Barnstable County

REGIONAL GOVERNMENT OF CAPE COD
CAPE COD COOPERATIVE EXTENSION
KIMBERLY CONCRA, MS, LDN
NUTRITION & FOOD SAFETY SPECIALIST
Food Safety Outreach and Opportunities in the Community
Cooperative Extension: Educational arm of Barnstable County, working with County and local health departments.

Nutrition education: SNAP-ed programming to schools, Sr. Centers & PreK, food pantries and others.

Food Safety Education: Consumer phone calls, volunteer food safety, integrated info into presentations and SNAP-ed materials.

Food Business and Agriculture: Buy Fresh Buy Local CapeCod, MDAR, Community Development workshops

Continually learning!
Objectives

To summarize where different sectors of the community learn about food safety.

To understand where the gaps are and where misinformation comes from.

To discover sources of information and how they might integrate into both consumer and food establishment communities.

To have a goal of forming consistent and constant messaging— we can work together.
Where do we learn about Food Safety?

- Friends & Family
- Federal initiatives
- Media: Recalls, News bulletins
- Training: certification
Confusion of food date label with food safety- implications for food waste

"sell by"  
‘best by”  
"use by"  
"best before"

Don’t necessarily mean the food is bad!
In the US, there are more than 50 types of date labels for food products but the only one regulated is really for infant formula. In the EU, UK, Australia and New Zealand there are only a few.

Confusion of food date label with food safety- implications for food waste

Debasmita Patra ¹, Shuyi Feng ², Jeff W. Howard ¹
Dang, my 250 million year old salt has expired

Employees must wash hands. Customers can roll the dice.
Are Television Cooking Shows Modeling Recommended Food Safety Practices for Consumers?

NANCY COHEN, PHD, RD, LDN, FAND
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ASSISTANT VP, UMSO

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BARNSTABLE COUNTY/CAPE COD COOPERATIVE EXTENSION

Cohen and Brennan Olson. JNEB 2016; 48:730-734
Methods

Pilot episode viewed by raters and tested for Inter-Rater Reliability: Fleiss Kappa of 0.47
Changes made to 3 questions

19 question survey (adapted from MA Food Establishment Inspection Report)
Hygienic practices (9 items)
Use of utensils and gloves (3 items)
Protection from contamination (5 items)
Time and Temperature control (1 item)
Food Safety mentioned (1 item)

39 episodes rated; 5 raters, food safety educators MPFSE
If multiple practices seen, but was OUT once, rated as OUT

Frequency of shows that were IN OUT NA/NO
Results

Questions OUT of compliance > 60% of the time:

- Clean clothing, 70%
- Touching body during preparation and washing hands, 83%
- Barriers used for RTE food, 85%
- Food safety practices mentioned, 88%
- Hair restrained, 88%
- Handling of raw food, 91%
- Fruits and vegetables washed, 91%
- Hand washing, 93%
- Times and temperatures shown or stated, 93%
- Wiping cloths used and stored properly, 93%
- Gloves worn, 100%
Conclusion

There is little focus on food safety during most cooking shows.

Most episodes showed practices that were out of compliance with current recommendations.

Celebrity chefs have the opportunity to reach millions of viewers and teach good food safety practices.

There are many steps that shows can use to improve modeling of food safety for viewers.

Rating cooking shows can be a useful tool in training and education.
Where are the Gaps to food safety education?

- Public perception
- No ‘home economics’
- Old science
- Food Code - For everyone?
- Staff?
The EatFit Curriculum was adapted for online delivery to 855 middle school students in 6 lessons.

One significant outcome was a 51% improvement in food safety practices as determined from pre/post program surveys completed by 284 students.

Imagine if we still had Home Economics classes! This could be one missing link in consumer food safety knowledge.

https://www.jneb.org/article/S1499-4046(22)00295-0/fulltext#relatedArticles
Resources to address Consumer Knowledge of Food Safety
How to use consumer food safety resources for education

➢ Post on website
➢ Twitter
➢ Facebook
➢ Printed in office
➢ Fairs
➢ Senior Centers
➢ Public Safety Events
➢ Holiday Bazaars
Consumers as food producers-

Do it safely...

Serving You

The National Center for Home Food Preservation is your source for current research-based recommendations for most methods of home food preservation. The Center was established with funding from the Cooperative State Research, Education and Extension Service, U.S. Department of Agriculture (CSREES-USDA) to address food safety concerns for those who practice and teach home food preservation and processing methods. Read More
Ready to Distribute materials On Food Safety....

For Consumer AND Food Service

At Food Safety classes, Volunteer led venues, Health departments, Websites, Inspections...
Provide at Trainings

Great for Volunteers

Prevent the potluck FBI

https://www.mafoodsaftyeducation.info/sites/default/files/food_safety_food_workers_eng%205.6.21.pdf
Food Safety for Food Workers

This series of mini-lessons is designed for food service managers to train workers using the Food Safety for Food Workers pamphlet and accompanying posters. Lessons are short and include tips for discussing and demonstrating each of the four basic food safety concepts.

- Control Time & Temperature - poster
- Control Time & Temperature - teaching tips (PDF)
- How to Sanitize by Hand with Chemical Sanitizers - poster
- How to Sanitize by Hand with Chemical Sanitizers - teaching tips
- Keep Fists Out of Your Kitchen - poster
- Deeply Wash Out - teaching tips
- Employees Must Wash Hands - poster
- Wash Hands - teaching tips (PDF)
- Food Safety for Food Workers - guide
Food Slicer

Food Slicer Video

Purpose
Cut slices of the same thickness.

Equipment Safety Precautions

Video Transcript - Slicer (PDF)

Translations
- Chinese - Slicer (PDF)
- English - Slicer (PDF)
- Greek - Slicer (PDF)
- Polish - Slicer (PDF)
- Portuguese - Slicer (PDF)
- Russian - Slicer (PDF)
- Spanish - Slicer (PDF)
- Vietnamese - Slicer (PDF)

The fact sheets and videos are general guidelines for equipment safety, operation and sanitation. Be sure to follow specific recommendations and procedures for equipment provided by the manufacturer and your school or workplace.

https://www.mafoodsafetyeducation.info/workplace/feast/review/slicer
Newly Designed Massachusetts Food Processors Resource Guide

*pdf download at UMass CAFÉ Entrepreneur page

https://www.mass.gov/forms/the-massachusetts-food-processors-resource-guide

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Chapter One: Guide Background

Chapter 2: Performing Market/Consumer Research

Chapter 3: Scaling Up, Where to Make Your Product, Licensing

Chapter 4: Calculating Costs & Setting a Price

Chapter 5: Food Safety Basics

Chapter 6: Product Labeling, Regulations, & Label Design & Packaging

Chapter 7: Developing a Business Plan, Registering a Business, Insurance

Chapter 8: Marketing, Promotions, & Social Media

Chapter 9: Sales, Brokers, Distribution, & Trade Shows

Chapter 10: Resources

Chapter 11: Resources for Women, BIPOC, & LGBTQ+ Entrepreneurs

Chapter 12: Credits
UMass Center for Agriculture, Food and the Environment.... C.A.F.E.

*Consumer

*Entrepreneur

*Farmer

A Key to Success: Collaboration

- Countywide and/or statewide campaigns

- Free info at Cooperative Extension and Federal websites.

- What is the message to delivered? Let’s create it and distribute it!

- Work together- who do you interact with in other towns, councils, etc. who might be able to divide the workload.

- Work with the FPP, UMass Food Science, MDAR and other available resources.
2016 Experiment

- 1 Announced Inspection and 1 Unannounced Inspection
- 24-hour notice prior to Announced Inspections
- Education during inspection when violation occurs or recommendation can be made
- Goals:
  - Address effectiveness of food service inspections
  - Improve foodborne illness factors
  - Improve inspector/management relationships
<table>
<thead>
<tr>
<th>Announced</th>
<th>Unannounced</th>
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<tbody>
<tr>
<td>126 Total Violations</td>
<td>171 Total Violations</td>
</tr>
<tr>
<td>50 Critical Violations</td>
<td>115 Critical Violations</td>
</tr>
<tr>
<td>76 Non-Critical Violations</td>
<td>56 Non-Critical Violations</td>
</tr>
</tbody>
</table>
Lessons Learned

Split reaction from managers and chefs:

Some do not see the point and prefer surprise inspections. Others appreciate the announced inspections to take the burden off by staffing an extra person when an inspector will be present to walk-through, answer questions and immediately respond to violations.

Restaurants (not all) need more incentive to change behavior
Lessons Learned

Although more violations were recorded during unannounced inspections. The types of violations were consistent:

| Employee cell phones on food prep areas | Screen doors/windows needing repairs or missing | General cleaning necessary |

Consistent inspecting is important!!

Educational materials are welcomed and appreciated
**HOLIDAY PREPARATIONS**

Potluck Safety Tips

Cape Cod Cooperative Extension

Kim Concra
kconcra@co.harvard.ma.us

Everyone loves a party! But it’s flu and cold season, so remember to use extra care when making food to share at a potluck. Don’t cook if you are sick and please use these tips to make sure we don’t pass along unwanted germs. Proper food handling is key to keeping food safe from foodborne pathogens, too. Keep food out of the temperature danger zone (41-135°F) where these pathogens grow quickly.

1. Wash your hands: With warm, soapy water for at least 20 seconds. (Not sure how long that is? Sing the “Happy birthday” song to yourself twice.)

2. Remember the basics: Clean, separate, cook, chill. Clean the counter top before you cook. Keep raw meat, poultry and seafood separate from other ingredients. Use a food thermometer to ensure food is cooked thoroughly. Refrigerate perishable food right away, don’t leave it on the counter to cool. Put food into shallow pans in the refrigerator to cool quickly. Refrigerated food should be cooked to at least 105°F within 2 hours, then held at 135°F or higher.

3. Hot food Hot, Cold food Cold: Keep foods hot at 135°F or hotter and cold food cold with ice packs in a cooler for transporting so they stay 40°F or colder.

4. Beware the板肠 spoons: If you use food as you’re cooking, use a separate board for each task. Plus, use a separate spoon for serving and a fresh spoon for serving. Make sure each dish has a serving utensil or tongs.

5. Put away food after two hours: Bacteria that cause food poisoning can multiply rapidly at room temperature. After two hours, store leftovers in shallow containers in the refrigerator.

**EXPENSIVE ACCIDENTS**

Nursing home costs can run into thousands of dollars, not to mention the health impact on family members.

**KEEP NOROVIRUS OUT**

Keep Norovirus out of your kitchen by:
- Washing your hands frequently
- Washing shared eating utensils
- Reheating food safely (thawing and cooking food from 40°F or above)
- Cleaning and disinfecting surfaces

Serve Shellfish Safely

Sierra mariscos con cuidado

Cape Cod Cooperative Extension

Shellfish must remain cold

Mariscos deben mantenerse frescos

Serve shellfish after handling

Sierra mariscos despues de manipulación

Keep shellfish away from other food

Mantenga mariscos lejos de alimentos

Necesaria manipulación de mariscos y mermeladas

www.whoi.edu/newsref
Proper Cooling of Food

The FDA has identified improper cooling as one of the major causes of foodborne illness. Bacterial growth slows in cold temperatures and is mostly dormant at 0°F. Cooking and reheating food to 162°F kills most bacteria. Foods kept in the temperature danger zone (41°F-135°F) encourages bacteria to grow quickly and can make people sick.

Dense foods like stew or chilli and large amounts of food generally take longer to cool.

**Time to cool chilli from 135°F to 41°F**

<table>
<thead>
<tr>
<th>Method of Cooling</th>
<th>Time to Cool Chilli (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 gallon container, stack packed into waist-deep</td>
<td>50-70</td>
</tr>
<tr>
<td>2 x 10 x 12” pan</td>
<td>130</td>
</tr>
<tr>
<td>2 x 10 x 12” pan, stack packed</td>
<td>70-90</td>
</tr>
<tr>
<td>2 x 5 x 12” pan, stack packed with 2 inch stick</td>
<td>90-120</td>
</tr>
<tr>
<td>2 x 5 x 12” pan, stack packed with 1 inch stick</td>
<td>120-180</td>
</tr>
</tbody>
</table>

**Tips for Cooling Food Fast**

- Split large amounts of food into smaller batches.
- Roasts can be cut into smaller pieces.
- Use shallow pans to reduce the depth of the food. Use stainless steel food containers instead of plastic.
- Slide pans into a rack or place on a slotted shelf to allow air flow around the pan.
- Use ice water baths for cooling. Stir the food often to cool quickly.
- Use cold paddles. If available, use a “blitz chill” unit.
- Modify the recipe so that water can be added at the end in the form of ice made from drinking water.

**Runners**

- Do not place hot food next to any other food.
- Food should go into refrigeration immediately. Do not let out to “cool-off.”
- Do not cover food until it is fully cooled.

**Reheat It To**

Hold It At

135°F or Above

Refrigerate It At

41°F or Below

Freeze It

Danger Zone is also room temperature.

In 4 hours at room temperature, 1 bacteria multiplies to over 6,000,000!

This material was compiled by the Cape Cod Cooperative Extension in conjunction with Oregon Health Department.

Updated 12/11/18
Resources:

FDA: Everyday Food Safety Resources for Health Educators | FDA
CDC: Infographics | Communications | Food Safety | CDC
MPFSE: Home | Massachusetts Partnership for Food Safety Education (mafoodsafetyeducation.info)
Fight BacNational Food Safety Education Month | Partnership for Food Safety Education (fightbac.org)
Food Preservation: National Center for Home Food Preservation (uga.edu)
Food Processors Guide(MA):
https://www.mass.gov/forms/the-massachusetts-food-processors-resource-guide
Cape Cod Cooperative Extension: Nutrition & Food Safety
www.capecodextension.org
Thank You... For All You Do

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