

V(A). Planned Program (Summary)

Program # 11

1. Name of the Planned Program

Food Safety

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources	50%			
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	50%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Actual Paid Professional	6.5	0.0	0.0	0.0
Actual Volunteer	100.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
279649	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
279649	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

For 2011, Wisconsin Cooperative Extension reports efforts of colleagues and partners providing timely research-based education and assistance to improve the safety of the food supply through training and supporting small acidified food processors and small meat processors. While face-to-face programs are a hallmark of Cooperative Extension, educators reach Wisconsin residents round-the-clock through web-based materials and print publications. Online resources keep consumers up-to date on food preservation, safety and storage. An easy-to-use web site dedicated to providing the latest information on food preservation and other food safety topics can be found at: <http://www.foodsafety.wisc.edu>

Training and supporting small food processors: Helping small food processors is an excellent way to increase the availability of safe, wholesome products made in Wisconsin. Committed to providing small food processors ongoing training and support in the critical area of food safety, Wisconsin Cooperative Extension partnered with the Department of Agriculture, Trade and Consumer Protection to develop a training program for these small processors. Since 2009, 333 small business owners and entrepreneurs have completed Wisconsin Acidified Canned Foods Program trainings as they prepare to develop and market their products. Cooperative Extension training and support has also allowed these businesses to develop new products and has provided economic growth for local economies. Along with needed trainings, a web site now helps small food processors navigate the course of "recipe to reality," providing convenient information on licensing and product testing, sample process forms, and contact information for process approval: http://www.foodsafety.wisc.edu/ssp_acidified_canned_food.html

Master Meat Crafter: Working within a small margin of error, meat processors must thoroughly understand what pathogens must be controlled and how most effectively to control them. Food safety ranks as a top priority for all meat and poultry processors tasked with the daily challenge of producing safe, high-quality nutritious foods. Initiated and organized by UW-Madison extension meat specialist Jeff Sindelar in partnership with the Wisconsin Department of Agriculture, Trade and Consumer Protection, a unique new meat processing certification program began at the University of Wisconsin-Madison Meat Science Laboratory in 2010. The Master Meat Crafter Training Program addresses food safety education and practical application throughout the program's 2.5 years. Having been exposed to food safety principles ranging from new antimicrobials and their application to how thermal processing design improves process lethality, the first 18 participants gained a deep and thorough understanding of food safety from micro lab to meat plant. As a result, they take home a thorough and comprehensive understanding of pathogenic bacteria as well as tools to improve their own food safety programs: <http://www.uwex.edu/ces/animalscience/meats/index.cfm>

2. Brief description of the target audience

The statewide Wisconsin FIRST (Food Industry Research, Service and Training) Team, Family Living Programs colleagues and trained Master Food Preserver volunteers provide research-based education and assistance to individuals, families, 4-H youth, school-age children and preschoolers, fresh market vegetable and fruit growers and sellers, small food processors and entrepreneurs, crop, dairy and livestock producers, artisan cheesemakers, small meat processors and others preserving food safely and keeping the food supply safe and wholesome.

Wisconsin Cooperative Extension campus and county faculty and trained volunteer advisers address animal care and carcass quality issues through species-specific programs. Twenty county extension educators and state specialists are Beef Quality Assurance trainers, two Swine Team members are certified Transport Quality Assurance trainers and all four are Pork Quality Assurance Plus Advisers who

also help train certified 4-H youth and volunteer leaders in Meat Animal Quality Assurance required for participation in county and state fair swine, beef and sheep projects and auctions. Around 4,500 4-H youth are certified in Meat Animal Quality Assurance each year.

Of 2,003 adults reached by the Wisconsin FIRST Food Industry Research, Service and Training Team through direct teaching methods in 2011, 92.2% were white, 2.9% were Asian American, 2.4% were African American, 0% were American Indian, and 2.4% were of other identity; 57.6% were female and 42.4% male. Of these, 2.8% (56) identified as Latino/a, who may be of any race. Community partners and trained volunteers made additional teaching contacts. To help meet the growing need for food safety education, 100 trained Master Food Preserver volunteers pledged to commit an average of 20 volunteer hours per year for 3 years -- a total of 6,000 hours -- in service to their communities as part of the Volunteer Master Food Preserver program.

In 2011, 8,687 adults who participated in nutrition education food safety lessons learned more about preparing, cooking and storing food safely. Almost 20,000 educational contacts were made with school-age youth in lessons focused on food safety topics. Almost 3,000 preschool children learned more about safe food handling and hand washing. Demographics for the total low-income youth and adults reached by direct teaching methods in 2011, 81% were white, 7% were African American, 5% were Asian American, 2% were American Indian, and 5% were of other identity; 52% were female and 48% were male. Of these, 13% identified as Latino/a, who may be of any race. Community partners and trained volunteers made additional teaching contacts.

3. How was eXtension used?

Wisconsin Cooperative Extension campus and county faculty and staff participate in various communities of practice, engaging with colleagues around the country to improve the educational content of research-based programs and assistance delivered to residents across the state. Extension colleagues are connected by email ListServ, blogs and online newsletters, and shared resources such as teleconferences and webinars, eXtension Communities of Practice, and the national Extension Disaster Education Network (EDEN) to quickly address critical and emerging issues.

V(E). Planned Program (Outputs)

1. Standard output measures

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	10690	0	27500	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2011

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2011	Extension	Research	Total
Actual	0	13	13

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- {No Data Entered}

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Improve the safety of the food supply: Acidified Canned Foods Program
2	Improve the safety of the food supply: Master Meat Crafter Training Program

Outcome #1

1. Outcome Measures

Improve the safety of the food supply: Acidified Canned Foods Program

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	333

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Wisconsin has a vibrant "buy local" economy and small food processors are benefiting from the economic momentum. In some cases, farmers wishing to add value to their crops are delving into the sale of canned pickles, salsas and other family-favorite products. As a group, canned foods such as pickles, salsas and tomato-based products are referred to as acidified foods. Processed incorrectly, acidified canned foods are potentially hazardous—they present the risk of botulism poisoning. As a result, the federal government requires processors of acidified canned foods to receive training before they are issued a processing license. For small food processors, finding training that fits their needs often poses a challenge.

What has been done

Helping small food processors is an excellent way to increase the availability of safe, wholesome products made in Wisconsin. Committed to providing small food processors ongoing training and support in the critical area of food safety, Wisconsin Cooperative Extension partnered with the Department of Agriculture, Trade and Consumer Protection to develop a training program for these small processors. In 2011, 133 new businesses were trained under the Acidified Canned Foods Program and extension provided support and ongoing one-on-one assistance to 86 businesses—assisting with development and approval of scheduled processes, filing documents with FDA, and providing ongoing technical support. Extension also trained 64 employees under the FDA's Better Process Control School to supervise critical functions in the Upper Midwest's vibrant canning industries.

Results

Training and supporting small food processors: Since 2009, 333 small business owners and entrepreneurs have completed Wisconsin Acidified Canned Foods Program trainings as they prepare to develop and market their products. Their top acidified canned foods processed for sale are salsas and tomato sauces, fruit or vegetable pickles or relishes. Wisconsin Cooperative

Extension training and support has also allowed these businesses to develop new products and has provided economic growth for local economies. Survey responses were used to redesign the Wisconsin Acidified Canned Foods Program to better support these businesses. Along with needed trainings, a web site now helps small food processors navigate the course of "recipe to reality," providing convenient information on licensing and product testing, sample process forms, and contact information for process approval:

http://www.foodsafety.wisc.edu/ssp_acidified_canned_food.html

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #2

1. Outcome Measures

Improve the safety of the food supply: Master Meat Crafter Training Program

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Wisconsin has a strong and vibrant meat industry that is important for meeting consumer needs. Food safety ranks as a top priority for all meat and poultry establishments, with productivity and profit often ranking lower. Without a clear understanding of pathogenic bacteria and a progressive approach to preventing bacterial presence or growth, meat processors may face a negative food safety situation such as a foodborne illness outbreak. Working within a small margin of error, meat processors must thoroughly understand what pathogens must be controlled and how most effectively to control them. From small, family businesses to very large multi-plant facilities, all are tasked with the daily challenge of producing safe, high-quality nutritious foods.

What has been done

Initiated and organized by UW-Madison extension meat specialist Jeff Sindelar in partnership with the Wisconsin Department of Agriculture, Trade and Consumer Protection, a unique new meat processing certification program began at the University of Wisconsin-Madison Meat Science Laboratory in 2010. The Master Meat Crafter Training Program addresses food safety education and practical application throughout the program's 2.5 years. While food safety is part of five of the program's short courses, the sixth titled Food Safety and Meat Microbiology School focuses on all facets of food safety from industry experts, some of whom have been involved with outbreaks through their companies. Coupled with hands-on microbiology laboratories, participants gain a deep and thorough understanding of food safety from micro lab to meat plant. As a result, they take home a thorough and comprehensive understanding of pathogenic bacteria as well as tools to improve their own food safety programs:

<http://www.uwex.edu/ces/animalscience/meats/index.cfm>

Results

Master Meat Crafter: As a result of completing the intensive meat processing certification program they began in 2010, graduating participants will be awarded status as a Master Meat Crafter. Of the first 18 participants, half are the next generation in a family business--6 are taking the training to take over the family business, and 3 are in the early phases of starting a business. Having been exposed to food safety principles ranging from new antimicrobials and their application to how thermal processing design improves process lethality, participants have improved their understanding, making them a proactive rather than reactive business owner. Each is tasked with producing each and every pound of product safely so no one becomes ill. Thus, the food safety elements of the Master Meat Crafter Training Program are critical to providing participants the knowledge and proper tools to process 100% safe food all the time. Program success can be measured by how many people never become ill due to a food safety slip.

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

V(I). Planned Program (Evaluation Studies)

Evaluation Results

No response

Key Items of Evaluation

No response