

# IDEAS

## For Food Processors



Summer 2002  
Volume 1, Issue 2

A Publication of the Food Technology Extension Program  
Cooperative Extension Service, New Mexico State University

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## New Mexico Food Businesses and Processors Survey

In February a telephone survey was conducted of New Mexico food processors and food businesses by the New Mexico State University Extension and Food Technology Program. The purpose of the survey was to learn the needs of food processors and producers within the state of New Mexico. The results of this survey revealed an interesting cross-section of producers in this state, as well as finding out what is most needed by food producers at this time, and how our food technology program can assist these companies.

Out of 458 businesses included in the survey, 57 have gone out of business, which is in line with the national average. The length of time these companies have been in business ranged from under six months to 50 years, with an average of 14 years. When asked about the biggest issue or issues facing their businesses, the most common answer was "cash flow" and "marketing distributions."

More than half of the companies sur-

veyed had heard of the Food Technology program at New Mexico State University and had utilized our program for consulting on product development and regulation. Many were not aware of the additional services we provide such as nutritional labeling database service, process review of acidified products and shelf-life and microbiological evaluation for a small fee.

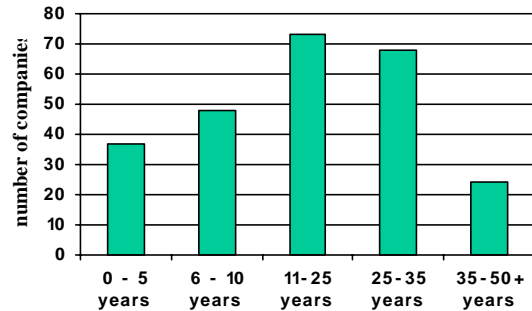
When asked what kind of technical training or services they would like to see provided by the University or Cooperative Extension Service, many producers indicated that training for employees in food safety and food handling would be very helpful. Additional areas were marketing their product and finding local growers and packagers within the state of New Mexico.

Results from the survey were compiled and are shown on page 2. Once again, we want to thank all our participants in our survey.

Results from survey continued from page 1.

**How many years have you been in business?**

**New Mexico Food Processors/Producers:**  
**Number of Years in Business**



**What are the biggest issues facing your business?**

**ISSUES**

CASH FLOW .....	4.7
MARKETING DISTRIBUTIONS .....	3.8
FOOD SAFETY .....	2.4
CUSTOMER AWARENESS .....	3.3

**PRIORITY RANKING BY COMPANIES**

RATINGS: 1 = LEAST SIGNIFICANT

5 = VERY SIGNIFICANT

By Ann Pottenger

**A Message from the Editor**

I can hardly believe that I have been in New Mexico for an entire year!

The pilot plant is still being re-modeled and new equipment is being acquired. Recent additions are a pasteurizer and a small commercial dehydrator.

I have been busy this spring presenting the "Good Agricultural Practices" program at the various specialty crops conferences held through out the state as well as coordinating a series of workshops on food business development and food safety. These programs were held in various parts of the state, but

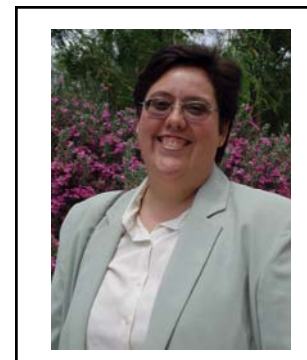
were not well attended. Those who did participate have been empowered to make better decisions in the development of their food business.

The results of the telephone survey conducted this spring indicated that food processors need assistance with business planning and marketing and some information on food safety. Workshops have been designed to meet these needs.

Please give me feedback as to the type of programming needed.

I look forward to your response!

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Extension Home Economics  
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**IDEAS**  
**for Food Processors**

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Editor: Nancy C. Flores, Ph.D.  
Extension Food Technology Specialist  
Contributors: Nancy C. Flores

# Calendar of Upcoming Events

## Meeting & Conferences-2002

- Aug. 11-15:** SIM annual Meeting and Exposition. Lowes Philadelphia Hotel, Philadelphia, Pa. Call 703-691-3357, e-mail [info@simhq.org](mailto:info@simhq.org), or visit [www.simhq.org](http://www.simhq.org).
- Aug. 18-20:** Challenges in the Characterization of Flavor Compounds. Boston, Mass. Call 315-787-2615, e-mail [kdd3@cornell.edu](mailto:kdd3@cornell.edu), or visit [www.nysaes.cornell.edu/agfd/deibler02.html](http://www.nysaes.cornell.edu/agfd/deibler02.html).
- Aug. 24-26:** Western Foodservice & Hospitality Expo. San Francisco, Calif. Call 203-840-5935 or e-mail [nradder@reedexpo.com](mailto:nradder@reedexpo.com).
- Aug. 25-30:** 48th International Congress of Meat Science and Technology (ICoMST). Rome, Italy. Call +39-0521-293913, e-mail [francesca.corona@newteam.it](mailto:francesca.corona@newteam.it), or visit [www.newteam.it/ICoMST2002](http://www.newteam.it/ICoMST2002).
- Aug. 28-31:** 4th European Symposium on Biochemical Engineering Science. Delft, The Netherlands. E-mail [esbes-4@tnw.tudelft.nl](mailto:esbes-4@tnw.tudelft.nl) or visit [www.esbes4.tnw.tudelft.nl](http://www.esbes4.tnw.tudelft.nl).
- Aug. 30-Sept.5:** China International Equipment Manufacturing Exposition. Liaoning, China. Fax+852-2866-1770 or e-mail [promotion@bitf.com.hk](mailto:promotion@bitf.com.hk).
- Sept. 11-15:** 2002 National Training Conference of the Nat'l. Society for Healthcare Foodservice Management (HFM). Boca Raton Resort, Boca Raton, Fla. Call NHM at 202-546-7236; fax 202-547-6348.
- Sept. 19-20:** 10th Annual Soy Symposium. Double Tree Hotel, Chicago, Ill. Call 888-772-8454, e-mail [soy@communiqueinc.com](mailto:soy@communiqueinc.com), or visit [www.talksoy.com](http://www.talksoy.com).

Source: <http://www.ift.org/meetings/courses>

## State and Regional-2002

- Sept. 17-20:** 3rd National Small Farm Conference. Albuquerque Convention Center. Call Edmund Gomez at 505-852-2668 or 1-800-583-3071, or visit [www.cahe.nmsu.edu/smallfarm/](http://www.cahe.nmsu.edu/smallfarm/)
- Sept. 6-22:** 2002 New Mexico State Fair and Rodeo. New Mexico State Fair, P.O. Box 8546, Albuquerque, NM 87198. Call 505-265-1791, fax 505-266-7784, e-mail [info@nmstatefair.com](mailto:info@nmstatefair.com) or visit [www.nmstatefair.com](http://www.nmstatefair.com).
- Oct. 2-6:** Southern New Mexico State Fair. Located 11 miles West of Las Cruces-off Interstate 10. For more information call 505-524-8602 or visit [www.snmstatefair.com](http://www.snmstatefair.com).

## Workshops & Short Courses-2002

- Aug. 12-15:** Extended Shelf Life. West Lafayette, Ind. Call 800-359-2968 or e-mail [jmw@purdue.edu](mailto:jmw@purdue.edu).
- Aug. 12-16:** Introduction to Food Science: Principles and Recent Advances. Rutgers University, N.J. Call 732-932-9271 ext. 630 or visit [www.cook.rutgers.edu/~ocpe](http://www.cook.rutgers.edu/~ocpe).
- Aug. 13-15:** Principles of High-Pressure Processing. Summit, Ill. Call 708-563-1853, e-mail [soppet@iit.edu](mailto:soppet@iit.edu), or visit [www.ncfst.iit.edu](http://www.ncfst.iit.edu).
- Aug. 20-21:** Advanced HACCP. Washington, D.C. Call 800-355-0983 or visit [www.fpi-food.org](http://www.fpi-food.org).
- Aug. 20-21:** Advanced HACCP Workshop. Seattle, Wash. Call 800-633-5137 or visit [www.aibonline.org](http://www.aibonline.org).
- Aug. 20-22:** Milk Pasteurization and Process Control School. Madison, Wis. Call 608-262-3046, fax 608-262-6872, or visit [www.wisc.edu/foodsci/](http://www.wisc.edu/foodsci/).
- Aug. 21-23:** HACCP for Juice Processors. Ontario, Calif. Call 800-355-0983 or visit [www.fpi-food.org](http://www.fpi-food.org).
- Aug. 22:** In-Depth Verification. Washington, D.C. Call 800-355-0983 or visit [www.fpi-food.org](http://www.fpi-food.org).
- Aug. 25-30:** Aquaculture Feed Preparation, Nutrition, and Feed Management. Texas A&M University, College Station, Tex. Call 979-845-2774, e-mail [mnriaz@tamu.edu](mailto:mnriaz@tamu.edu), or visit [www.tamu.edu/extrusion](http://www.tamu.edu/extrusion).
- Sept. 3-6:** 4th Dairy Science and Technology Basics for the Farmstead Cheesemaker. Cal Poly's Dairy Products Technology Center, San Luis Obispo, Calif. Call 805-756-6097 or visit [www.calpoly.edu/~dptc](http://www.calpoly.edu/~dptc).
- Sept. 10-12:** Fresh-Cut Products: Maintaining Quality and Safety. Davis, Calif. Call 800-752-0881 or visit [www.extension.ucdavis.edu/agriculture](http://www.extension.ucdavis.edu/agriculture).
- Sept. 10-12:** Spanish Basic HACCP. Miami, Fla. Call 800-355-0983 or visit [www.fpi-food.org](http://www.fpi-food.org).
- Sept. 10-13:** Food Plant Sanitation & HACCP Workshop. Louisville, Ky. Call 800-633-5137 or visit [www.aibonline.org](http://www.aibonline.org).
- Sept. 11-12:** HACCP for Juice Processors. Miami, Fla. Call 800-355-0983 or visit [www.fpi-food.org](http://www.fpi-food.org).

Source: <http://www.ift.org/meetings/courses>

## Better Process Control Schools come to New Mexico!

New Mexico State University and University of Arizona in cooperation with Northern New Mexico Community College will be hosting two Better Process Control School (BPCS) programs over the next year. BPCS is an approved course required by FDA and USDA for companies manufacturing acidified and canned foods.

The First BPCS program will be an abbreviated two and a half days program focusing on acidified processes and will be presented October 7-9th,

2002 on campus at Northern New Mexico Community College located in Española, New Mexico. A full BPCS program will be presented on the New Mexico State University campus in Las Cruces, New Mexico on February 11-14th, 2003. Registration fees will vary for each program ranging from \$275.00 to \$425.00 per person. For additional information on either program, please call Gloria Hernandez at 505-646-2198.

Better Process Control Schools  
*presented by*  
**The Food Processors Institute  
(FPI)**  
*in conjunction with*  
**FDA-approved Universities**

[www.fpi-food.org/courseschedule.html](http://www.fpi-food.org/courseschedule.html)

## Food Science at Northern New Mexico Community College

Northern New Mexico Community College offers an Associate of Science in Food Science. Although the program is relatively new to the Española area the program has already begun to impact food processing in the state.

The two-year program provides instruction in Food Science and Technology directly related to food microbiology, food analysis, commercial food processing as well as safety and sanitation in a processing facility. Training in basic science including chemistry, math, and physics and courses in verbal and written communication prepares students to continue their education at New Mexico State

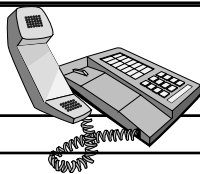
University's main campus, which offers a Bachelor of Science degree in Human Science. Students receiving the Associate degree will be well-qualified for careers as quality assurance technicians, laboratory technicians and processing supervisors in the food and agricultural resources industries.

For more information concerning this program at Northern New Mexico Community College please contact Cecelia Garcia-Whitehead, Food Science Director and Kitchen Manager at 505-753-8952.

Northern New Mexico Community College's Española campus is located 25 miles north of the state capitol, Santa Fe, and 25 miles south of the El Rito Campus. It is situated on a 30 plus acre site, which extends off of U.S. Highway 84/285 to the banks of the Rio Grande River.



## HELP LINES



### NMSU EXTENSION

**Nancy C. Flores**  
**Food Technology Specialist/  
Assistant Professor**  
New Mexico State University  
Las Cruces, New Mexico  
(505) 646-1179

**Martha Archuleta**  
**Foods and Nutrition Specialist/  
Assistant Professor**  
New Mexico State University  
Las Cruces, New Mexico  
(505) 646-3516

**Bill Gomez**  
Extension Economist  
New Mexico State University  
Las Cruces, New Mexico  
(505) 646-4543

### COUNTY/CITY AGENCIES

Albuquerque Environmental  
Health Department  
(505) 768-2642

### STATE AGENCIES

**New Mexico Department of  
Agriculture**  
Las Cruces, New Mexico  
(505) 646-3007

**New Mexico Department of  
Health**  
Scientific Lab Division  
Pauline Gutierrez  
Albuquerque, New Mexico  
(505) 841-2500

**New Mexico Environment  
Department Food Specialists.**  
Albuquerque, New Mexico  
(505) 841-9452

**District I-**  
Albuquerque (counties served:  
San Juan, McKinley, Sandoval,  
Cibola, Torrance and Bernalillo)

**District II-**  
**Anita Roy** (505) 425-6764  
Las Vegas (counties served:  
Santa Fe, Los Alamos, Taos, Rio  
Arriba, Union, San Miguel,  
Mora, Harding, Colfax and part  
of Guadalupe)

**District III-**  
**Kent Oldenburg** (505) 524-6300  
Las Cruces, (counties served:  
Catron, Grant, Sierra, Hidalgo  
Luna, Doña Ana, and Otero)

**District IV-**  
**Ronald Taylor** (505) 624-6046  
Roswell (counties served: Curry,  
DeBaca, Roosevelt, Chaves, Lea,  
Quay, Eddy and Lincoln)

**New Mexico Livestock Board**  
Meat Inspection Division  
Arthur P. Marquez  
Program Manager  
Albuquerque, New Mexico  
(505) 250-6115

### FEDERAL AGENCIES

**United States Department  
of Agriculture (USDA)**

**Animal and Plant Health  
Inspection Service**  
Plant Protection & Quarantine  
(505) 527-6985

**Meat and Poultry Hotline**  
1-800-535-4555

**Food and Drug  
Administration (FDA)**  
**Virlie Walker**  
Food and Drug Administration  
(FDA), Public Affairs Specialist  
Denver, Colorado  
303) 236-3018

**Marie Falcone**  
Small Business Office  
Southwest Region, FDA  
Dallas, Texas  
(214) 655-8100

**Barbara White**  
Consumer Safety Officer, FDA  
Albuquerque, New Mexico  
(505) 248-7393

**Seafood Hotline**  
1-800-FDA-4010

### ASSOCIATIONS

**Jean Gibson**  
New Mexico Food Producers and  
Processors Association (NMFPPA)  
(505) 856-5147

## Better Process Control Schools

**August 12-15, 2002:** Chapman University, One  
University Drive, Orange, CA 92866  
*Location:* Chapman University Campus  
*Contact:* Andres Vasconcellos  
Tel: 909-371-8995, Fax: 714-532-6048

**September 24-27, 2002:** The University of Ten-  
nessee, Dept. of Food Science & Technology, 2509  
River Road, Knoxville, TN 37996-4539  
*Location:* Holiday Inn Select—Cedar Bluff  
*Contact:* Dr. William C. Morris  
Tel: 865-974-7274, Fax: 865-974-7332

**October 1-4, 2002:** University of Nebraska/  
Kansas State University, 143 Food Industry Com-  
plex/P.O. Box 830919, Lincoln, NE 68583-0919  
*Location:* Super 8 Motel, Lincoln, NE  
*Contact:* Pauline Galloway  
Tel: 402-472-9751, Fax: 402-472-1693

**October 7-9, 2002:** University of Arizona/New  
Mexico State University, P.O. Box 30003, MSC 3AE  
Las Cruces, NM 88003-8003  
*Location:* Northern New Mexico Community  
College Campus  
*Contact:* Gloria Hernandez  
Tel: 505-646-2198, Fax: 505-646-1889

**October 7-10, 2002:** Texas A&M University,  
TAMU-2134, Rm. 225 Horticulture Dept, College  
Station, TX 77843-1234  
*Location:* Rudder Tower, Texas A&M University  
Campus  
*Contact:* Jacque Hand  
Tel: 979-845-7692, Fax: 979-845-8906

**October 29-November 1, 2002:** Michigan State  
University, 202 GM Trout Food Science and  
Human Nutrition Building, East Lansing, MI 48824  
*Location:* Dairy Food Complex, MSU Campus  
*Contact:* Linda Young  
Tel: 517-355-8474 ext. 114, Fax: 517-353-8963

**February 11-14, 2003:** University of Arizona/New  
Mexico State University, P.O. Box 30003, MSC  
3AE, Las Cruces, NM 88003-8003  
*Location:* New Mexico State University Campus,  
Las Cruces, NM  
*Contact:* Gloria Hernandez  
Tel: 505-646-2198, Fax: 505-  
646-1889

# BPCS

## Food Allergens and Labeling of Food Products

A food allergy, or hypersensitivity, is an abnormal response to a food triggered by the immune system. Some people may experience gas, bloating or another unpleasant reaction to something they have eaten, however, this is not an allergic response but an intolerance to the food eaten. Each year the Food and Drug Administration (FDA) receives reports of consumers who experienced adverse reactions following exposure to an allergenic substance in foods.

Only about 1.5 percent of adults and up to 6 percent of children younger than 3 years in the United States or about 4 million people, have a true food allergy, according to researchers who have examined the prevalence of food allergies.

It's critical for people who have food allergies to identify them and to avoid foods that cause allergic reactions. Some foods can cause severe illness and, in some cases, a life-threatening allergic reaction (anaphylaxis) that can constrict airways in the lungs, severely lower blood pressure, and cause suffocation by the swelling of the tongue or throat. Frequently, such reactions occur because the presence of the allergenic substances in the foods was not declared on the food label.

An estimated 150 Americans die each year from severe allergic reactions to food, says Hugh A. Sampson, M.D., director of the Elliot and Roslyn Jaffe Food Allergy Institute at Mount Sinai School of Medicine in New York City and a food allergy expert.

FDA believes there is scientific consensus that the following foods can cause serious allergic reactions in some individuals and account for more than 90% of all food allergies. These foods are Peanuts, Soybeans, Milk, Eggs, Fish, Crustacea, Tree nuts such as walnuts and pecans, Wheat, including flour. There are other foods that may cause an allergic response in certain individuals, the FDS can be contacted for guidance.

Manufacturers are responsible for ensuring that food is not adulterated or misbranded as a result of the presence of undeclared allergens. Unintentional addition during manufacturing, which may happen by cross contamination, is considered a labeling violation.

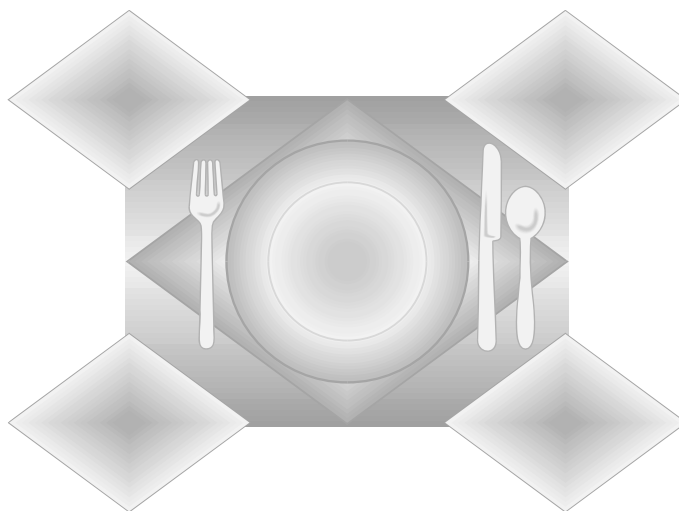
An allergen, not formulated in the product, can be identified as likely to occur in the food on the label due to the use of common equipment, production scheduling, rework practices, etc. However the manufacturer must identify and implement controls to prevent potential allergen cross-contact, e.g. dedicated equipment, separation, production scheduling, sanitation, proper rework usage (like into like).

Source:

Compliance Policy Guide

Compliance Policy Guidance for FDA Staff

Sec. 555.250 Statement of Policy for Labeling and Preventing Cross-contact of Common Food Allergens  
Issued: 04/19/2001



## Incubator Kitchens Grow in New Mexico

So what's an incubator kitchen?

Incubator kitchens are also known as certified kitchens. An incubator kitchen is a facility that follows all the state and federal regulations for a food-processing establishment and has small processors to develop their home recipes to commercial formulations without the initial capital outlay required for a processing facility.

A small processor using an incubator kitchen has the opportunity to develop a product for an appropriate market before a full scale up production through a larger facility.

Larger companies can also use incubator kitchen to test small batches of their products without disturbing their full-time production facility.

The largest facility in New Mexico is located in Taos as a part of the Taos County Economic Development Center, which provides assistance in business planning and product development. Another comprehensive facility, Rio Grande Community Development Corporation, will be located in the south valley of Albuquerque. As a part of the Food Science program at Northern New Mexico Community College in Española,

the Johnson Controls Business Park Commercial Kitchen also offers comprehensive services in food safety and food product development.

Incubator kitchens are now operational in Canjillón and Questa. These facilities provide a valuable service in each community and allow development of innovative specialty food products that make New Mexico a unique area for food processing.

## Improving Flour Tortilla Shelf-Life

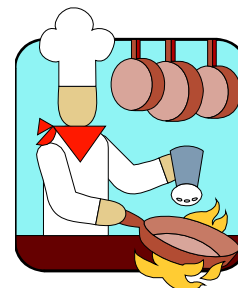
How can you improve the shelf-life and quality of your flour tortillas?

One way is to add a hydrocolloid or gum to the formulation. Gums such as alginate, carboxy methyl cellulose, carrageenan, guar and locust bean gums serve various functions including replacing fat, binding water and adding texture and flexibility to tortillas. Gums can be used separately at low concentrations (0.1-0.3%) or combined to get the desired effect. During processing, gums allow the dough to be more extendable and pliable and prevents contraction after rolling and cutting.

Once baked, gums stabilize the texture of tortillas by reducing the loss of moisture during refrigerated and frozen storage.

Selecting the correct gum or gum combination for your application can be tricky and it is best to consult a professional to make the appropriate changes to the formulation.

Reference: Gurkin S. Hydrocolloids—Ingredients that add flexibility to tortilla processing. *Cereal Foods World* 47(2): 41-43.



For Food Safety Information online:

[www.fda.gov/](http://www.fda.gov/)

<http://vm.cfsan.fda.gov/>

National Organic Program:

[www.ams.usda.gov/](http://www.ams.usda.gov/)



# New ideas?

## Address Change/Corrections? Suggestions/Comments? Subscription?

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Comments/Suggestions: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Add me to your list.

Drop me from your mailing list.

If you would like to contribute with articles for this newsletter or have any comments, suggestions, or address changes, please send all correspondence to:

**Ideas for Food Processors  
Extension Food Technology Program  
Box 30003, Dept. 3AE  
Las Cruces, NM 88003-0003**

**OR**

**Fax to:  
(505) 646-1889  
E-mail:  
naflores@nmsu.edu**

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