF will provide a fee estimate to any new applicant.
5. Chapter assignment and inspection. The application will be reviewed by CCOF’s home office staff and assigned to a local chapter. A trained inspector will then call to set up a site inspection. A site inspection fee is required for certification processing. The chapter representative will provide information on meetings and opportunities to meet other organic producers in the area.
6. Inspection report review. The chapter certification committee and CCOF’s home office staff will review inspection reports and assign a certification status to each operation.
7. Certification status notification. Upon completion of the review process, CCOF will send a letter regarding the certification status and any requirements for further certification.

***For More Information:***

California Certified Organic Farmers Website: [www.ccof.org](http://www.ccof.org)

Organic Materials Research Institute Website: [www.omri.org](http://www.omri.org)

Organic Farming Research Foundation Website: [www.ofrf.org](http://www.ofrf.org)

USDA/AMS National Organic Program Website: [www.ams.usda.gov/nop](http://www.ams.usda.gov/nop)

**NGO third-party certifiers are typically not-for-profit organizations and usually have a social, religious, or political agenda.**

Safe Farm Management Certification Program may also provide a reputable third-party certification. NGO third-party certifiers are typically not-for-profit organizations and usually have a social, religious, or political agenda. The Food Alliance is a nationally recognized nonprofit organization that certifies producers who follow sustainable agricultural practices. In order for a producer to receive Food Alliance certification, they must meet a stringent set of environmental and social production criteria, such as the use of natural pest control, crop rotations, soil, water and wildlife habitat conservation, humane treatment of animals, and fair working conditions.

The Forest Stewardship Council accredits certification of wood and wood products as coming from “well-managed” forests. The World Wide Fund (WWF) created this organization. The Marine Stewardship Council (MSC) is an international charitable organization that certifies whether seafood products are produced and processed by sustainable and well-managed fisheries ([www.msc.org](http://www.msc.org)). In the United States, many of the products that are certified by MSC are forms of Alaskan salmon.

Religious organizations are another type of nonprofit organization involved in food certification. They are used to certify that product attributes associated with religious beliefs are present. Kosher foods are one example (see Star-K Kosher Certification at [www.star-k.com/default.htm](http://www.star-k.com/default.htm) for a discussion from one of many Kosher certifiers).

In addition to government, NGO, and religious certification agencies, private-for-profit firms can also provide a reputable entity for third-party certification. For example, the NutriClean labeling program, administered by the private company Scientific Certification Services (SCS), guarantees that foods carrying the NutriClean label are pesticide and residue free. The SCS prohibits the hiring of employees who may have a vested interest in products that are certified; thus, the company aspires for independent evaluations with no potential conflicts of interest. Another example of a private certifier is Quality Assurance International (QAI), a firm that certifies organic products worldwide.

Certifying organizations use their own labels, which are usually trademarked. Also, regardless of whether certifiers are government, private, or NGOs, a fee is charged for inspection services. Table 1 provides a matrix of certifying organizations and different types of product certifications. In considering certification, producers must decide on all of the following: 1) whether to obtain certification or not, 2) what attributes to certify, and 3) the selection of the appropriate entity(ies) to do the certification(s).



**Table 1. Examples of a Few of the Available Certifying Organizations<sup>a</sup> by Product Attributes and Certifying Entity**

Product Attribute	Type of Certifying Entity		
	Government	NGO and Religious Organizations	Wholly Private Companies
Personal Welfare (e.g., Heart-check)	USDA	Oregon Tilth	Self-certification
	FSIS (USDA)	American Heart Association	SCS (NutriClean)
	FDA	California Certified Organic Farmers	Quality Assurance International
Animal Welfare (e.g., Free-range Chickens)		The Food Alliance	
Social Responsibility (e.g., Fair Trade Association Coffee)	State Governments (Colorado Proud, Island Fresh, 100% Kona Coffee)	Trans Fair USA	
		Demeter Certified Biodynamic	
		The Food Alliance	
		Hawaii Coffee Association, Kona Coffee Council	
Environmental Responsibility		Forest Stewardship Council	
		The Rain Forest Alliance	
		Nature Conservancy (Conservation Beef)	
		The Food Alliance	
		World Wildlife Fund	
		Salmon Safe	
		Marine Stewardship Council Eco-OK	
Religious Beliefs (e.g., Kosher Milk)		Orthodox Union	
		Star-K Kosher	

<sup>a</sup>There are many more certifying agencies than are mentioned here. These are provided as a synopsis of the examples described in the text. An exhaustive list of certifying agencies would be much larger than the subset of agencies provided in this table.



**The study's findings indicate that an overwhelming majority of US participants in the study trust government agencies the most. In contrast, UK participants trusted private certifiers the most.**



**As incomes have grown, consumer interest in supporting several credence attributes on how their food was produced and processed has also increased.**

### **Certification: Whom Do Consumers Trust?**

A recent Utah State University study used focus groups and surveys to determine whom consumers in the United States and the United Kingdom trust to provide certifications for different beef characteristics (Christensen 2002). The comparison between the United States and United Kingdom is interesting since the United Kingdom was the epicenter of the European BSE crisis and UK consumers' attitudes about government certifications should be different from US consumers'. Participants in both countries chose from among government agencies, the private sector (private companies, producers, and retailers), and special interest groups (Green Peace, World Wildlife Fund, etc.) to identify the group they trusted the most and trusted the least to make different types of certifications including certifications for food safety, animal welfare, environmental responsibility, and social responsibility.

The study's findings indicate that an overwhelming majority of US participants in the study (85 percent) trust government agencies the most to make certifications about food quality and safety for beef. In contrast, UK participants trusted private certifiers the most. US participants were split widely over which group would be best to make certifications for characteristics other than food safety. However, there was clearly less support for government certification and more support for private sector certifications for animal welfare, environmental responsibility, and social responsibility than there was for food safety. UK participants viewed certifications from special interest groups for characteristics other than food safety more positively than did US participants. These findings may provide some guidance in selecting types of certifications and third-party certifiers. For American consumers, US government-sanctioned certifications have a very strong trustworthiness for food characteristics related to safety issues and for food quality related to appearance and experience attributes. However, certification of credence attributes may best be done by an NGO. When dealing in international markets (especially the European Union), government certifications carry much less "weight" than they do in the United States and a food company may wish to seek certifications from appropriate NGOs rather than from government agencies. Also, a third-party certified label recognized in the United States or by a state may not mean much of anything to a foreign consumer unless this consumer is educated on the attributes of the label.



## Summary

Traditionally, food products have been differentiated through quality characteristics identifiable through either direct examination (sight, smell, touch) or consumption (experiencing) of the product. Brands can be especially useful in helping consumers find experience attributes. However, as incomes have grown, consumer interest in supporting several credence attributes on how their food was produced and processed has also increased. Certification provides a means of product differentiation for those consumers who wish to act upon a wide array of health, animal welfare, environmental, social, and religious concerns of their food purchases.

Providing consumers with credible information about production and processing methods is complicated. For example, a consumer cannot tell if a food product with a label guaranteeing that the product was raised in an “environmentally friendly” manner was actually produced in that way. In general, consumers are unable to judge whether or not credence labeling claims are true. The reputation of the producer helps in some cases. In others, third-party certification may be a viable alternative. The reputation of the certifying agency (government, NGO, or private) and the trust consumers place in the certifier will ultimately impact the validity, trustworthiness, and overall label value to consumers. Certification for credence attributes starts at the farm level. Thus, the purpose of third-party certification can be viewed as providing the consumer with a trustworthy representative who backs up the claim on the label.

The market appears to be growing for differentiated food products that are based on the processes used to produce the food or the absence or substantial reduction in the use of certain inputs used to produce the food (e.g., absence or reduction in the use of synthetic fertilizers and pesticides, genetically modified food products, and/or products with animal, environmental, or social welfare characteristics). Initial evidence suggests that many US consumers are willing to pay for food products grown and processed in ways that are at least perceived to be healthier. Food marketers must decide if a large enough niche market for a particular certification exists to warrant the expense of providing food products with that certification. In any case, the current trend in the US food industry is toward an expanded list of certification possibilities. This offers new opportunities and potential risks for agricultural producers. The next section is a “flowchart guide” to help producers sort through the general certification possibilities that exist and to evaluate whether third-party certification may be a viable option for their operation.

## Certification for credence attributes starts at the farm level.



**The current trend in the US food industry is toward an expanded list of certification possibilities.**

ALL NATURAL

Arrowhead Mills

Naturally Nutritious

W H O L E G R A I N

Barley Flour



*BARLEY, the 'Spirit of a Grain'. Cultivated for about 8,000 years, Barley is the world's oldest grain. Originating in the ancient Middle East and North Africa, it was brought to the New World by the Dutch primarily to make beer. This easily digestible wheat free grain, when milled into flour, is ideal for flatbreads or porridge due to its lower gluten content.*

**WHEAT FREE**

**(K) PAREVE**

NET WT 24 OZ (1LB 8OZ) 680g



**PART TWO**

## A Flowchart Guide for Third-Party Certification

While consumers have shown increasing interest and willingness to pay for assurances on how their food has been produced, processed, and shipped, the decision of whether to pursue certification to capitalize on this segment of the market is notably complex. Certification at some level is often required to assure that minimum food safety and quality standards are met, as dictated by Federal, State, or local laws and regulations. A producer can also voluntarily seek to obtain an array of third-party certifications that center on how the product was grown and processed. The decision to seek third-party certification beyond minimum food safety and quality standards involves many factors that relate to goals and objectives, characteristics of consumers in the target market, available resources and capital, cost structure of the farm, producer risk and return preferences, and characteristics of the business and product.

This section provides a flowchart (figure 2) to help evaluate how goals and objectives, type of product, and target market can be used to identify an appropriate production-marketing strategy that may or may not involve voluntary third-party certification. In this simplified flowchart framework, we provide a step-by-step process through the main factors that influence decisions about certification. We address mandatory third-party certifications first to make sure that they are not overlooked. We then tie together goals and objectives with product attributes to examine whether third-party certification is an advisable production-marketing strategy.

### Mandatory Certification

Certain products such as fresh produce for out-of-state markets (e.g., Perishable Agricultural Commodities Act), animal products (e.g., Wholesome Meat & Poultry Products Acts and amendments), and processed foods (e.g., Federal Food, Drug and Cosmetic Act and amendments) require that a number of federal regulations be satisfied. These requirements are outlined on the first page of figure 2. Inspections required by the USDA/Food Safety Inspection Service (FSIS) for animal products are often a major cost obstacle for small-scale production and distribution systems to overcome. In addition to federal regulations, local county or state regulations may require that your product meet certain standards.

Mandatory certifications help ensure the safety of the food supply and should be viewed as entry costs for dealing with these products and markets. Products that just meet mandatory food safety requirements are not differentiated or identified as



**The decision of whether to pursue certification to capitalize on this segment of the market is notably complex.**

**Mandatory certifications help ensure the safety of the food supply and should be viewed as entry costs for dealing with these products and markets.**



**Supermarket products set the benchmark for quality that producers must meet for consistency.**

being different from regular supermarket items. These products are typically mainstreamed toward retail supermarkets where volume is high and price margins are low. Thus, few opportunities exist in this area for small full-time agricultural producers to develop a profitable enterprise.

### *Producer Objectives*

After mandatory certifications are met, a producer must next assess personal and family goals and objectives. These goals are highlighted in the light blue squares shown in figure 2. If you as a producer already have good local markets and relatively low production costs, it may be possible that you can currently sell everything you produce at satisfactory prices so that little can be gained by further enhancing or differentiating your product.

However, if you want higher and/or more consistent prices, or you want improved and/or expanded market access, then the quality of your product is very important. Credence attributes may be a vehicle for more stable or growing market access opportunities, but consumers will only pay top price or select your product over conventional if the traditional quality attributes (e.g., appearance, color, size, firmness) of your product are also high. Shoppers are accustomed to fresh produce in the supermarket that is “Grade A” or “US No. 1.” Supermarket products set the benchmark for quality that producers must meet for consistency. Growers unable or unwilling to meet these standards should recognize that this greatly restricts their ability to expand beyond their traditional markets.

Even with top quality, producers who decide to follow the certification route must also *want* to differentiate their product from the mainstream. Without a drive for product differentiation, traditional markets again provide the best marketing option.

### *Product Attributes*

Product attributes play a critical role for directing your best market strategy. Producers who want to differentiate their product typically focus on one or more of the following general product attributes:

- 1) “Appearance attributes” that are readily identified by sight or touch, and sometimes by smell. These include shape, size, color, firmness, uniformity, maturity, texture, and freedom from damage and defects.
- 2) “Experience attributes” that are only gained after consuming the product. These include taste/flavor, sweetness,

mouth feel, tenderness, freshness (crispy, crunchy), and related characteristics.

3) “Credence attributes” (as described in the prior section) that are based on production and/or processing methods. Most third-party certification programs focus on credence attributes.

Appearance plays a major role in consumers’ food purchasing decisions and an important role for many federal grades and standards. For example, most produce is third-party certified by a USDA/Agricultural Marketing Service (AMS) inspector regarding size and visual appeal. USDA beef and pork grades are assigned through a USDA/FSIS grader using visual characteristics. While all meat products are required to be processed using minimum processing facilities and standards before they can be sold (e.g., USDA inspected), graded meat products are voluntarily certified by a USDA/FSIS grader/inspector. A grading fee is paid by the owner of the meat product to the government grader in order to utilize well-established marketing channels that recognize value for higher grades. If no established marketing channels exist that recognize your product’s attributes, you may consider establishing your own brand label or marketing with a third-party certifier that emphasizes your strongest product attributes.

Consumers can only evaluate experience attributes after they have tried your product (this is the basis of offering free samples) or if they were told about these product attributes by other consumers. Desirable experience attributes lead to repeat purchases, a good reputation, and a solid consumer demand base with growth potential. Experience attributes can be greatly enhanced with your own brand or label that allows consumers to readily identify your product the next time they make a purchase. In some cases, experience attributes related to flavor esters and sugar content of fruit may be associated with undesirable appearance since fruit tends to develop higher sugar content the longer it is tree or vine ripened, up to a point. A brand or label that becomes associated with undesirable experience attributes and inconsistent quality will suffer from discounted prices in the marketplace and likely will disappear.

If you don’t have an established reputation or an existing customer base, your best alternative might be to market through an existing brand or label (see note 2, p. 51). For example, “Certified Angus Beef” has grown through the years because consumers associate this label with more desirable beef. It is virtually impossible for a consumer to identify—based upon appearance—whether a steak originated from the required genetic and production protocols of the Certified Angus Beef program. But the program argues that consumers can discern the intrinsic characteristics of

**If no established marketing channels exist that recognize your product’s attributes, you may consider establishing your own brand label.**



**If you don’t have an established reputation or an existing customer base, your best alternative might be to market through an existing brand or label.**

**Credence attributes cannot be evaluated by touch, sight, or even product consumption.**



**Establish the size of your potential market.**



**Consider both the willingness of your target consumer to pay for the label and the expected costs associated with implementing the production and processing protocols embedded in the label.**

flavor, juiciness, taste, and tenderness that are associated with the program requirements. Thus, because the certification label helps consumers locate desirable experience attributes, they are willing to pay more for a product with this label. This could include specialty stores, food processors/manufacturers known for high-quality products, or high-end restaurants that feature gourmet cuisine. As shown at the top of the last page in figure 2, desirable experience attributes are crucial when developing your own brand label and a loyal consumer base. But many producers with good products simply don't have the resources or product quantity to justify this move. For these producers, using an established label that involves other producers may be the right choice, particularly if their product attributes are not very different from those of an existing label.

Credence attributes cannot be evaluated by touch, sight, or even product consumption. Consumers pay for credence attributes because they desire the impact that the production or processing methods of the product are believed to have on animal welfare, the environment, their own and/or family's long-term health, the working conditions and well-being of other people, or religious beliefs. Table 2 describes how several certification programs are perceived by consumers to affect these areas and what the major producer costs are for these programs as compared to conventional production methods. For small operations, the cost of certification can be quite large relative to total sales, although cost-sharing and exemptions for small operations sometimes exist. On the other hand, if the certification standard is well recognized, the potential market can be large. Recognition of a common federal standard for organic production is one of the reasons why larger commercial growers and shippers are getting into organic production.

If you are contemplating adopting a third-party certification label, consider both the willingness of your target consumer to pay for the label and the expected costs associated with implementing the production and processing protocols embedded in the label. Using third-party certification to market appropriate production and/or processing methods could be an attractive option for you if you are using established marketing channels or marketing directly. For example, you could market organic produce through a specialty grocery store or market directly at a farmers' market or on your farm.

It is important to establish the size of your potential market. That is, are there enough paying customers to justify the costs of third-party certification? As shown in table 2, producer costs are greater for some programs than for others. For example, the record keeping costs to verify that your product has no pesticide

residues (e.g., NutriClean Certified) will be greater than what would be required for a “natural label.” A natural label requires that you file an affidavit on your production protocols, but a third-party certifier for pesticide-free residues will require records be kept on each field operation and also require product testing of pesticide residues.

In exploring certification possibilities, the management expertise and time required to implement production protocols and the impact these protocols have on farm yield and variability need to be considered. For example, making the decision to grow organic apples could have a devastating impact on your yield and on neighboring orchards if codling moths cannot be controlled. Not using hormones or antibiotics may reduce your feed conversion performance when feeding livestock. The amount of production risk or yield uncertainty associated with adopting a certification label will also vary in accordance with the crop, livestock, and/or local climate conditions. Identifying production protocols that are easier to implement for your farm than your potential competitors’ could help lead you to a profitable third-party certification strategy.

If third-party certification does not seem viable due to certification costs, there may be a large enough customer base for you to self-certify your production/processing method (within legal guidelines) and market your product directly to customers. This can result in a differentiated and higher-priced product. Additional costs are minimized (except for mandated inspections/certifications), but you will need to promote your product and educate your consumers in order to obtain a price premium. Recognize that developing a direct marketing business is not the lifestyle desired by many traditional farmers and ranchers and that it requires a personality and skill that not all possess. For these individuals, maintaining existing distribution channels may be their most desirable option.

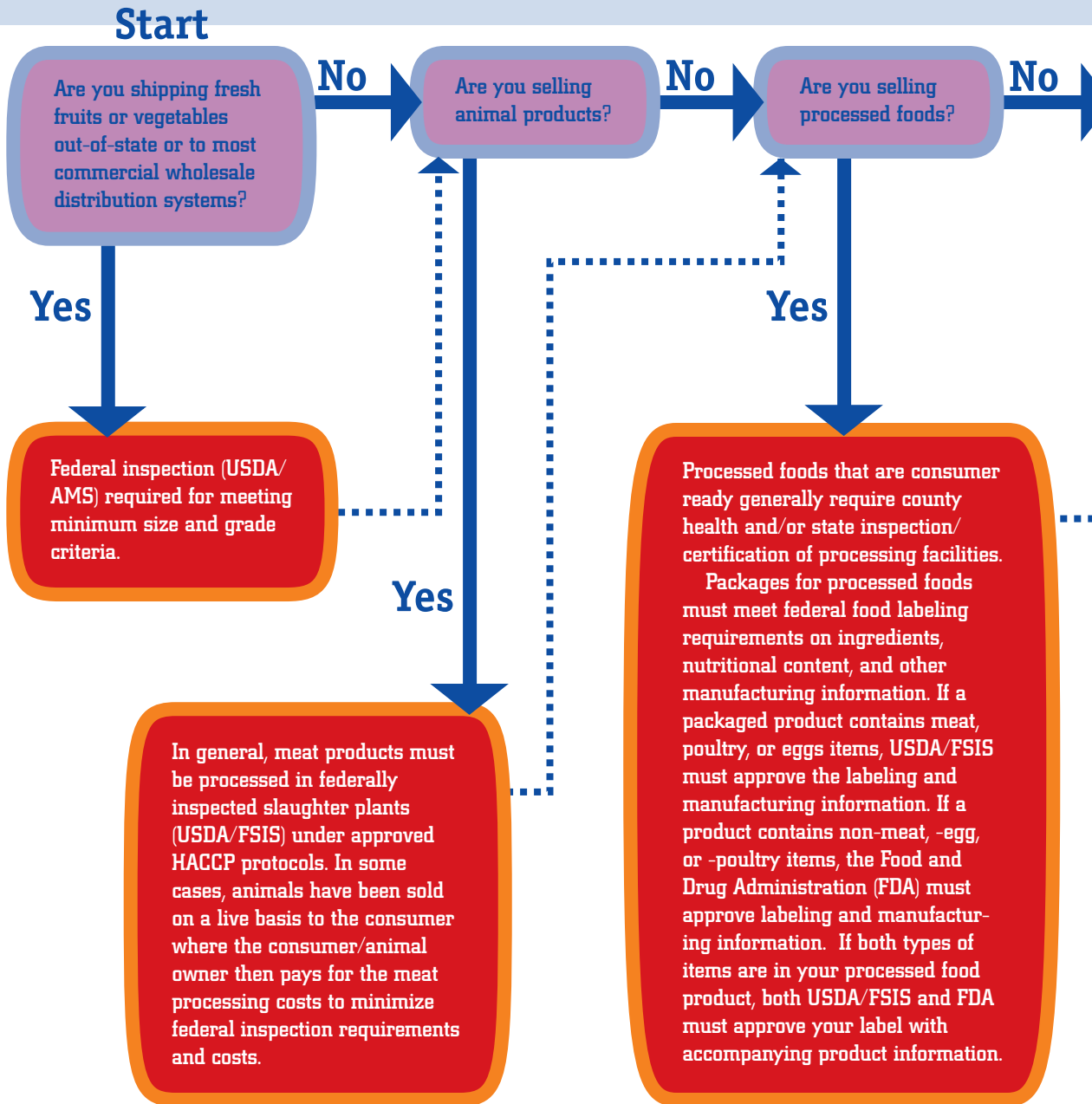
In summary, your assessment is a dynamic one that can change with your situation, goals and objectives, and major market changes. For example, a third-party certified label for an array of credence attributes may carry a worthy premium today, but future premiums may very well be lower if the growth in the production supply for these products exceeds consumer demand growth. Conversely, new opportunities may present themselves as consumer preferences shift over time with research on the long-term health risks or benefits of food products grown under different production environments and genetic materials. This flowchart provides a simplified step-by-step assessment of whether third-party certification has a role in your business as a production-marketing strategy.

**Identifying production protocols that are easier to implement for your farm than your potential competitors’ could help lead you to a profitable third-party certification strategy.**

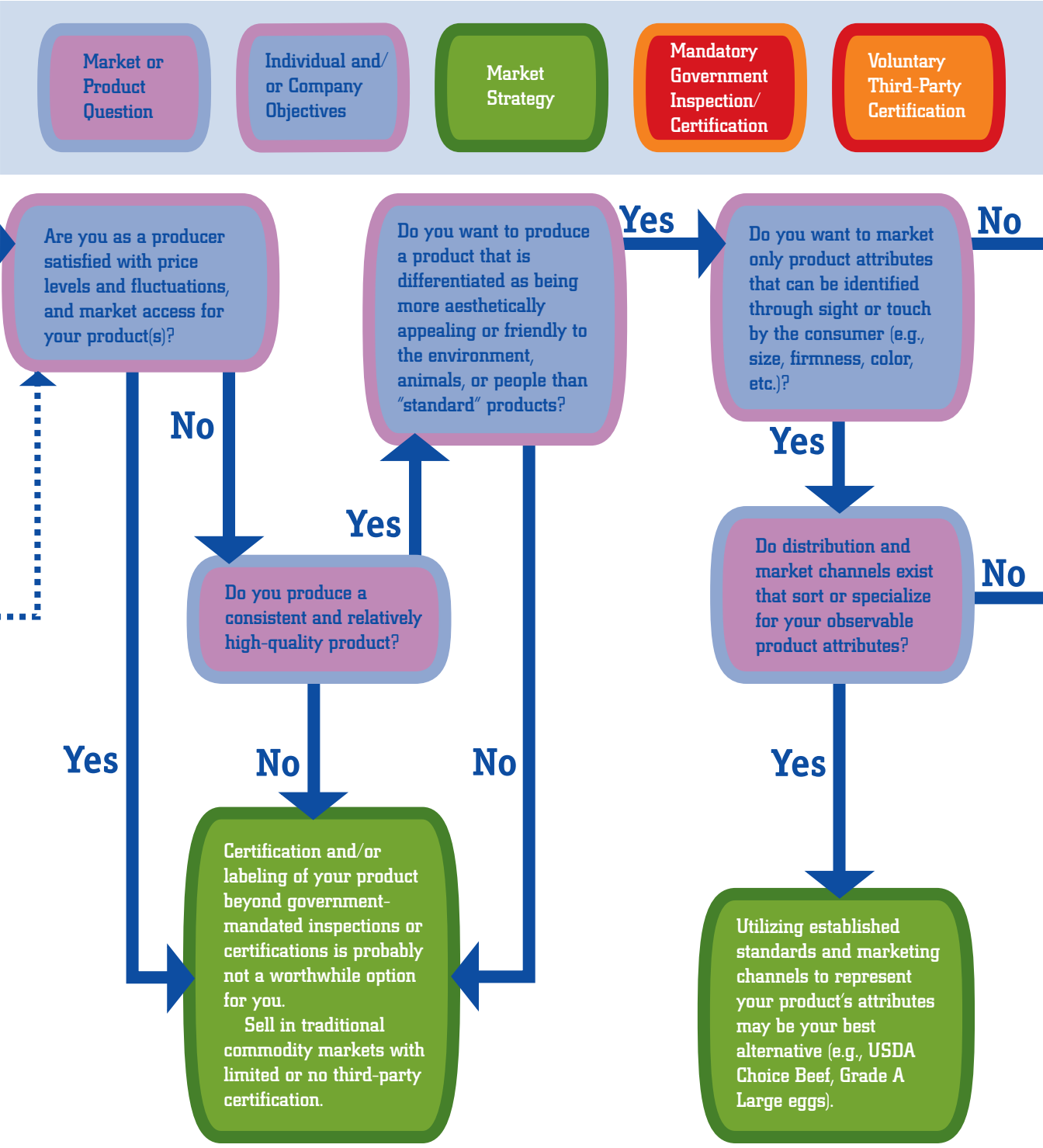


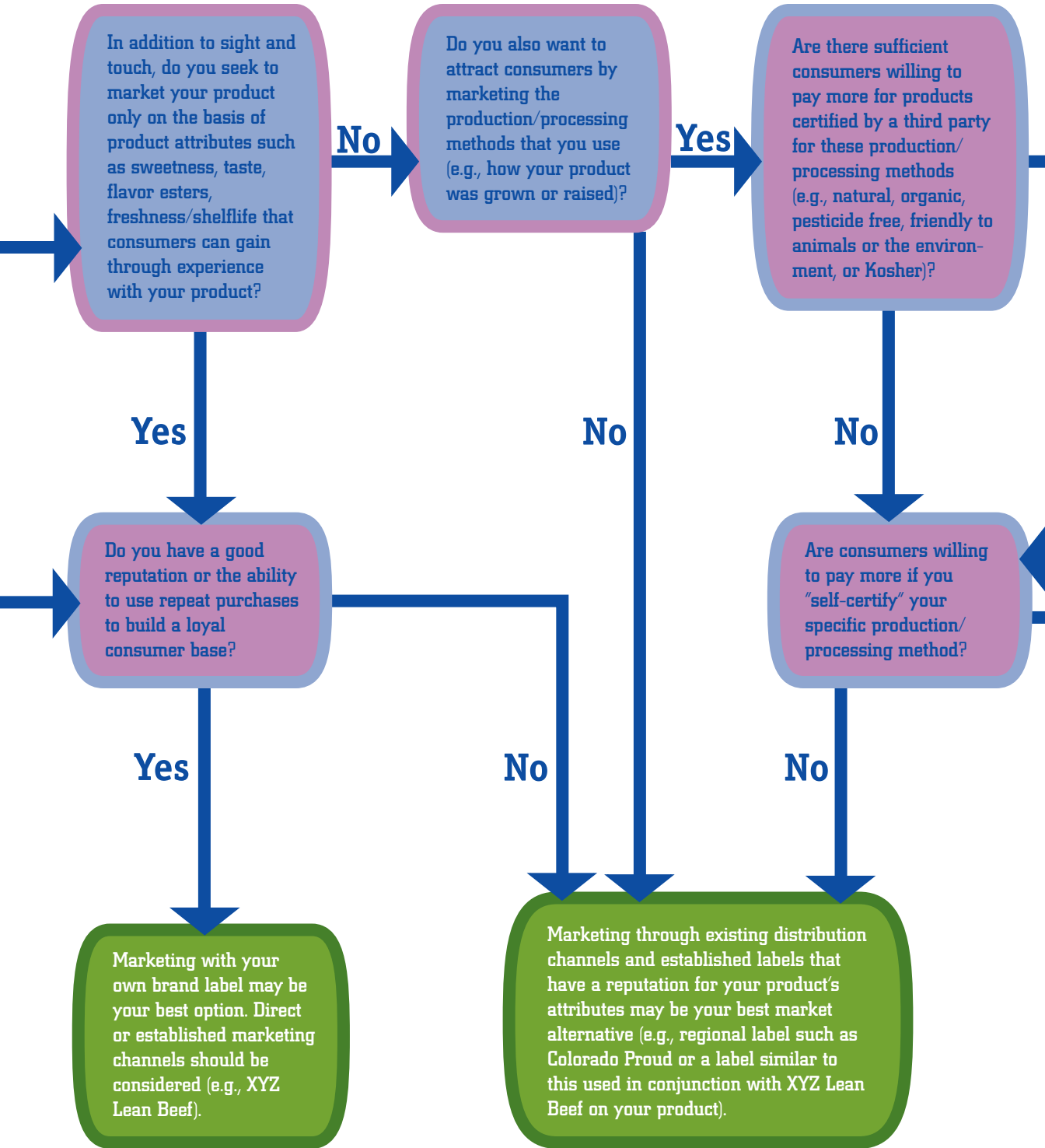
**Future premiums may very well be lower if the growth in the production supply for these products exceeds consumer demand growth.**

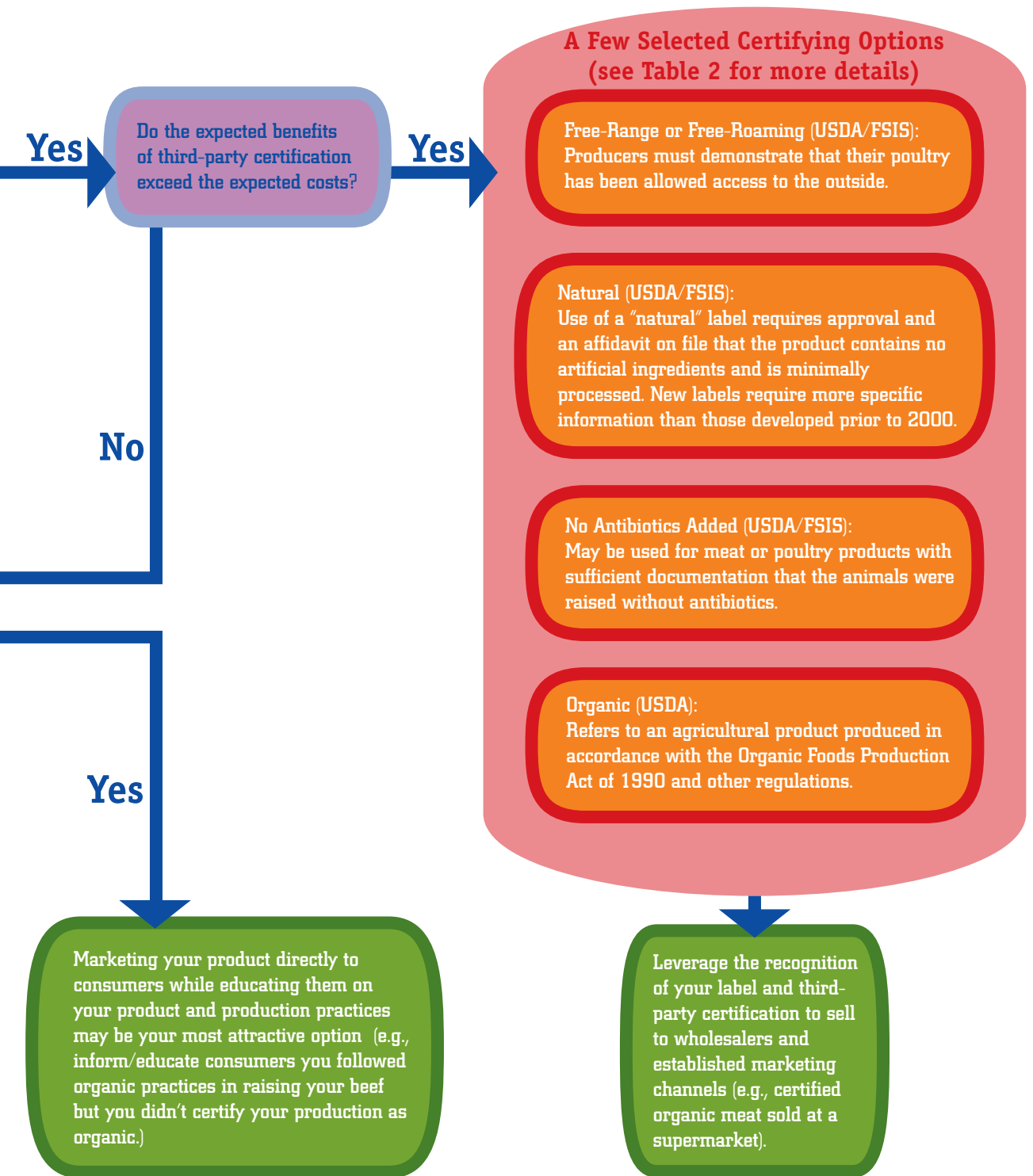
# Figure 2. A Flowchart Guide for Certification











**Table 2. Relative Producers' Costs and Benefits of Selected Certification Categories**

Producer Requirements/ Costs Relative to Conventional Methods						Selected Certification Categories	Perceived or Real Consumer Benefits Areas					
Record Keeping	Financial Outlay	Management Expertise	Yield/Performance Reductions	Production Risk	Time		Notes/Examples	Consumers	Animals	Environment	Other People	Religious Beliefs
L = Low, M = Medium, H = High						Y = Yes ? = Possible consumer benefits associated with category						
L	L	L	L	L	L	USDA/Government Inspected	[1]	Y				
L	L-M	L	M	L	L	USDA Grade	[2]	Y				
L	M-H	M	M	L	M-H	Own Brand Label	[3]	Y	?	?	?	
L	L	L	M	L	M	Established Brand Label	[4]	Y	?	?	?	
H	H	L	M	H	H	Eco-labels	[5]			Y		
M	H	H	M-H	H	H	Organic	[6]	Y	?	Y		
L	L	L	M	L	L	Natural	[7]	Y	?	?		
L	L	L	M	L	M	Animal Handling	[8]		Y	Y		
H	H	H	improve	L	H	ISO 9000	[9]			Y	Y	
M	M-H	L	-	L	L	Geographic Origin	[10]	Y			Y	
H	H	M	M-H	M-H	H	Pesticide-free Residues	[11]	Y		Y		
H	H	M	M	L	H	Food Safety	[12]	Y			Y	
M	L	M	M-H	H	L	No Antibiotics	[13]	Y	?		?	
M	L	L	-	L	M	Religious	[14]	?				Y
M	M-H	M	-	L-M	L	Social Responsibility	[15]			Y	Y	
L	L	M-H	L-H	M-H	L	NonGMO	[16]	Y	?	Y	?	

*The following are specific examples of certifications & certifying entities:*

- [1] Essentially “conventional method” since USDA inspections are centered on immediate food safety issues. For example, lower grade meat cuts (e.g., older cull animals) will be USDA inspected for HACCP (Health Analysis Critical Control Point) standards but will probably not be g-rated for USDA quality standards. USDA inspections for produce center around fruit damage or cosmetic appearance, which relates to food safety, and minimum size standards.
- [2] Top three USDA beef grades available to most consumers are Prime, Choice, and Select.
- [3] The illustration of Mike’s Melons would be an example of an “own brand” that is not established.
- [4] Established brand label examples include national: Dole, Del Monte, Sunkist, Ocean Spray, Tyson, Hormel; and local/regional: Mountain Apple, Meadow Gold.
- [5] The Food Alliance, Rainforest Alliance, Eco-OK
- [6] Quality Assurance International, Oregon Tilth, CCOF (California Certified Organic Farmers), HOFA (Hawaii Organic Farmers Association)
- [7] Coleman Beef
- [8] Free Range, Dolphin Safe, Cruelty-Free, Free-Farmed
- [9] ISO 9000 is a series of rigorous international standards on business and quality practices.
- [10] Washington Apples, Kona Coffee, Idaho Potatoes, Walla Walla Sweet Onions, Maui Onions, Colorado Proud, (Hawaii) Island Fresh
- [11] Nutriclean (Scientific Certification Systems)
- [12] Programs like Primus Labs are designed to ensure safe processing/handling.
- [13] No verification system in place for “raised without antibiotics”
- [14] Kosher
- [15] Fair Trade Certified, Food Alliance, Buy Local
- [16] No Genetically Modified Organisms label

## References

Baines R.N. "Strategic Motivations for Implementing Traceability & Assurance," USDA Workshop, Washington DC, USA. 2002.

Caswell, J.A. "How Labeling of Safety and Process Attributes Affects Markets for Food." *Agricultural and Resource Economics Review* 27(October 1998):151–158.

Christensen, B.J. Consumer Preferences for Public and Private Sector Certifications of Beef Products in the United States and the United Kingdom. International MBA dissertation, Royal Agricultural College, Cirencester, England and Utah State University, Logan, UT, 2002.

Dickinson, D.L. and D. Bailey. "Meat Traceability: Are U.S. Consumers Willing to Pay for It?" *Journal of Agricultural And Resource Economics*, 27(2002):348–364.

Dickinson, D.L. and D. Bailey. "Experimental Evidence on Willingness-to-Pay for Red Meat Traceability in the United States, Canada, the United Kingdom, and Japan." *Journal of Agricultural and Applied Economics*, forthcoming in 2005.

Harris, B., D. Burress, and S. Eicher. "Demands for Local and Organic Produce: A Brief Review of the Literature. Institute for Public Policy Research and Business Research, University of Kansas, Lawrence Kansas, 2000. Available at: [www.ku.edu/pri/resrep/pdf/m254A.pdf](http://www.ku.edu/pri/resrep/pdf/m254A.pdf)

Loureiro, M.L., and W.J. Umberger. "Estimating Consumer Willingness to Pay for Country-of-Origin Labeling." *Journal of Agricultural and Resource Economics*, 28(August 2003):287–301.

Loureiro, M.L., J.J. McCluskey, and R.C. Mittelhammer. "Assessing Consumer Preferences for Organic, Eco-labeled and Regular Apples," *Journal of Agricultural & Resource Economics* 26(December 2001):404–416.

Loureiro, M.L., J.J. McCluskey, and R.C. Mittelhammer. "Will Consumers Pay a Premium for Eco-labeled Apples?" *Journal of Consumer Affairs* 36(2002):203–219.

Loureiro, M.L. and J.J. McCluskey. "Assessing Consumers Response to Protected Geographical Identification Labeling." *Agribusiness* 16(2000):309–320.

McCluskey, Jill J., Kristine M. Grimsrud, Hiromi Ouchi, and Thomas I. Wahl, 2003. "After the BSE Discoveries: Japanese Consumers' Food Safety Perceptions and Willingness to Pay for Tested Beef." Washington State University, IMPACT Center Working Paper, 2003.

Oberholtzer, L., C. Demitri, and C. Greene. "Price Premiums Hold on as U.S. Organic Produce Market Expands." Economic Research Service, VGS-308-01, May 2005. ([www.ers.usda.gov/Publications/vgs/may05/VGS30801](http://www.ers.usda.gov/Publications/vgs/may05/VGS30801))

Salin, Victoria, and Neal H. Hooker. "Stock Market Reaction to Food Recalls." *Review of Agricultural Economics*, 23(Summer 2001):33–40.

Wessells, C.R., R.J. Johnston, and H. Donath. "Assessing Consumer Preferences for Eco-labeled Seafood: The Influence of Species, Certifier, and Household Attributes." *American Journal of Agricultural Economics*, 81(1999):1084–1089.

### Endnotes

<sup>1</sup> PGIs and Protected Designation of Origin (PDO) have been a matter of great interest, especially in Europe where producers want to protect products whose name is connected to the region they originate from. Examples include Champagne from the Champagne region of France and Kalamata olives from Greece (see <http://www.euauthentic tastes.com/news/pr1.html>).

<sup>2</sup> A couple of labeling examples that have been used successfully in market development in recent years include Niman Ranch and Harris Ranches.



Mild sweet flavor. Thin skin is typically not removed. Cook as you would summer squash. Great steamed with butter.



Very sweet. Delicious raw, roasted or cooked.



Mild, sweet flavor. Excellent for stuffing or sliced fresh in salads.



Crisp and refreshing flavor. Typically eaten raw, they may also be cooked and prepared similar to squash.

**1<sup>99</sup>**  
**LB**

Organic

GROWN IN HOLLAND

**8<sup>99</sup>**  
**LB**

Organic

GROWN IN UNITED STATES

**8<sup>99</sup>**  
**LB**

Organic

GROWN IN UNITED STATES

**1<sup>29</sup>**  
**EA**

