Our world is constantly changing, and we must continue to change with it. The events of September 11, 2001, reinforced the need to enhance the security of the United States food supply. Congress responded by passing the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (“the Bioterrorism Act”) (PL107-188), which President Bush signed into law on June 12, 2002. 

http://www.fda.gov/oc/bioterrorism/bioact.html

Plans for Developing Bioterrorism-Related Food Regulations

Four provisions of the Act require new food regulations. These four provisions are:

Section 303: Administrative detention: Authorizes the Secretary, through FDA, to order the detention of food if an officer or qualified employee finds credible evidence or information indicating an article presents a threat of serious adverse health consequences or death to human or animals. The Act requires the Secretary, through FDA, to issue final regulations to expedite court actions on perishable foods. No time frame is specified.

Section 305: The registration of food and animal feed facilities: Requires the owner, operator, or agent in charge of a domestic or foreign facility to register with the FDA no later than December 12, 2003. Facilities are defined as any factory, warehouse, or establishment, including importers. The Secretary, through FDA, is required to issue final regulations addressing the registration requirements no later than December 12, 2003; however, food facilities must register with FDA by this date even if FDA has not issued final regulations. The Bioterrorism Act exempts farms, restaurants, other retail food establishments, nonprofit food establishments in which food is prepared for or served directly to the consumer; and fishing vessels (except such vessels engaged in processing as defined in 21 CFR 123.3(k)) from the requirements to register. Also, foreign facilities subject to the registration requirements are limited to those that manufacture, process, pack, or hold food, only if food from such facility is exported to the United States without further processing or packaging outside the United States.
Section 306: The establishment and maintenance of records:
Requires the Secretary, through FDA, to issue final regulations by December 12, 2003, to establish requirements for the creation and maintenance of records needed to determine the immediate previous sources and the immediate subsequent recipients of food, (i.e., one up, one down). Such records are to allow FDA to address credible threat of serious adverse health consequences or death to humans or animals. Entities subject to these provisions are those that manufacture, process, pack, transport, distribute, receive, hold or import food. Farms and restaurants are exempt from these requirements.

Section 307: Prior notice of imported food shipments: Requires that prior notice of food shipments be given to FDA. The notice must include a description of the article, the manufacturer and shipper, the grower (if known), the country of origin, the country from which the article is shipped, and the anticipated port of entry. The Secretary, through FDA, must issue final regulations by December 12, 2003. While we fully expect regulations to be issued by this date, if such regulations are not issued, the statute still requires importers to provide no less than 8 hours and no more than 5 days notice to FDA until the regulation takes effect.

Unless exempted, these provisions apply to all types of food products regulated by FDA, including dietary supplements and animal feed.

The Bioterrorism Act establishes short deadlines for proposing and finalizing new regulations. Submit written comments to the Dockets Management Branch (HFA-305, Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852. Submit electronic comments to http://www.fda.gov/dockets/ecomments.

For a list of contacts for each regulation, see FDA’s stakeholder letter. http://www.cfsan.fda.gov/~dms/sec-ltr.html
More information can be obtained at the following website: http://fda.gov/oc/opacom/hottopics/bioterrorism.html

By Barbara White, FDA Inspector In Charge

A Message from the Editor

This issue has articles contributed by Barbara White, Food and Drug Administration (FDA) Inspector In Charge, and Kari Bachman, Kellogg Fellow. So the opportunity to contribute to this newsletter is always available!

These two articles point toward changes on the horizon. Over the next year, remodeling of a new laboratory space will allow for product development and sensory testing.

By next December, all food processing establishments, with some exceptions, must be registered with FDA. Registration may seem to be a hassle but will lead to more control of bioterrorist threat.

With the holidays upon us, hopefully we can take time to celebrate life with close family and friends.

Nancy C. Flores, Ph.D.
New Mexico State University
Extension Home Economics
P.O. Box 30003, Dept. 3AE
Ph: 505-646-1179/Fax: 505-646-1889
E-mail: naflores@nmsu.edu
Meeting & Conferences
2002 - 2003

Dec. 11-13:
International Conference on Innovations in Food Processing Technology and Engineering. Asian Institute of Technology, Thailand. E-mail jindal@ait.ac.th or visit http://pt.ait.ac.th/fpc.

Jan. 12-15, 2003:
Northwest Food Processors Association’s 2003 Northwest Food Manufacturing and Packaging Exposition. Seattle, Wash. Call 503-639-7676, e-mail nwfpa@nwfpa.org, or visit www.nwfpa.org.

Jan. 21-24:
17th International Forum Process Analytical Chemistry (IFPAC). Scottsdale/Phoenix, Ariz. Call 847-548-1800, e-mail scIENCE@ais.net, or visit www.ifpac.com.

Feb. 1-4:
International FoodTec India. Hyderabad, India. E-mail foodtecindia@kmi.kelnmessde or visit www.foodtecindia.com.

Mar. 2-5:
NMA MEATXPO. Las Vegas, Nev. Call 510-763-1533, e-mail staff@nmaonline.org, or visit www.nmaonline.org.

Mar. 4-6:
FHC Beijing 2003. Beijing, China. Call +852-2076-8202 or e-mail gmarucchi@montnet.com.

Mar. 5-7:
Food Ingredients Asia-China 2003. Shanghai. Call +31-346-559444, e-mail ahofman@cmpinformation.com, or visit www.fi-events.com.

Mar. 17-19:
AACC 2003 Pacific Rim Meeting. Honolulu. Hawaii. Call 651-994-3836, e-mail jmustful@scisoc.org, or visit www.aaccnet.org.

Mar. 18-20:
Food & Hotel Korea 2003. Seoul, Korea. Call +44 (0) 20-7862-2061 or e-mail pmarch@montnet.com.

Workshops & Short Courses
2002 - 2003

Dec. 3-5:
Basic HACCP. Cornell University, N.Y. Call 800-355-0983 or visit www.fpi-food.org.

Dec. 10-11:

Jan. 7-8:

Jan. 14-15:
HACCP for Processors of Apple Cider. Location TBA. Call 608-265-4801 or visit www.wisc.edu/foodsci/.

Jan. 15-18:
Ice Cream Makers Short Course. Madison, Wis. Call 608-263-2008 or visit www.wisc.edu/foodsci/.

Jan. 26-31:
Feeds and Pet Food Extrusion. College Station, Tex. Call 979-845-2774, fax 979-458-0019, e-mail mnriz@tamu.edu, or visit www.tamu.edu/extrusion.

Feb. 16-20:
Soyfoods II. College Station, Tex. Call 979-845-2749, email s-koseoglu@tamu.edu, or visit www.tamu.edu/separations.

Feb. 25-26:
Wisconsin Process Cheese Short Course. Madison, Wis. Call 608-263-2253 or visit www.wisc.edu/foodsci/.

Mar. 23-27:
Practical Membrane Technology. College Station, Tex. Call 979-845-2749, e-mail s-koseoglu@tamu.edu, or visit www.tamu.edu/separations.

Mar. 23-28:
Wisconsin Cheese Technology Short Course. Madison, Wis. Call 608-263-2015 or visit www.wisc.edu/foodsci/.

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

State and Regional-2003 (cont.)

Jan. 24-26:
4-H Senior Leadership Retreat. Will be held at the Wyndham Airport Hotel in Albuquerque, New Mexico. For more information contact Amy Zemler at the State 4-H Office at 505-646-5204.

Feb. 5:
New Mexico Chile Conference. 20th Annual New Mexico Chile Conference at the Las Cruces Hilton. For more information, contact Danise Coon with NMSU’s Chile Pepper Institute at 505-646-3028.

March 2-4:
Western Pecan Growers Association Conference. Held at the Las Cruces Hilton. Contact Esteban Herrera at 505-646-2911.
On-line Registration for Better Process Control School

New Mexico State University will be hosting a Better Process Control School for Managers and Supervisors of Food Processing Operations, February 11-14, 2003 in Las Cruces, New Mexico. The school is presented by: New Mexico State University, Northern New Mexico Community College and University of Arizona. The registration fees are $440 per person and $100 for students. Registration includes the textbook, instruction, and testing. Lodging and meals are not included. To register on-line go to: http://cahe.nmsu.edu/ces/home_ec/betterprocesscontrol.htm.

For more information contact: Nancy C. Flores, Extension Food Technology Specialist, Extension Home Economics, New Mexico State University. Phone: 505-646-1179, FAX: 505-646-1889 or by e-mail: naflores@nmsu.edu. You may also contact Gloria Hernandez at 505-646-2198 or by e-mail: glorhern@nmsu.edu.

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

www.fpi-food.org/ courseschedule.html

WHO MUST REGISTER

All commercial processors of low-acid and acidified foods located in the United States and all processors in other countries who export low-acid canned food or acidified food products into the United States must register their processing plants with FDA. Wholesalers, importers, distributors, brokers, etc. are not required to register and file processes. However, they must ensure that processing firms they represent comply with all registration and process filing requirements.

WHEN TO REGISTER

Low-acid canned food and acidified food processors in the United States must register with FDA not later than 10 day after first engaging in the manufacture, processing, or packing of acidified foods or of low-acid canned foods. Processors in other countries must register before offering any such products for entry into the United States. PROCESS FILING FORMS WILL BE RETURNED FROM UNREGISTERED FIRMS. However, registration and initial process filing may be done at the same time.

HOW TO REGISTER

To register with FDA, processors must complete and submit to FDA a Form FDA 2541 for each processing establishment location and Form FDA 2541a for each product.

MAIL THE REGISTRATION FORM AND ALL ATTACHED COPIES TO:

LACF Registration Coordinator (HFS-618)
Center for Food Safety and Applied Nutrition (FDA)
5100 Paint Branch Parkway
College Park, MD 20740-3835

Forms can be submitted to FDA via FAX or e-mail. In submitting forms via these methods, the transmitted forms must be clear and legible to be accepted. Also, forms submitted via e-mail should be submitted as file attachments along with any additional supporting information. All forms must be signed. Electronic signatures complying with 21 CFR 11 are acceptable. For more infor-

(Continued on page 7)
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-
(505) 841-9450
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-
(505) 524-6300
Las Cruces, (counties served: Catron, Grant, Sierra, Hidalgo Luna, Doña Ana, and Otero)

District IV-
(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

Food Science and Nutrition, 1 University Drive, Orange, CA 92866
Location: 213 Beckman Hall, Chapman University Campus, Orange, CA.
Contact: Andres Vasconcellos
Tel: 714-628-7255/909-371-8995
Fax: 714-532-6048

Dept. of Food Science & Technology, 100 Wiegand Hall, Corvallis, OR 97331-6602
Location: Salbasgeon Suites, 1730 N. W. 9th Street, Corvallis, OR. 97730
Contact: Debby Yacas
Tel: 800-823-2357, Fax: 541-737-1877
URL: http://www.orst.edu/dept/foodsci

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

February 18-21, 2003: University of California-Davis.
1333 Research Park Drive, Davis, CA 95616
Location: Freeborn Hall, University of California-Davis Campus
Contact: Sharon Munowitch
Tel: 530-757-8896, Fax: 530-757-8634
URL: http://www.extension.ucdavis.edu/agriculture

March 10-13, 2003: University of Minnesota.
1334 Eckles Ave., Dept. of Food Science and Nutrition, St. Paul, MN 55108
Location: Earle Brown Continuing Education Center, 1890 Buford Ave.
Contact: Nicole Hettwer
Tel: 612-624-4793, Fax: 612-625-5272
URL: http://fscn.che.umn.edu/documents&forms/shortcourses/shortcourses.htm
Many small food processors conduct marketing research to entice consumers to purchase their product for the first time. But fewer processors think ahead to the second and more important step: attracting repeat customers. According to Dr. Hildegard Heymann, sensory evaluation can help processors do just that.

Internationally recognized in her field, Heymann is a professor at the University of Missouri, where she designs sensory evaluation protocols for small processors. As she explained during her visit to NMSU in November, there are two types of sensory evaluation: analytical evaluation, which helps us understand the attributes of products; and consumer evaluation, which studies people’s preferences.

Extension Food Technologist, Nancy Flores coordinated Heymann’s whirlwind visit, which included a seminar for the public and a more in-depth lecture for Dr. Lisa McKee’s food science students. The visit was made possible by NMSU’s ADVANCE program, which is funded by the National Science Foundation to support tenure-track women faculty members.

Heymann peppered her presentations with fascinating examples drawn from her own work. In one instance, a company enlisted her to determine the shelf life of its tea bags. In another example, Heymann helped a processor study the noodle preferences of Asian Americans and how they differed from those of non-Asian Americans. Heymann also described several of her food safety studies, including one that looked at the attributes of pork cooked to different temperatures, and another that studied the palatability over time of broccoli refrigerated in different types of plastic packaging, which is now an industry standard for pre-cut, ready-to-eat produce.

Heymann’s visit couldn’t have been timed more perfectly. While on campus, she worked with Flores to fine-tune the design of the new sensory lab. Once completed, the facility will offer both analytical and consumer sensory evaluation services to small New Mexico food processors.

Flores can envision many applications of sensory evaluation to New Mexico products. For example, a salsa processor could determine if consumers notice any difference between two product formulations. If not, the company could not save money by producing the more expensive version. A processor of pecan brittle could determine the effects of different end point temperatures on product texture, and then analyze consumers’ preferences to arrive at an optimal formulation.

The key to successful sensory evaluation, says Heymann, is to identify one important question and then devise a protocol to study it. If you would like to discuss the application of sensory evaluation to your business, don’t hesitate to contact Flores at 505-646-1179.

By Kari Bachman

Professor Hildegard Heymann,
Food Scientist
University of Missouri-Columbia
The WHO, WHAT, WHEN, and HOW to Register Food Products with the FDA

(Continued from page 4)

information on electronic signatures see: www.access.gpo.gov/nara/cfr/waisidx_01/21cfr11_01.html

The firm or its authorized representative should maintain original hard copies, as these may be requested at a later date. FDA suggests that firms keep receipts of faxes or copies of e-mail transmissions with original forms. These transmitted forms will be viewed as official submissions. The FAX number for transmitting forms is 301-436-2669 or 301-436-2655 and the e-mail address is lacf@cfsan.fda.gov

Specific instructions for filing can be found on the FDA web site: www.cfsan.fda.gov/~comm/lacf-s2.html


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Relationship Between pH and Water Activity in Classifying Low-Acid or Acidified Foods

The following table illustrates the relationships between pH, water activity ($a_w$), and current low-acid and acidified regulations. The table indicates whether a product is a low-acid or an acidified food and therefore must meet the registration and process filing requirements of FDA. To use the table, determine the finished equilibrium pH and water activity ($a_w$) of the product as either low-acid or acidified. Regardless of pH, a food product with a water activity of 0.85 or below, would not be covered by the low-acid canned food regulations or the acidified food regulations. Thus, the firm would not be required to file scheduled process information for that product.

<table>
<thead>
<tr>
<th>pH</th>
<th>$a_w$</th>
<th>Low Acid*</th>
<th>Acidified**</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤4.6</td>
<td>≤0.85</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>≤4.6</td>
<td>&gt;0.85</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>&gt;4.6</td>
<td>≤0.85</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>&gt;4.6</td>
<td>&gt;0.85</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

>greater than

<less than or equal to

*A yes under this column defines the product as low-acid, subject to the requirements of 21 CFR 108.35 and 113, and it means that the establishment must register and file scheduled process information for that low-acid product.

**A yes under this column indicates that the product is an acidified food, subject to the requirements of 21 CFR 108.25 and 114, and if so, requiring the establishment to register and file scheduled process information for that acidified product.

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Note: This table does not apply to foods which are naturally or normally acid.


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For Food Safety Information online:

www.fda.gov/

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

National Organic Program:

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 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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