Welcome! A couple of notes before we get started...

- Your feedback is valuable to us! Please fill out the survey provided at the conclusion of the presentation.

- During the last 10 minutes of this presentation Sondra and Janie will address your questions! Please submit them in the chat box and they will answer as many questions as time allows. If you have additional questions please direct them to healthy_food_choices_in_schools@cornell.edu

If you wish to receive email updates from Healthy Food Choices in Schools please enter your information here: http://www.extension.org/pages/71031/join-the-mailing-list
HANDS ON
Real-World Lessons for Middle School Classrooms

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QR Code
Hands On: Real World Lessons for Middle School Classrooms

• Comprehensive food safety curriculum designed to *model* best practices in adolescent instruction for
  – The classroom
  – 4-H
Curriculum Design

• Week long instructional unit (5-7 class periods)

• Includes comprehensive lesson plans for math, science, social studies, language arts, and vocabulary

• Traditional and authentic assessments are included

• Intended for use by an entire grade level team, but can stand alone in individual disciplines
Curriculum Design

• Introduce high energy, hands on activities with real life applications into the classroom
• Provide opportunities for critical thinking and problem solving
• Deliver food safety education to middle school students that is directly tied to state standards for core subjects
• Lay the foundation for safe food handling skills
Since 2006, over 42,000 students across 12 states have used the Hands On resources and materials.
Why Food Safety?

An estimated 1 in 6 Americans (48 million) become sick from foodborne illness each year (CDC, 2011) at a cost of $15.5 billion a year (USDA, 2015).

We know that:

• Many adolescents prepare snacks and meals in the home
• A number of food service workers are teenagers
• Adolescence is a critical time for establishing life-long, healthy behaviors

If we can model best practices with a topic like food safety, we can do it with ANY unit topic
Why is Teacher Training Important?

• Raises background knowledge on topic and increases content knowledge
• Models effective instructional strategies
• Teaches appropriate handling and disposal of microbiological agents
How do we introduce this unit to students?
We ask them to: **Consider this...**

- On a scale of 1-10, how clean do you think your hands are right now? (1=dirtiest 10=cleanest).

- Make a list of 10 things you have touched since you last washed your hands.
• Introduce bacteria and examine the growth and control of microorganisms

• Practice methods of inquiry
  • Variables, experimental design, collection and analysis of data

• Model and practice appropriate lab safety skills
Bacterial Growth Lab

• Science activity designed to
  • Engage students in scientific research
  • Explore concepts of bacteria, growth conditions, & hand washing
  • Develop observation & prediction skills
RAFT

- Role, Audience, Format, Topic
- Activity designed to:
  - Synthesize new content with background knowledge
  - Requires creative thinking
  - Differentiated for various learning levels, styles, and interests

R - A Helpful Bacteria
A - Teenagers
F - Poem or Rap Song
T - “Can I Help U?”

RAFT Video
• Explore the concept of scale

• Bacterial growth as a model of exponential growth

• Simple statistical analysis of data
Understanding Scale

• Math activity designed to
  • Provide a hands-on learning experience to make the abstract concept of scale more concrete
  • Allow students to draw connections between their scale models and the magnification of microscope objectives (4x, 10x, and 40x)
• Practice accurate measurement
• Read non-fiction source materials for detail and comprehension

• Practice verbal and written communication skills

• Write expository texts
Finding Food Safety Mistakes

• Designed to allow students to apply their newly acquired knowledge

• Students read a scenario and identify critical food safety mistakes

• Students predict possible outcomes of those mistakes
Writing Press Releases

• Allows students to practice expository, process writing
• Specific activities to teach revision of one’s own work
  – Rainbow Writing
• Provides opportunities to write to audiences outside the classroom
• Practice informational research skills

• Identify primary and secondary sources, credible sources, etc.

• Bring outbreaks of food borne illness and their consequences into a geo-spatial context
What’s the Cause?

• Social Studies Activity designed to
  • Apply knowledge of pathogens, their symptoms, and onset time to identify causative agents in Food borne Illness scenarios
  • Evaluate students’ own understanding of the risks and preventative measures of food borne illnesses.
Extra! Extra!

• Students will research one of three topics:
  – Native Americans
  – Immigrants from Europe
  – Westward Expansion

• They will use this information to create time-period newspapers describing the role disease played with these populations
Supplies
Participation

• Middle School Classrooms
  – Free professional development training for teachers
  – All curriculum materials and supplies (petri plates, gloves, modeling clay, etc.) provided
  – *Currently we are able to offer materials to middle school teachers at no cost through grant funding as long as funds last.*

• 4-H Curriculum
  – Nationally peer-reviewed
  – After school, special programs, project groups
  – *4-H Kits for 20 students are available at $150.00*
Thank you for attending!
We hope you found the presentation informative and useful!

Your feedback is important to us! Please help us evaluate our efforts by filling out this survey:
https://vte.co1.qualtrics.com/SE/?SID=SV_bmk9T8eSq0eQeyN

A recording of this webinar will be available shortly at:
https://learn.extension.org/events/2305

To learn more about Healthy Food Choices in Schools please contact:
healthy_food_choices_in_schools@cornell.edu