Public Health
Prevent. Promote. Protect.
Frederick County Health Department
Barbara A. Brookmyer, M.D., M.P.H. ▪ Health Officer

Special Processes & Processing Authorities

Foods made with a special process including acidified and low acid foods are required to submit results of the *process review* along with the application. A process review is a complete evaluation of how a food product is made, including all the steps of preparation, ingredients and packaging. Process reviews also determine whether a processed food is an acid food or acidified food (21CFR113.83 & 113.89). Acidified foods/Low-Acid Canned Foods require special training, and a scheduled process with the FDA.

Canning of food using water baths do not provide adequate heating to prevent microbial spoilage or to control *Clostridium botulinum* in low-acid food. The primary concern with canned food, is that further cooking is not required; therefore, it is critical that such foods be processed correctly to render them safe and do not harm the consumer.

The process review is conducted by a food *processing authority*. The process authority will review the process and write a process review letter determining the appropriate food safety guidelines, standards of identity, applicable regulations, and recommended processing steps. Food tests may include:

- water activity (a_w)—to determine the amount of "free" water in baked and other foods available to support bacterial growth;
- pH—to measure the acidity of pickled foods and salsa (most bacteria will not grow in acidic foods);
- Brix—to determine the concentration of dissolved sugars in jams, jellies, and syrups;
- titratable acidity—to measure the actual amount of acids in vinegars or mustards; and
- water phase salt—to determine the percentage of salt in smoked or dried seafood and fish.

The process review also aids in identifying critical control points in a HACCP plan, such as final fill temperature and finished equilibrium pH. These key factors are part of the *process schedule* developed by the process authority to ensure the delivery of a safe food product.

> **Note:** Regardless of processing method used, there will be critical factors that must be monitored for each batch of product made. Record keeping requirements apply.

All paperwork and a final product label must be submitted to the Frederick County Health Department Food Office for review and inclusion in the approved HACCP plan. Approval is required prior to manufacturing any food product which involves a specialized process.

A list of process authorities where you can have your product evaluated is attached.

Barry Glotfelty ▪ Director
Environmental Health Services ▪ 350 Montevue Lane ▪ Frederick, MD 21702
Phone: 301-600-1715 ▪ Fax: 301-600-3180 ▪ MD TTY: 1-800-735-2258

NYSAES
Cornell Food Venture Center
201 Sturtevant Hall
630 W. North Street
Geneva, NY 14456
https://cfvc.foodscience.cals.cornell.edu/

North Carolina State University
Dept. of Food, Bioprocessing, and Nutrition Sciences
Campus Box 7624
Raleigh, NC 27695
Contact: Arritt Fletcher, Ph.D., Food Science
Phone: 919-513-0176
E-mail: fletcher_arritt@ncsu.edu
http://www.ncsu.edu/foodscience/extension.htm

Rutgers University
Center for Advanced Food Technology
120 New England Ave.
Piscataway, NJ 08901
Contact: William Franke, Ph.D., Associate Director
Phone: 732-445-6130
E-mail: franke@aesop.rutgers.edu
http://caft.rutgers.edu

University of Nebraska-Lincoln
The Food Processing Center
143 Food Industry Complex
P.O. Box 830930
Lincoln, NE 68583-0930
Contact: Jill Gifford, Mgr., Food Entrepreneur Assist. Program
Phone: 402-472-2832
E-mail: jgifford1@unl.edu
http://fpc.unl.edu

New Mexico State University
College of Agriculture and Home Economics
Dept. of Extension Home Economics
P.O. Box 30003, MSC 3 AE
Las Cruces, NM 88003-8003
Contact: Nancy C. Flores, Ph.D., Food Tech. Ext. Specialist
Phone: 575-646-1179
E-mail: naflores@nmsu.edu
http://aces.nmsu.edu/ces/foodtech

University of Maine
Dept. of Food Science and Human Nutrition
109 Hitchner Hall
Orono, ME 04469-5735
Contact: Alfred A. Bushway, Ph.D., Food Science
Phone: 207-581-1629
E-mail: bushway@maine.edu
www.umaine.edu/foodinfo

University of Florida
Dept. of Agricultural & Biological Engineering
207 Frazier Rodgers Hall, P.O. Box 110570
Gainesville, FL 32611-0570
Contact: Arthur A. Teixeira, Ph.D., P.E., Food Engineering
Phone: 352-392-1864, ext. 207
E-mail: aateixeira@ifas.ufl.edu
www.abe.ufl.edu/people/directory/facultyprofiles/teixeira-arthur.shtml

University of Kentucky
Dept. of Animal and Food Sciences
203 W.P. Garrigus Building
Lexington, KY 40546-0215
Contact: Joe O'Leary, Ph.D., Associate Professor
Phone: 859-257-5882
E-mail: joleary@uky.edu
http://www.uky.edu/Ag/AnimalSciences/foodsci/foodscience.html

Washington State University
School of Food Science
P.O. Box 646376
Pullman, WA 99164-6376
Contact: Richard H. Dougherty, Ph.D., Food Science Specialist
Phone: 509-335-0972
E-mail: Dougherty@wsu.edu
www.foodprocessing.wsu.eud/evaluation.html

Kansas State University
Food Science Institute – Thermal Processing Lab
216D Call Hall
Manhattan, KS 66506
Contact: Fadi Aramouni, Ph.D., Prof./Extension Specialist
Phone: 785-532-1668
E-mail: aramouni@k-state.edu
http://www.foodsci.ksu.edu/p.aspx?tabid=622

University of Wisconsin – Madison
1605 Linden Dr., Room 203A
Madison, WI 53706
Contact: Barbara Ingham, Ph.D., Food Safety Specialist
Phone: 608-263-7383
E-mail: bhingham@wisc.edu
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