Self-Serve Salad Bars and Food Safety
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The conclusions in this presentation are those of the author and do not necessarily represent the views of the Centers for Disease Control and Prevention.

Outline
- Introduction
- Salad bars – benefits and risks
- Guidelines governing salad bar safety

U.S. Fruit and Vegetable Consumption
Prevalence by Daily Frequency Among Adults and Adolescents

National Fruit & Vegetable Alliance

www.nfva.org
Let’s Move Salad Bars to Schools

Launch with First Lady
November 22, 2010
Miami, FL

www.saladbars2schools.org

Salad Bar Settings

• Grocery Stores
• Restaurants
• Institutional Food Service
  – Hospitals
  – Universities
  – Schools
  – Camps
  – Military, etc.

Can also be choice bars, fruit and vegetable bars, potato bars, salsa bars and more!

Salad Bar Benefits

• Choice
• Convenience, ready-to-eat
• Attractive presentation of (usually) healthful foods
• Portion control
• Ability to serve customers with special dietary needs (with care)

Behavioral Economics
or “Nudges”

BRIAN WANSINK, DAVID R. JUST
and JOE MCKENDRY (Cornell Univ.)

Salad Bar Evaluation (Schools)

- Students who choose the salad bar eat more servings of F&V than students who choose the hot bar (Riverside USD Farmers’ Market Salad Bar; http://www.center-trt.org/)
- Increase in frequency of fruits and vegetables consumed during the day (change almost all due to increase at lunch)
- Intake of energy, cholesterol, saturated fat, total fat significantly lower in children after introduction of salad bar compared to before (Los Angeles USD; Slusser et al, 2007 Pub. Health. Nut. 10(12):1490)

Salad Bar Evaluation (Worksite)

- Increasing variety of offerings and reducing prices increases fruit and salad purchases 3-fold during the intervention period in a worksite cafeteria (Jeffrey et al., 1994 Preventive Med., 23:788)

Poll 1

My current company/institution utilizes self-serve salad bars in food service
- Yes/no

Salad Bar Risks

- Unintentional contamination
  - No kill step for fresh produce
  - Variety of offerings
  - Self-serve, cross-contamination
- Deliberate contamination
  - Open service
- Food allergies
Salad Bar Guidance

- FDA Food Code
  - States and counties may use their own food code
- HACCP & ServSafe
- NSF/ANSI Food Equipment Standard
- USDA/FNS Memos (for schools)

Preventing Contamination in Salad Bars

- Supply Chain
  - Quality at purchase, receiving/storage
- Food safety in bidding process, traceability
- Equipment and Shielding
- Training/instructions
- Monitoring
- Verification and Record Keeping

Poll 2

Concerns about food safety have limited implementation of self-serve salad bars in my setting
- Yes/no
**Equipment and Shielding**

Fig. 15 – Self Service Food Shield (5.35.7)

Basic principle:

“A food shield shall provide a barrier between the mouth of a customer and unpackaged food to minimize the potential of contamination of the food by a customer.”

**Food Shields for Use in Elementary Schools (5.35.8)**

“Food shields designed and manufactured for use in elementary schools and other similar applications shall have full front panel(s) complying with 5.35.12 or be designated for use with wrapped or packaged serving portions.”

**Salad Bar Units**

The Vollrath Company, LLC CAMBRO Manufacturing Company

No endorsement of specific products is intended

**Equipment Considerations**

- **Height**
  - K-12: Standard Height (36¼”) and Children’s and ADA Height (29¼”) models
- **Refrigeration**
  - Hold food to 41° or below
  - Cambro Buffet Camchiller maintains cold food at safe temperatures for over 3 hours (no ice)
- **Utensils & accessories**
  - Thermometers (correct style), salad dressing vessels (closed vs. open), tongs (size), pans (BPA-free)
Training/Instructions

• Employees
  – SOPs for produce handling, personal hygiene, manufacturer’s instructions for food bar equipment
  – All exposed food behind sneeze guards, appropriate clean and sanitized utensil for each container
  – Replace existing containers of food and utensils with new at replenishment
  – Avoid using spray chemicals to clean food bars when in use

Training/Instructions II

• Customers
  – Provide hand sanitizer before service
  – Ensure customers use clean plate when returning to the bar
  – Provide assistance to those who are unable to properly use utensils
  – Can use signage as prompts

Consumer Prompts

- Please exchange your plate for a clean plate before returning to Salad Bar.

Monitoring

• Attendant dedicated to salad bar
• Monitor food containers to ensure utensils are stored on a clean and sanitized surface or in containers with handles out of food
• Oversee customers to ensure:
  – Food touched with clean utensils only and not returned to container after handling
  – No coughing, spitting, sneezing on food
  – No foreign objects in food
  – Plates used only once
Verification and Record Keeping

- Monitor and record temperatures of food
  - Make sure below temperature before placing on bar
- Potentially contaminated food removed and discarded
- Plan for use of leftovers at end of service period

Sample SOPs

- [http://sop.nfsmi.org/HACCPBasedSOPs.php](http://sop.nfsmi.org/HACCPBasedSOPs.php)
- [http://www.thelunchbox.org/technical-tools/training](http://www.thelunchbox.org/technical-tools/training)

Bottom Line for Inspection*

- Priorities of local inspectors:
  - Product is held at proper temperature
  - General cleanliness of salad bar
  - Proper utensils available for handling
    - Correct size, good condition
  - Clean plate for 2nd serving
  - ANSI certification of equipment
  - For electrical units, safety for power supply

*Subjective interpretation from discussions

Questions?

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