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[Return to Current Issue](#)

Adapting Extension Food Safety Programming for Vegetable Growers to Accommodate Differences in Ethnicity, Farming Scale, and Other Individual Factors

Terence R. Kline

Former Adjunct Assistant Professor
The Ohio State University
The Ohio Agricultural Research and Development Center
Wooster, Ohio
docs2kids2@aol.com

Harold Kneen

Meigs County Extension Director
The Ohio State University Extension
Pomeroy, Ohio
kneen.1@osu.edu

Eric Barrett

Mahoning County Extension Educator
The Ohio State University Extension
Marietta, Ohio
barrett.90@osu.edu

Andy Kleinschmidt

Former Assistant Professor
Ohio State University Extension
Van Wert, Ohio
andy.kleinschmidt@pioneer.com

Doug Doohan

Professor, Horticulture and Crop Science
The Ohio State University
The Ohio Agricultural Research and Development Center
Wooster, Ohio
doohan.1@osu.edu

Abstract: Differences in vegetable production methods utilized by American growers create distinct challenges for Extension personnel providing food safety training to producer groups. A program employing computers and projectors will not be accepted by an Amish group that does not accept modern technology. We have developed an outreach program that covers all pertinent food safety information in a manner that is acceptable to each of our target audiences. Utilizing audience targeted programming, small group of food safety professionals will be able to reach a myriad of different types of producers and help them provide the consumer with a wholesome product.

Introduction

Food safety is an issue that is always in the news, with foodborne outbreaks occurring with alarming frequency. Consumer confidence can be the single determining factor deciding the viability of American vegetable producers. Differences in production styles and cultures create distinct challenges for Extension personnel providing food safety training to producer groups. A program designed for Consumer-Supported Agriculture may not be suitable for a producer growing hundreds of acres of vegetables and employing migrant labor. A program employing computers and projectors will not be accepted by an Amish group that does not embrace modern technology. We have developed an outreach program that covers all pertinent food safety information in a manner that is acceptable to each of our target audiences.

Responding to the Community's Needs

In the winter of 2005 a local vegetable auction, selling millions of dollars of produce each year, contacted the Wayne County, Ohio Extension office to request food safety training for their predominately Amish growers. The auction management, many of whom were Amish Bishops, recognized the threat to the livelihood of their vegetable growers posed by the increasing number of foodborne disease outbreaks. They wished to be proactive and use their mandatory winter meeting to provide food safety and Good Agricultural Practices (GAPs) training to their growers.

Wayne County, Ohio is home to the Ohio State University's Ohio Agricultural Research and Development Center (OARDC). The county Extension office collaborated with OARDC faculty members to develop a science-based program to educate the auction's growers on personal hygiene, sanitation, bacterial contaminants, the proper use of manure and composting. All of the individuals involved in developing the program had worked with Amish farmers previously.

A 3-hour program was presented to the growers group utilizing a series of stations. At each station a different topic was presented. Small groups rotated through the stations until they had received all of the instruction. Course evaluation was performed using pre and post testing of all participants showing an average 34% improvement over ten learning objectives following the program.

The true measure of any instruction is in its application. During the program it was suggested that manure not be spread on vegetable fields any later than 4 months prior to planting. Many Amish farmers prefer to deal with Extension through Amish intermediaries, such as their Bishops. The Bishops in the auction management were queried the following spring to determine if the program's instructions were being implemented by the growers during the current planting season. It was determined that many of the Amish farmers had decided not to use any manure on their fields. The program's intended message had been improper use of manure can lead to contamination of vegetables. The message that many of the Amish farmers apparently received was that the use of manure can lead to the contamination of vegetables. Like many farmers, the Amish farmers at this program saw Extension as a valuable information resource (Awa 1978; Gentry-Van Laanen 1995; Ekanem, 2006). Unfortunately they misunderstood the information they

received. We realized the need to ensure that the information we provide is presented in a format that is culturally sensitive to each specific audience.

Target-Specific Programming

Ohio has a diverse group of vegetable growers, from large operations utilizing modern equipment to small Amish farms cultivated by horses. The food safety and GAPs message relayed to each group should be consistent, but the method of communication needs to be tailored to the audience. Programming that takes the culture and ethos of the audience into account is more effective than programs that provide the same information in a generic format (Bairstow & Driscoll, 2002; Hobbs, 2004; Ingram, 2004). Many of Ohio's vegetable growers are Amish, and their culture is reflected in their production methods (The Young Center for Anabaptist and Pietist Studies at Elizabethtown College 2009)

A pool of PowerPoint slides and handouts covering the produce GAPs was developed that educators could utilize when planning a program tailored to the specific culture and needs of their particular audience. Several different types of GAPS programs are delivered from this resource. The basic program is 15 minutes in duration and simply introduces the audience to the concept of GAPs. There are 1- and 2- hour programs that explore the subject in more detail. Full-day workshops for large commercial producer groups that will be the subject of third party audits are also presented. These workshops include didactic lecture as well as hands-on instruction and a mock audit.

The large Amish population in our area presented unique challenges in program development. Their religious beliefs do not let them participate in highly technical programs, so they do not embrace PowerPoint presentations. A set of six 48" x 36" color posters focusing on different areas of Good Agricultural Practices was created for Amish presentations. Each poster contained GAPs information presented in a non-technical format acceptable to the audience. These posters could be mailed to educators in other parts of the state to use when they had a program to present. A set of visual aids designed to illustrate key points in the training was also created. Since the change in format of our Amish presentations, we have had very positive feedback from the managers of the produce auction. While Amish farmers are not approached individually for feedback out of respect for their personal beliefs, many do approach us on an individual basis to express their appreciation and enthusiasm for the program.

Program Evolution and Outcome

Our fourth year of programming saw growers from many different backgrounds who had completed the basic instruction progressing through the more advanced classes. This led to increased emphasis being placed on the full day-workshops. Much of the focus of these programs was drawn directly from feedback forms filled out by program participants. The programs are constantly evaluated in an effort to determine how to make them more effective for specific audiences. The outcome has been programming tailored to the specific group being addressed rather than a one-size-fits-all approach.

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