

**CONSUMER
BRANDS
ASSOCIATION
FOUNDATION**

**BPCS
PARTNERS
PROGRAM**



**CONSUMER
BRANDS
ASSOCIATION
FOUNDATION**

About Better Process Control School

FDA regulations 21 CFR 108, 113, and 114 require that each processor of low-acid or acidified foods operate with a certified supervisor on hand at all times during processing. These regulations are designed to prevent public health problems in low-acid and acidified packaged foods.

To prepare industry practitioners and help companies meet federal regulations, the Consumer Brands Association Foundation and its partner institutions offer the Better Process Control School (BPCS).

In addition to meeting FDA regulations, the BPCS course also meets USDA FSIS regulations 9 CFR 431 for thermally processed meat and poultry products.

The BPCS subject areas include thermal processing system operations, microbiological food safety, equipment operations, acidification, and container closure evaluation for low acid and acidified canned foods.

Who should attend?

The BPCS program is an important and valuable educational opportunity for operators, mid-level managers, and employees of food processing plants that utilize thermal processing.

The course is an excellent platform to improve thermal processing knowledge for food safety and quality assurance personnel, individuals who work with rigid and flexible packaged food products, academia, auditors, and government inspectors.

Training Options

- **Option 1:** Attend an in-person training at one of our partner institutions.
-
- **Option 2:** Participate in a virtual training a virtual training via one of our partner institutions.
-
- **Option 3:** The University of Tennessee offers an asynchronous BPCS program.

At the completion of coursework and passing of the required examinations, participants are awarded a certificate of completion.

For any inquiries, please contact us at foundation@consumerbrandsassociation.org

Course Material

Canned Foods: Principles of Thermal Process Control, Acidification, and Container Closure Evaluation is the FDA approved text for the instruction of Better Process Control School. The book may be purchased online. The text is also available in Spanish. As of 2021, the books is also available via Amazon Kindle.

Virtual Course Dates

Laguna Training Consultancy

March 19-29, 2022 -- BPCS

August 23 - September 2 -- BPCS

Register at lagunafirst.moodlecloud.com

Michigan State University

March 6-15, 2023 -- Contact Renae Silver,

Project/Event Coordinator, latoskir@msu.edu, 517-355-4156

Virtual Course Dates

University of Nebraska Lincoln

December 5-6, 2022 -- ACIDIFIED COURSE, Contact
Dr. Jayne Stratton, jstratton1@unl.edu, 402-472-2829
or Jill Gifford, jgifford1@unl.edu, 402-472-2819

In- Person Course Dates

Cornell University

May 17-20, 2022 -- Acidified and Low-Acid BPCS.

[Register Here.](#)

Chapman University

January 17-20, 2023 -- Retort Workshop and January 17-18, 2023 -- Acidified or Aseptic Workshop,

Chapman University. [Register Here.](#)

Pusan National University, South Korea

February 7-11, 2022 -- BPCS. Visit bpcs.pusan.ac.kr to learn more.

UC Davis

February 14-17, 2023 -- BPCS. [Register Here.](#)

University of Nebraska Lincoln

May 2-3, 2022 -- Acidified Course.

October 4-6, 2022 -- Full BPCS.

Contact Dr. Jayne Stratton, jstratton1@unl.edu, 402-472-2829 or Jill Gifford, jgifford1@unl.edu, 402-472-2819

Laguna Training Consulting, Phillipines

May 24-27, 2022 -- BPCS. Visit www.lagunafirst.org.

October 18-21, 2022 -- BPCS. Visit www.lagunafirst.org.

Course Content

Canned Foods: Principles of Thermal Process Control, Acidification, and Container Closure Evaluation, 9th Edition is organized into 15 chapters.

- 1. Introduction**
- 2. Microbiology of Thermally Processed Foods**
- 3. Sanitation for Retorts and Atmospheric Cookers**
- 4. Cleaning for Continuous Systems**
- 5. Double Seamed Metal and Plastic Containers**
- 6. Closures for Glass and Twist-Off Plastic Containers**
- 7. Flexible and Semirigid Containers**
- 8. Introduction to Thermal Processing**
- 9. Batch Saturated Steam Retorts: Still and Agitating**
- 10. Still Retorts Processing with Overpressure**
- 11. Continuous Rotary Retorts**
- 12. Retorts with Overpressure: Still and Agitating**
- 13. Hydrostatic Retorts**
- 14. Aseptic Processing and Packaging Systems**
- 15. Mild Thermal Processes**

	Requirements		
Chapters	Retort Certificate	Aseptic Certificate	Acidified Certificate
1. Introduction	Required	Required	Required
2. Microbiology of Thermally Processed Foods	Required	Required	Required
3. Sanitation for Retorts and Atmospheric Cookers	Required	-	At least one of these is required
4. Sanitation for Continuous Systems	-	Required	At least one of these is required
5. Closures for Double Seamed Metal and Plastic Containers	At least one of these is required	At least one of these is required	At least one of these is required
6. Closures for Glass and Twist-Off Plastic Containers			
7. Flexible and Semirigid Containers			
8. Introduction to Thermal Processing	Required	Required	Required
9. Retort Equipment and Operation	Required	-	-
10. Batch Saturated Steam Retorts: Still and Agitating			
11. Continuous Rotary Retorts	At least one of these is required	-	-
12. Still and Agitating Retorts That Process with Overpressure			
13. Hydrostatic Retorts			
14. Aseptic Processing and Packaging Systems	-	Required	-
15. Mild Thermal Processes	-	-	Required

Partner Institutions

Campden BRI (United Kingdom)

Location: Station Road, Chipping, Campden, Gloucestershire, GL55 6LD, UK

Website: www.campdenbri.co.uk/training/better-process-control-school

Course Contact: Jo Rathkey, Training Manager
jo.rathkey@campdenbri.co.uk, +44 (0)1386 842104

Chapman University

Location: 1 University Drive Orange, CA 92866

Website: www.chapman.edu/scst/graduate/ms-food-science/better-process-control-school.aspx

Course Contact: Dr. Anuradha Prakash,
prakash@chapman.edu, 714-744-7826

Cornell University

Offers Training in Spanish

Location: 630 W. North St, 216 Jordan Hall, Cornell AgriTech, Geneva, NY 14456

Website: foodscience.cals.cornell.edu/extension/events

Course Contact: Dr. Olga Padilla-Zakour
oip1@cornell.edu, 315-787-2255

Registration Contact: Gemma Osborne,
gro2@cornell.edu, 315-787-2248

Clemson University

Location: 6305 W Main Street, Lexington, SC 29072

Website: Better Process Control School - August 22-25, 2022 (touchnet.net)

Course Contact: Dr. Scott Whiteside
wwhtsd@clemson.edu, 864-423-0727

Registration Contact: Frances Seel,
flongin@clemson.edu

ESI-Euroservizi Impresa SRL-Partner ITA Group

Location: 11 Via Giorgio Ribotta 00144 Roma, Italy

Website: www.itagroupltd.com

Course Contact: Claudio Gallottini

Email: info@euroservizimpresa.it

Food Processing Specialists - Retort Supervisor and Process Control School (Australia and New Zealand)

Location: Australia: 19 Patamba Street, Koorringal, NSW, 2650 Australia

Website: foodprocessingspecialists.com.au/training

Course Contact: Mike Moffat,
mike@foodprocessingspecialists.com, +61 (0)477 043 483

Global Services SM&R Training & Consulting

Offers Training in English and Spanish. Also Conducts Onsite Company-Specific Training

Location(s): 11109 Lakeland Circle, Fort Myers, FL 33913, USA Latin America, United Kingdom and Spain.

Website: www.smracademy.com

Course Contact: Paul Seminario, General Manager, paul.seminario@smracademy.com, 786-605-0531

Institute for Food Safety and Health (IFSH)

Location: 6502 S. Archer Rd. Bedford Park, IL 60501

Website: <https://www.ifsh.iit.edu/events/virtual-better-process-control-school-bpcs-begins-march-22nd>

Course Contact: Dr. Akhila Vasan, avasan@iit.edu, 708-563-7539

Registration Contact: Renee McBrien, mcbrienr@iit.edu
708-563-8271

Institute of Food Technology (Instituto de Tecnologia de Alimentos - Itai/Campinas/Brazil)

Offers Training in Portuguese

Location: Av. Brasil, 2880 - Jardim Chapadao, 13.087-722 - Campina - SP - Brazil

Website: <https://ital.agricultura.sp.gov.br/>

Course Contact: Maria Isabel Berto, miberto@ital.sp.gov.br, +55 11 3743-1835/ +55 11 3743-1834

JBT

Offers Training in Dutch, Italian, Thai, Spanish,

Locations: Madera, CA, U.S.A, Bangkok, Thailand, Puebla, Mexico and Parma, Italy; Also offers onsite or virtual company-specific training.

Website: www.jbtc.com/en/north-america/foodtech/customer-care/training/technical-school/better-process-control-school

Course Contact: Karen Brown, karen.brown@jbtc.com, 559-661-3345

Klaratech BVBA

Offers Training in English, Spanish, and Italian

Location: Schoolstraat 80E, 9140 Temse, Belgium

Website: www.klaratech.com/training

Course Contact: Clara Rovedo, Ph.D.,
crovedo@klaratech.com, +32 495124995

King Mongkut's University of Technology Thonburi (Thailand)

Offers Training in Thai

Location: 126 Pracha Utit Rd. Bangmod, Thungkru,
Bangkok, 10140 Thailand

Website: <https://foodeng.kmutt.ac.th/>

Course Contact: Dr. Tipaporn Yoovidhya
tipaporn.yoo@kmutt.ac.th, +66 0470 9241

Registration Contact: Ruchira Maneekot,
ruchira.man@kmutt.ac.th, +66 0470 9244-5

Laguna Training Consultancy Services (Philippines)

Location: Pila-Calumpang Road, Barangay Masico,
Pila, Laguna, Philippines 4010

Website: www.lagunafirst.org

Course Contact: Jaime F. Tiongson
jftiongson@lagunafirst.org, +63 9178147918

Louisiana State University

Location: 297E Knapp Hall, Baton Rouge, LA 70808

Website:

www.lsuagcenter.com/portals/our_offices/departments/food-science/extension_outreach/incubator/seminars

Course Contact: Charles Boeneke

CBoeneke@agcenter.lsu.edu, 225-578-4383

Registration Contact: Celika Murphy,

murphy@agcenter.lsu.edu, 225-578-4475

McGill University

Location: 21111 Lakeshore Rd, Ste Anne de Bellevue, QC, H9X3V9

Website: Hosahalli S. Ramaswamy | Food Science and Agricultural Chemistry - McGill University

Course Contact: Hosahili Ramaswamy,

khosahili.ramaswamy@mcgill.ca, 514-398-7919

Michigan State University

Location: 446 West Circle Drive Room 11 East
Lansing, MI 48824

Website: <https://www.canr.msu.edu/food-safety-regulations-and-courses/>

Course Contact: ANR Event Services,
events@anr.msu.edu
517-353-3175

New Mexico State University

Offers Training in Spanish

Location: 940 College Drive Gerald Thomas Hall 312
Las Cruces, NM 88003

Website: <https://aces.nmsu.edu/ces/foodtech/better-process-control-s.html>

Course Contact: Dr. Nancy Flores,
naflores@nmsu.edu

Nong Lam University (Vietnam)

Offers Training in Vietnamese

Location: Linh Trung Ward, Ho Chi Minh, Vietnam

Course Contact: Dr. Tuyen Kha
khachatuyen@hcmuaf.edu.vn, +84 (0) 909.367.094

Penn State University

Location: Erikson Food Science Building, University Park, PA 16802

Website: <https://foodscience.psu.edu/workshops/better-process-control>

Course Contact: Luke LaBorde, lfl5@psu.edu

Registration Contact: csco@psu.edu

Purdue University

Location: 745 Agriculture Mall Drive West Lafayette, IN 47907

Course Contact: Dharmendra Mishra, mishradh@purdue.edu, 765-494-7953

Registration Contact: Amanda Johnson, ohn2145@purdue.edu, 765-494-0874

Pusan National University (South Korea)

Offers Training in Korean

Location: 63 Beon-gil 2 Geumjeonggu, Busan, 46241

Website: bpcs.pusan.ac.kr

Course Contact: Dr. Jeehyun Lee, jeehyunlee@pusan.ac.kr, +82 51-510-2784

Rutgers University

Location: Cook Campus, New Brunswick, NJ 08901

Website:

http://www.cpe.rutgers.edu/programs/food_safety.html

Course Contact: Suzanne Hills, suzanne.hills@rutgers.edu, 848-932-7234

Silgan Containers

Location: 1190 Corporate Center Dr. Oconomowoc, WI 53066

Course Contact: Sean Coleman,
scoleman@silgancontainers.com, 262-569-5268

Southeast Asia Food and Agricultural Science and Technology (SEAFST) Center IPB University

Offers courses in Bahasa Indonesia

Location: Jl. Ulin no. 1, Kampus IPB Darmaga, Bogor 16680, West Java, Indonesia

Course Contact: Dr. Pupso Edi Giriwono
pegiriwono@apps.ipb.ac.id, +62 2518629903

The Ohio State University

Offers Training in Spanish

Location: 2015 Fyffe Rd. Columbus OH, 43210

Website: www.foodindustries.osu.edu

Course Contact: Dr. Valente B. Alvarez
alvarez.23@osu.edu

Registration Contact: Heather Bell,
bell.1534@osu.edu

University of California-Davis

Location: UC Davis Food Science and Technology,
Davis, CA 95616

Website:

[http://ucfoodsafety.ucdavis.edu/Better Process Control Schools/](http://ucfoodsafety.ucdavis.edu/Better_Process_Control_Schools/)

Course Contact: Dr. Erin DiCaprio,
eldicaprio@ucdavis.edu

Registration Contact: Zann Gates,
zgates@ucdavis.edu, 530-752-5901

University of Georgia

Offers Online Training

Location: 240 Food Science Building, 100 Cedar St.
Athens, GA 30602

Website: <https://extension.uga.edu/topic-areas/food-health/food-science-manufacturing.html>

Course Contact: Dr. Anand Mohan,
anandmohan@uga.edu, 706-542-6673

Registration Contact: Asha Manzy, EFS@uga.edu

University of Illinois at Urbana-Champaign

Location: Dept. of Food Science and Human
Nutrition, 105 Agricultural Bioprocess Laboratory,
1302 W. Pennsylvania Ave, Urbana, IL 61801

Course Contact: Dr. Pratik Banerjee
pratik@illinois.edu, 217-300-0260.

University of Kentucky

Location: University of Kentucky, Animal and Food Sciences, 211 W,P Garrigus Bldg. Lexington, KY 40546-0215

Course Contact: Kandice Williams, FSIC Instructor, kandice.williams@uky.edu

University of Nebraska-Lincoln

Location: Food Innovation Center 1901 N 21st St. Lincoln, NE 68588

Course Contact: Dr. Jayne Stratton, jstratton1@unl.edu, 402-472-2829

Registration Contact: Jill Gifford, jgifford1@unl.edu 402-472-2819

University of Tennessee

Offers Online Training

Location: 2510 River Drive Knoxville, TN 37996

Website: <https://foodscience.tennessee.edu/better-process-control-school-course/>

Course Contact: Nathan Miller, nmille12@utk.edu 865-974-7287

Registration Contact: Connie Bowman, cbowma14@utk.edu, 865-974-7331

University of Wyoming

Location: 1000 E. University Ave, Laramie, WY,
82071

Course Contact: Gleyln Bledsoe, gleyn@live.com,
206-612-6980