

Food Processors Expanding from Conventional to Organic Foods

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ABSTRACT

Food processors desire to participate in 20% per year growth currently seen in the organic & natural foods vs. slower growing conventional food markets.

This change involves processors, co-packers, suppliers and marketers who are seeking reliable strategies to achieve their respective goals.

This poster will focus on the activities which are usable, given existing facilities and recently approved regulations as well as the use of allowable ingredients (conventional, natural / organic) to produce the most economic, flexible and timely tools for meeting their objectives.

Introduction

National Organic Standards Board (NOSB) definition of "Organic" was passed at its April 1995 meeting in Orlando, FL as:

"Organic agriculture is an ecological production management system that promotes and enhances biodiversity, biological cycles and soil biological activity. It is based on minimal use of off-farm inputs and on management practices that restore, maintain and enhance ecological harmony.

'Organic' is a labeling term that denotes products produced under the authority of the Organic Foods Production Act. The principal guidelines for organic production are to use materials and practices that enhance the ecological balance of natural systems and that integrate the parts of the farming system into an ecological whole.

Organic agriculture practices cannot ensure that products are completely free of residues; however, methods are used to minimize pollution from air, soil and water.

Organic food handlers, processors and retailers adhere to standards that maintain the integrity of organic agricultural products. The primary goal of organic agriculture is to optimize the health and productivity of interdependent communities of soil life, plants, animals and people."

Aside from the mandate for responsible care and sustainability tenants, consumers have been willing to pay premium prices for organic vs. comparable conventional foods and the tangible benefits that organic foods deliver. The ability to gain price (and potential profitability) has attracted many conventional food manufacturers to expand from conventional to the natural and organic food markets.

Market growth rates for the organic segment have exceeded the growth rates for conventional food by a factor of 3:1 in recent years. Continued high growth rates in the organic / natural sector in the future will, in part, rely on continued consumer confidence that these foods are what they claim to be, "organic". The USDA has tightened the working definitions of what constitutes these product categories:

- Natural
- Made with organic products
- 70% organic
- Certified organic
- 100% organic

with the result being different price bands and requirements for finished products in each category.

The potential to shift from conventional to organic production brings the prospect of improved economics, expanded public image and increased corporate goodwill, at least in the short run. All these benefits are within the grasp of conventional food manufacturers, if they are able to make the expansion into natural and organic foods.

This presentation will cover agency certification, general approaches, specific ingredient selections and techniques that have been successful for some processors in this transition.

The goal of this poster is to assist those considering expanding their offering to natural and organic production.

Objective

Demonstrate that choice of ingredients can have a significant impact in determining the ease of manufacturing, economic viability and improved product quality with certified organic materials.

Materials and Methods - stakeholders and pressure points

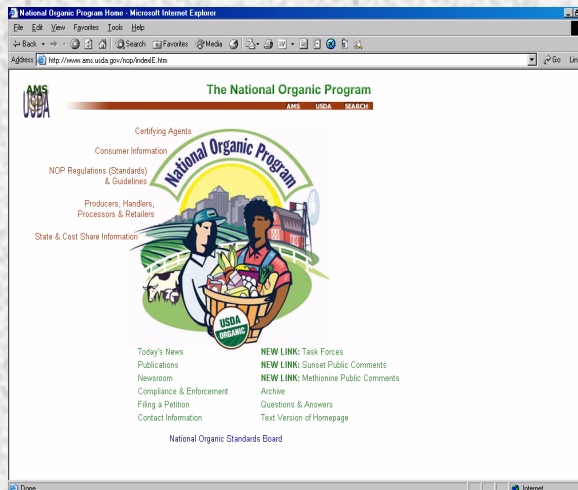
Once the decision is made to expand to organic the retention of an organic consultant is advisable to manage the certification phase. This will allow the product development (process and personnel) and commercialization efforts to proceed unburdened with the certification process. Consultants are also able to pull resources that can assist in product reformulation that is typically a part of this process.

USDA through CFR laws regulate and enforce what is allowed in organic production. Confusion in the marketplace has recently been cleared up by the Federal Court's decision in the Harvey Vs. Veneman case and allowing current law to remain in force until June 2007. Sourcing of major ingredients in organic forms (i.e., wheat, rice, corn) is often more easily performed than replacing the functionality of minor ingredients (ie dough conditioners, monoglycerides, preservatives). Many commonly used conventional ingredients that provide functionality are categorized as "synthetics" in the organic legislation, and are not allowable. Accordingly the commercial success of the entire transition may hinge upon identifying functional replacements for synthetic minor ingredients and correctly assessing the economic impact therein. This is not a simple issue and is highly dependent upon product attributes and interactions with other ingredients. Producers will likely need time to adjust formulations to retain "conventional product characteristics" while obtaining a certified organic status for specific products.

One valuable resource is the Organic Trade Association or OTA. Its membership is comprised of growers, producers, retailers and certifying entities whose mission is to "cultivate a strong organic industry". The OTA is a key resource which identifies companies, organic products, ingredients and regulations (USA and international). It is also the focal point for communications from this market to governments and regulatory bodies. Becoming a member of such an organization, could be a prudent step towards being a successful processor of organic foods. The OTA web site is: www.ota.com

The USDA provides some very good resources on their web site:

<http://www.ams.usda.gov/nop/indexIE.htm> which lists allowed organic ingredients, NOP regulations and links to certifying agents.



Specifics - Methodology

Replacing conventional ingredients with organic ones typically leaves the formulator without the use of conventional processing aids, preservatives and other "tools" to ensure high and consistent product quality.

One potential strategy is to replace 2 or more non-allowed synthetic ingredients with a single organic specialty ingredient that exhibits more broad functionality. For example, in a bakery application an organic emulsifier can function as an emulsifier and dough conditioner, as well as helping to manage water activity vs. single benefit synthetic ingredients. In this way, ingredient labels can be "cleaned up" and made more easily understood by the consumer, improving the acceptability of the product in the natural / organic marketplace.

Making it work – uncovers Positive Unintended Consequences

Due to greater variability in raw organic ingredients vs. conventional, formulators have found that processing of organic foods can be very difficult. Manufacturers often use processing aids to overcome production issues caused by the variability of raw materials. The challenge is finding the desired functionality in an ingredient that is "certified organic".

Applications where this is important may include, but are not limited to, reformulations with a new base material (potato flake vs. potato starch) or new delivery method, (dry or frozen vs. fresh) and new crop vs. old crop processing.

Particularly challenging for manufacturers and product managers are further points of product differentiation such as embossing in crackers or adherence to shape constraints while the above mentioned variables are shifting. Certified Organic special ingredients are commercially available that have functionality to assist in this area as well as others such as elimination of trans fats, reduction of potential allergens, etc.

When the available set of "allowable" functional ingredients is reduced, formulators need viable options. Often these responses come from consultants and or food formulators. One excellent resource for locating organic consultants can be the OTA website link at www.theorganicpages.com which offers further links to locate:

- Branded Products
- Broker Services
- Consulting Services
- Manufacturing Locations
- Organic Ingredients

The ingredient list has 108 separate product and service categories plus another search and look up function for company, text, brand, business type, location, and key word search for items that do not have their own category heading.

Just as in the conventional food processing world, it often requires a full network of resources to develop, formulate, produce and commercialize a new product; similar resources are necessary in the organic world. Assistance is available from many conventional suppliers, consultants, the USDA and organic trade associations.