The Organic Rule as it Applies to Value-Added Food Processing

As of October 21, 2002 the Final Organic Rule as proposed by the United States Department of Agriculture’s National Organic Program (NOP) will take effect. NOP is a marketing program housed within the USDA Agricultural Marketing Service, the agency that sets marketing standards. The Final Rule does not address food safety or nutrition. The complete Organic Rule has been published in the Code of Federal Regulations (CFR) Title 7 Part 205. To view the complete rule on-line visit http://www.ams.usda.gov/nop/regtext.htm

The following information has been taken from the website for the National Organic Program: http://www.ams.usda.gov/nop/. The article is intended to acquaint processors with the basics of the new organic rules.

According to the National Organic Program (NOP), organic processing can be defined, as the cooking, baking, curing, heating, drying, mixing, grinding, churning, separating, extracting, slaughtering, cutting, fermenting, distilling, eviscerating, preserving, dehydrating, freezing, chilling, or otherwise enclosed food in a container of an agricultural product produced in accordance with the Organic Foods Production Act of 1990. The principal of organic processing is to maintain the inherent organic qualities of a product through to the consumer.

With the implementation of the new rule, an USDA-accredited certifying agent must certify producers and handlers of agricultural products who make organic claims. Each production operation or specified portion of a production operation that produces or handles agricultural products that are intended to be sold, labeled, or represented as “100 percent organic,” “organic,” or “made with organic (specified ingredients or food group(s))” must be certified.

Processors will be responsible for documentation, record keeping, labeling, and auditing of handling procedures for certification. If your gross agricultural income from organic sales total $5,000 or less annually, you are exempt from certification however you must comply with labeling requirements, which are discussed later in this article. (Part 205.101)

Record Keeping (Part 205.103)
A certified operation must maintain records concerning the production and handling of agricultural products that are intended to be sold, labeled, or represented as “100 percent organic,” “organic,” or “made with organic ingredients.” An Organic Systems Plan with sufficient detail for the certifying agent to determine that the production and handling operation is in compliance with NOP regulations will be determined in collaboration with the certifying agent. It must include the following:

* A description of practices and procedures to be performed and maintained, including the frequency with which they will be performed.
Entrepreneur Profile:  
Edmund Patrick McCarthy - Hoboken Eddies

Edmund Patrick McCarthy, aka Hoboken Eddie, is the chef and owner of Hoboken Eddies. Eddie creates, manufactures and packages all of his collection of 13 original sauces himself at Hudson Valley Foodworks in Poughkeepsie, NY, a shared-use commercial kitchen. His creations include hot sauce, mustards, chutneys and BBQ sauces made with fresh, all natural ingredients and mixed with Eddie’s secret array of herbs and spices; he uses absolutely no fats, oils or meat products in any of his sauces. Eddie’s BBQ sauce, which he calls “the mother of all sauces” and is described in his brochures as a “secret mix of family herbs and spices brewed to a bubbling crude,” was an award winner at the 1998 Chile Pepper Magazine Fiery Food Challenge.

Eddie is trained in international cooking and moved his way through the ranks to executive chef of the Marriott Casa Marina Resort in Key West, Florida. In 1989, Eddie returned to New Jersey where he worked as a chef and lectured at the French Culinary Institute in New York City. Eventually, he opened his own tiny, 400 square-foot basement restaurant in Hoboken where Hoboken Eddie’s sauce originated. Today Eddie’s sauces are in 2000 stores with 8 distributors; Eddie himself distributes to 500 stores.

Eddie’s advice for entrepreneurs starting out in the specialty food business is “not to be afraid of hard work... you get out of it what you put into it... if you are not willing to work hard you are wasting your time.” And he models his advice. On production days, Eddie puts in 10-18 hours cooking and bottling; he says he is not ready to use a co-packer because no one will do as good a job as he does. All his products are hand-filled to maintain the quality of the chutneys and sauces. To automatically fill the bottles would require finer processing of ingredients, something he is not willing to do. Says Eddie, “It is not about making money.”

When he is not in the kitchen processing, Eddie is on the road making deliveries. This is especially for him and an effective part of his marketing strategy. While he is making his rounds in his ‘86 Ford pick-up Eddie scouts out potential stores to approach about carrying his sauces. This personal attention to vendors builds a rapport that helps get more of his products into stores. When he gets an order, he calls vendors in the vicinity to let them know he will be making a delivery and can fill their orders at the same time, saving time and costs.

Eddie does virtually no advertising; he fills mail orders through his website www.hobokeneddies.com and sells at street fairs. For him, fairs are not big money makers but he uses them to do market research through taste testing and talking to the people who buy his product. “People may be reluctant to purchase my sauces at $7.00 a bottle without trying it first”, says Eddie, “but when they taste it, they buy it; then they see it in the store and they try the rest of the product line.” Even though his story has appeared in several newspaper and magazine articles including Esquire, Food & Wine, Cigar Afficionados, Gourmet Magazine, Eddie says that this has been his most effective marketing strategy.

It is all working for Eddie. He recently closed his restaurant business to devote all of his time to production of the specialty food line. Within the next couple of months Eddie is coming out with a new line of Thai sauces named for his 4 year old daughter Hannah.

Cheryl Leach
Juice HACCP Regulations and Industry Compliance

Dr. Randy W. Worobo, Department of Food Science & Technology
New York State Agricultural Experiment Station, Cornell University

For decades, fresh fruit juice had been consumed in the US without any major consequences and was considered a safe food product because of the natural high acidity barrier. However, things changed in the early 1980’s when a new pathogen emerged and became a threat to fruit juices. This “new” pathogen came into existence as a result of the genetic recombination between a common bacterium known as Escherichia coli and Shigella, a known bacterial pathogen. This “super bug” known as E. coli O157:H7 has enhanced acid resistance and is capable of producing a shiga toxin that can cause renal failure, hemorrhaging and severe bloody diarrhea. These newly acquired traits allow for E. coli O157:H7 to survive in fruit juices and to cause serious sequela in susceptible individuals who consume contaminated juice. Several foodborne illness outbreaks occurred during the late 1980’s and early 1990’s due to contaminated fruit juice. A large juice outbreak in the mid-1990’s received large media and public attention due to numerous long-term hospitalizations and the death of one infant. These highly publicized outbreaks stimulated the Food and Drug Administration (FDA) to closely examine the safety and existing regulations that governed the production of fresh juice in the United States. In December of 1996, recommendations were made to FDA by the National Advisory Committee on Microbiological Criteria for Foods (NACMCF), suggesting the need for safety interventions to be implemented for fresh juices. On August 28, 1997, FDA published a notice of intent that announced a comprehensive program to address the incidence of foodborne illness related to the consumption of fresh juice and ultimately the safety of all juice products. This notice of intent proposed three areas to be addressed:

1. Initiate rulemaking on mandatory Hazard Analysis Critical Control Point (HACCP) program for some or all fruit juices.
2. Propose labels or the labeling of juice products not treated to achieve a 5-log reduction of the “pertinent” pathogen.
3. Initiate education programs to consumers regarding the risk associated with the consumption of fresh juices.

On April 24, 1998, FDA published a proposed rule for the labeling of fresh juices and the comment period for this HACCP proposed rule was extended to August 7, 1998. This ruling required the labeling of all juice that is not treated to achieve a 5-log reduction of the pertinent pathogen. For the first year, an optional warning placard at the point of sale in place of a warning label on the bottle itself was permitted. The warning label must state:

“WARNING: This product has not been pasteurized and, therefore, may contain harmful bacteria that can cause serious illness in children, the elderly and persons with weakened immune systems.”

It is because of this final rule that fresh fruit juice producers across the United States have been faced with the dilemma to decide whether to place a warning label on their fresh juice or meet the federal requirements.

On January 19, 2001, the FDA published the final rule for “HACCP; procedures for the safe and sanitary processing and importing of juice”. These regulations mandate the implementation of HACCP principles to the production of fresh juices. The effective date is January 22, 2002 with the exception for small and very small businesses who have compliance dates of January 21, 2003 and January 20, 2004, respectively. The definition for small companies are those that have either total sales less than $500,000; or if their total annual sales are greater than $500,000 but their total food sales are less than $50,000; or if the business employs less than an average of 100 full time equivalent employees and fewer than 100,000 units of juice sold in the United States.

Part 120 was amended to 21 CFR Chapter I and included in this ruling are general provisions for applicability, definitions, current good manufacturing practices, sanitation standard operating procedures, hazard analysis, HACCP plan, legal basis, corrective actions, verification and validation, records, training and application of requirements to imported products. A dedicated section of the ruling pertains to pathogen reduction, specifically process controls and process verification for certain processors.

Several changes from the 1998 Juice Labeling rule are present in the new regulation. One of these changes is the exemption of retail establishments. Retail establishments are defined as “an operation that provides juice directly to the consumers and does not include an establishment that sells or distributes juice to other business entities as well as directly to consumers. ‘Provides’ includes storing, preparing, packaging, serving, and vending”. In addition, for non-citrus juices, a cumulative 5-log reduction is not allowed and the 5-log reduction must be achieved on the juice itself and not on the fruit surface prior to juice extraction. Citrus juice processors are still permitted to perform a pathogen reduction step to the fruit surface after culling and cleaning but the finished product must be tested for the presence of biotype 1 Escherichia coli. In addition, shelf-stable juices are exempt from this regulation since they receive processing treatments that are designed to inactivate spoilage microorganisms that are more heat resistant than the pertinent pathogens.

Specific for apple juice and apple juice concentrate, an action level of 50 ppb of patulin is dictated by FDA Compliance Policy Guide (Chapter 5, subchapter 510). Patulin is a mycotoxin that is produced by several species of molds that include Penicillium spp., Byssochlamys spp., and Aspergillus spp. The presence of patulin is a possible chemical hazard for apple juice, apple juice concentrates and apple juice products. Research has shown that patulin is unaffected by normal pasteurization. Juice containing levels exceeding 50 ppb will be considered adulterated.

This new regulation covers all domestic and imported fresh or processed juices that are not exempt as described above. In addition, imported juice must be processed to meet the requirements of 21 CFR part 120, or that country must have an appropriate memorandum of understanding (MOU) with the United States.

HOT STUFFING, continued from page 1.

Looking Ahead

October 14, 2002
Bringing Your Product to Market
New York Metropolitan Area

October 15, 2002
Processed Meats Workshop
New York Metropolitan Area

October 16, 2002
GMPs for Acid and Acidified Foods
New York Metropolitan Area

November 13-15, 2002
8:00 a.m. - 5:00 p.m.
Advanced Course in Cheese-Making
For more information contact Cecilia Golnazarian at 802.656.0147
ORGANIC RULE, continued from page 1.

* A list of each substance to be used as a production or handling input, indicating its composition, source, location(s) where it will be used, and documentation of commercial availability, as applicable;

* A description of the monitoring practices and procedures to be performed and maintained, including the frequency with which they will be performed, to verify that the plan is effectively implemented.

* A description of the record keeping system implemented to comply with the requirements.

* A description of the management practices and physical barriers established to prevent commingling of organic and non-organic products on a split operation and to prevent contact of organic production and handling operations and products with prohibited substances; and

* Additional information deemed necessary by the certifying agent to evaluate compliance with the regulations.

These records must be adapted to the particular business that the certified operation is conducting, and fully disclose all activities and transactions of the certified operation in sufficient detail as to be readily understood and audited. The records must be maintained for not less than 5 years beyond their creation.

Labeling (Part 205.303-205.05)
Accompanying this article there is a table on how products must be labeled to indicate the percentage of organic ingredients and how the label must appear on the package. There are four categories of product composition of organic claims. (Part 205.301).
1. Products sold, labeled, or represented as “100 percent organic” must contain (by weight or fluid volume, excluding water and salt) 100 percent organically produced ingredients.
2. Products sold, labeled, or represented as “organic” must contain (by weight or fluid volume, excluding water and salt) not less than 95 percent organically produced raw or processed agricultural products. Any remaining product ingredients must be organically produced, unless not commercially available in organic form, or must be non-agricultural substances or non-organically produced agricultural products produced consistent with the National List (see information on National List below.)
3. Products sold, labeled, or represented as “made with organic ingredients” must contain (by weight or fluid volume, excluding water and salt) at least 70 percent organically produced ingredients.
4. Products with less than 70 percent organically produced ingredients by weight or fluid volume, (excluding water and salt) may only identify the organic content of the product by identifying each organically produced ingredient and the percentage of the ingredient.

The National List of Allowed and Prohibited Substances (Part 205.600) is included in the final rule, covers sanitizing materials, acidifying agents, minor ingredients and processing aids. It is important to check the List regularly for new compounds that may have been added or eliminated. Anyone may petition the National Organic Standard Board for the purpose of having a substance evaluated by the Board for recommendation to the Secretary for inclusion on or deletion from the National List. (Part 205.607). The list is revised as new substances are petitioned to be added and existing items are re-evaluated and deleted. The List can be found at www.ams.usda.gov/nop.

Auditing (Part 205.406)
For continued certification, a certified operation must pay the annual certification fees and submit the following information to the certifying agent.
* An updated organic production or handling system plan, which includes a summary statement, supported by documentation, detailing changes and modifications to the previous year’s plan.
* Additions or deletions to the previous year’s organic system plan intended to be undertaken in the coming year.
* An update on the correction of minor non-compliances previously identified by the certifying agent as requiring correction for continued certification.
* Other information as deemed necessary by the certifying agent to determine compliance with the Act and the regulations in this part.

To locate a certifying agency in your region contact the Department of Agriculture in your state or an agency that has been accredited.

NOFA-NY Certified Organic, LLC: 840 Upper Front St Binghamton, NY 13905

Phone: (607) 724-9851
NOFA Massachusetts Office 411 Sheldon Road Barre, MA 01005 Phone: (978) 355-2853
New Hampshire Department of Agriculture, Markets & Food PO Box 2042 Concord, NH 03302 Telephone: 603-271-3685 www.state.nh.us/agric/aghome/html
MOFGA Unity Office Maine Organic Farmers and Gardeners Association (MOFGA) Common Ground Country Fair PO Box 170 Unity, ME 04988 Tel.: 207-568-4142 www.mofga.org
Vermont Department of Agriculture, Food & Markets 116 State Street, Drawer 20 Montpelier, Vermont 05602-2901 Phone: (802) 828-2416 www.state.vt.us/agri
Rhode Island Division of Agriculture Kenneth Ayars, Chief 235 Promenade Street Providence, RI 02908-5767 (401) 222-2781
Connecticut Dept. of Agriculture 165 Capitol Avenue, Room 167 Hartford, CT 06106 P: 860-713-6160 www.state.ct.us/dep/
USDA Website: www.ams.usda.gov/nop/nop2000/nop2/statecontact.html

Cheryl Leach
Sarah Lincoln
Table 1. Prohibited Production and Handling Priorities for Labeling Categories.

<table>
<thead>
<tr>
<th>Organic and use label</th>
<th>Use excluded methods</th>
<th>Use sewage sludge</th>
<th>Use ionizing radiation</th>
<th>Use substances not on the National List</th>
<th>Contain added sulfites, nitrates, nitrites</th>
<th>Use nonorganic ingredients and label “when available”</th>
<th>Use both organic and nonorganic forms of same ingredient</th>
</tr>
</thead>
<tbody>
<tr>
<td>“100 percent organic”</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Single/multi-ingredients completely organic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Organic”</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Organic (95% or more)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonorganic (5% or less)</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>“Made with organic ingredients”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic (70-95%)</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO-except wine</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Nonorganic (30% or less)</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>OK</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Less than 70% organic ingredients</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic (70% or less)</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO-except wine</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Nonorganic (30% or more)</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>NA*</td>
<td>NA*</td>
</tr>
</tbody>
</table>

*Not applicable, provided that the nonorganic ingredient is not labeled as “organic” on the ingredient statement and is not counted in the calculation of the product’s organic percentage.

Table 2. Labeling Consumer Product Packages.

<table>
<thead>
<tr>
<th>Labeling category</th>
<th>Principle display panel</th>
<th>Information panel</th>
<th>Ingredient statement</th>
<th>Other package panels</th>
</tr>
</thead>
<tbody>
<tr>
<td>“100 percent Organic”</td>
<td>“100 percent organic (optional)</td>
<td>“100% organic” (optional)</td>
<td>If multicomponent product, identify each ingredient as “organic” (optional)</td>
<td>“100 percent organic” (optional) USDA seal and certifying agent seal (optional)</td>
</tr>
<tr>
<td>(Entirely organic; whole, raw or processed product)</td>
<td>USDA seal and certifying agent seal (optional)</td>
<td>Certifying agent name (required); business/Internet address, tel. # (optional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Organic”</td>
<td>“Organic” (plus product name) (optional)</td>
<td>“X% Organic” (optional)</td>
<td>Identify organic ingredients as “organic” (required if other organic labeling is shown)</td>
<td>“X% Organic” (optional) USDA seal and certifying agent seal (optional)</td>
</tr>
<tr>
<td>(95% or more organic ingredients)</td>
<td>“X% Organic” (optional) USDA seal and certifying agent seal (optional)</td>
<td>Certifying agent name (required); business/Internet address, tel. # (optional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Made with Organic Ingredient”</td>
<td>“Made with Organic (ingredients or food group(s))” (optional) “X% Organic” (optional)</td>
<td>“X% Organic ingredients” (optional)</td>
<td>Identify organic ingredients as “organic” (required if other organic labeling is shown)</td>
<td>“Made with Organic (ingredients or food group(s))” (optional) “X% Organic” (optional) Certifying agent seal of final product handler (optional) Prohibited: USDA seal</td>
</tr>
<tr>
<td>(70 to 95% organic ingredients)</td>
<td>Certifying agent seal of final product handler (optional) Prohibited: USDA seal</td>
<td>Certifying agent name (required); business/Internet address, tel. # (optional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 70% organic ingredients</td>
<td>Prohibited: Any reference to organic content of product Prohibited: USDA seal &amp; certifying agent seal</td>
<td>“X% Organic” (optional)</td>
<td>Identify organic ingredients as “organic” (optional)(required if % organic is displayed)</td>
<td>Prohibited: USDA seal and certifying agent seal</td>
</tr>
</tbody>
</table>
How to Prepare Chlorine Solutions for Food Sanitation
Dr. Olga Padilla-Zakour, Cornell University

In order to maintain a clean and safe processing environment, the food processor must thoroughly wash and clean the equipment, utensils and food preparation areas frequently, followed by a sanitizing step. Sanitizing is defined as adequately treating food-contact surfaces by a process that is effective in destroying vegetative cells of pathogenic microorganisms and in substantially reducing the number of other microbes. Chlorine and chlorine compounds are the most common germicides or sanitizers used in the food industry due to its low cost, fast action and effectiveness. Some disadvantages of chlorine-based sanitizers are that they are unstable and rapidly driven off with heat or contamination with organic matter, they are corrosive to stainless steel and other metals and therefore require a short contact time to prevent corrosion. Chlorine compounds are available as liquid chlorine, hypochlorites, chloramines and chlorine dioxide. For small scale food operations, prepared aqueous solutions of hypochlorites offer a convenient and economical choice.

Chlorine solutions are easily available for institutional use in a 5.25% solution of sodium hypochlorite in water, although stronger products are now also being offered in a 6.0% solution (“Ultra”). Commercial names such as Clorox, Purex or Bleach are familiar to most people. It is important to notice though that only pure solutions of chlorine, that is, without any added perfume, color or additional ingredients, should be used for sanitizing purposes in food processing.

Sanitizing solutions should be prepared fresh as chlorine concentration will decrease over time. Keep chlorine containers tightly closed in a cool, well ventilated place when not in use.

Chlorine solutions are effective at very low concentrations. Instead of using percentages, the food industry uses the concentration levels at parts per million or milligrams of chlorine per liter of aqueous solution. Recommended concentrations of chlorine for sanitizing food equipment and food contact surfaces range from 100-200 ppm (parts per million or mg/L) as free or active chlorine. The free chlorine is usually lower than the added amount of chlorine to a volume of water. This happens because some of the chlorine is ‘used’ by the impurities of the water, especially by any organic material. Therefore, periodic monitoring of chlorine concentration is necessary to maintain the target level. Chlorine concentration is easily measured using test kits like the ones used for monitoring swimming pools or using test strips that change in color depending on the amount of chlorine present in the water. The acidity or pH of the final solution is important, as the effectiveness of this solution decreases with an elevated pH. Always check the pH of the chlorine solution with a test kit; pH strips or pH meter and adjust the pH to 6.0 - 7.0 by adding a few drops of a diluted solution of acid if needed. Do not add extra acid as chlorine gas, which is highly toxic, will be released. Another factor to check and monitor is temperature as warmer solutions are more effective. If possible, use fresh solutions at 75 to 120°F.

To disinfect produce, federal regulations allow the use of up to 200 ppm chlorine solution followed by a potable water rinse. Typical concentrations vary from 100 to 200 ppm. If the solution concentration is 50 ppm or less, no rinse is required. Dipping or contact times are usually short, about 5 to 15 minutes. The pH and water temperature are again important. In the case of produce, use a chlorine solution that is warmer than the produce, as colder temperatures can induce a suction of the material at the surface of the produce and therefore penetration of bacteria inside the produce. If bacteria are inside, disinfection by dipping in sanitizing solution is ineffective. Pasteurization or another effective intervention step would be required to achieve a safe product.

The following formula can be used to calculate the amount of bleach needed to disinfect produce:

\[ \text{Vol. bleach (mL)} = \frac{\text{Vol. sanitizing solution (gal)} \times \text{chlorine conc (ppm)}}{0.79/ \text{bleach conc} \%} \]

**Example:** Prepare 10 gallons of 200 ppm chlorine solution using 5.25% sodium hypochlorite solution (common bleach)

Vol. bleach (mL) = 10 gal x 200 ppm x 0.79/5.25% = 300 mL

To prepare the solution then measure 10 gallons of water and add 300 mL of bleach.

### Table 1. Amount of 5.25% sodium hypochlorite solution (Bleach) needed to prepare 1 gallon or 10 gallons of sanitizing solutions - assume water has no impurities

<table>
<thead>
<tr>
<th>Chlorine Concentration (ppm)</th>
<th>mL of Bleach</th>
<th>Ounces of Bleach</th>
<th>Tablespoons of Bleach</th>
<th>Teaspoons of Bleach</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 gal</td>
<td>10 gal</td>
<td>1 gal</td>
<td>10 gal</td>
</tr>
<tr>
<td></td>
<td>1 gal</td>
<td>10 gal</td>
<td>1 gal</td>
<td>10 gal</td>
</tr>
<tr>
<td></td>
<td>1 gal</td>
<td>10 gal</td>
<td>1 gal</td>
<td>10 gal</td>
</tr>
<tr>
<td></td>
<td>1 gal</td>
<td>10 gal</td>
<td>1 gal</td>
<td>10 gal</td>
</tr>
<tr>
<td>5</td>
<td>0.75</td>
<td>7.5</td>
<td>1/4</td>
<td>1/2</td>
</tr>
<tr>
<td>10</td>
<td>1.5</td>
<td>15</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>3.8</td>
<td>38</td>
<td>1/8</td>
<td>1.3</td>
</tr>
<tr>
<td>50</td>
<td>7.5</td>
<td>75</td>
<td>1/4</td>
<td>2.5</td>
</tr>
<tr>
<td>100</td>
<td>15</td>
<td>150</td>
<td>1/2</td>
<td>5</td>
</tr>
<tr>
<td>200</td>
<td>30</td>
<td>300</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

**PRECAUTIONS:** When handling chlorine compounds, always follow the manufacturer’s safety instructions. Always wear splash goggles, lab coat or aprons and rubber gloves when handling bleach. If splashed in eyes, flush with water for at least 15 minutes and see a physician. Bleach is harmful if ingested; if swallowed, drink milk and immediately seek medical attention. Do not mix Bleach with ammonia or acids such as toilet bowl cleaners or rust removers or vinegar because toxic gases can be released.

**Reference**
Micro-lending institutions provide entrepreneurs alternative financing options for business start-up and expansion. These lending agencies are usually non-profit, community based organizations whose mission is to serve low and moderate income individuals who may not be eligible for loans in the traditional financial market. ACCION USA is one such organization that serves selected regions of the Northeast.

ACCIÓN USA does not give grants of any kind but its lending methodology is character-based. Unlike traditional lenders, ACCION USA does not make loans based on credit history or collateral alone. Instead, they focus on a potential borrower’s initiative and desire to succeed, knowledge of his or her business and market, as well as on references from customers and neighbors.

Loans:
- Range from $500 to $50,000 with terms of 3 to 36 months.
- First time loan limits are $15,000 for established businesses and $10,000 for start-ups.
- After successful repayment, you are eligible for up to $50,000.
- Are designed to match the credit needs of each business, the borrower’s character and the business/family income and expenses.
- Can be used for equipment, merchandise, working capital and business expansion.

To access the loan fund businesses must be located in the regions where ACCION offices are located. C.J. Lind, New England Program Associate for ACCION USA, explains that “because lending is based on character rather than assets loan officers provide ‘hands-on’ support throughout the process.” For locations see the list at the end of this article. If you are not located in these regions you may contact the Association of Enterprise Opportunity (AEO) for referrals to micro-lending agencies in your area. Contact information also following article.

Steps to apply for a loan from ACCION USA:
1. Attend orientation session, which is held about once a week.
2. Obtain an application, and meet with a loan officer who will help you fill out the forms and determine documents necessary to secure loan.
3. Gather documentation requested such as references from business suppliers, landlords, neighbors; bank account statements, and a business plan if the business has been operating for less than one year.
4. If a business plan is necessary then work with a loan officer to write the plan. The loan officer will make a site visit.
5. The loan officer takes application to credit committee. The whole process takes about 2-3 weeks.

ACCIÓN USA’s mission is to make access to credit a permanent resource for low- and moderate-income small business owners in the United States. By providing small or “micro” loans to men and women who have been shut out of the traditional banking sector, ACCION helps build their businesses and increase their incomes.

Securing a loan helps to establish credit for the business by providing:
- The opportunity to build a business credit record.
- The chance to develop the business owner’s skills in areas such as accounting, marketing, legal negotiations, etc. through ACCION’s partnerships with community organizations and professional groups.
- Networking opportunities, service referrals and group-buying discounts.
- The opportunity to develop relationships with traditional lenders and financial institutions.

There are other micro-lending agencies that provide support services such as business training and marketing assistance - credit unions, the US Small Business Administration’s Micro-Loan Program, community based economic development agencies such as Industrial Development Agencies (IDA’a). Look in the yellow pages of your phone book under “economic development” or visit the ACCION USA for links to loan agencies.
Continued Growth In Organic Market Expected

The U.S. is the world’s largest market for organic products, with an estimated $9.5 billion in sales in 2001, according to The U.S. Market for Organic Food and Beverages, a study compiled by the International Trade Centre, Geneva, Switzerland, reported Prepared Foods (June).

Continued strong growth in the organic foods industry is expected, driven by increased consumer awareness of health and environmental issues, more marketing and promotion by the retail sector and a heightened interest among major food manufacturers to develop organic product lines. Soy foods and other meat/dairy alternatives, fiber and miscellaneous canned and jarred products are expected to post impressive gains.

For a copy of the study, visit:

SALES OF ORGANIC FOODS & BEVERAGES BY PRODUCT GROUP
(Source: International Trade Centre/Prepared Foods)

<table>
<thead>
<tr>
<th>Category</th>
<th>2000 (In Millions)</th>
<th>1999 (In Millions)</th>
<th>% Chge.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh produce</td>
<td>$953</td>
<td>$833</td>
<td>14.4%</td>
</tr>
<tr>
<td>Packaged grocery</td>
<td>$652</td>
<td>$692</td>
<td>-5.8%</td>
</tr>
<tr>
<td>Bulk/packaged bulk</td>
<td>$482</td>
<td>$437</td>
<td>10.3%</td>
</tr>
<tr>
<td>Frozen/refrigerated</td>
<td>$333</td>
<td>$323</td>
<td>3.1%</td>
</tr>
<tr>
<td>Non-dairy beverages (soy,rice,oat)</td>
<td>$262</td>
<td>$157</td>
<td>66.9%</td>
</tr>
<tr>
<td>Dairy</td>
<td>$273</td>
<td>$171</td>
<td>59.6%</td>
</tr>
<tr>
<td>Foodservice</td>
<td>$120</td>
<td>$127</td>
<td>-5.5%</td>
</tr>
<tr>
<td>Bakery</td>
<td>$110</td>
<td>$98</td>
<td>12.2%</td>
</tr>
<tr>
<td>Snack foods</td>
<td>$105</td>
<td>$89</td>
<td>18.0%</td>
</tr>
<tr>
<td>Coffee/tea</td>
<td>$86</td>
<td>$78</td>
<td>10.3%</td>
</tr>
<tr>
<td>Other beverages (excluding beer/wine)</td>
<td>$133</td>
<td>$68</td>
<td>95.6%</td>
</tr>
<tr>
<td>Home meal replacement</td>
<td>$32</td>
<td>$58</td>
<td>-44.8%</td>
</tr>
<tr>
<td>Fresh meat/seafood</td>
<td>$44</td>
<td>$35</td>
<td>25.7%</td>
</tr>
<tr>
<td>Beer/wine</td>
<td>$27</td>
<td>$6</td>
<td>350.0%</td>
</tr>
</tbody>
</table>

From: Food Institute Report July 1, 2002; Telephone 201.791.5570

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