

© Ecolab 2019. All rights reserved.

DO NOT COPY, CITE, OR DISTRIBUTE WITHOUT PERMISSION OF ECOLAB

BEYOND FOOD SAFETY

Mandy Sedlak, RS/REHS
Food Safety and Public Health Manager,
EcoSure a Division of Ecolab



PRESENTATION OUTCOMES

Review of the **Global** burden of foodborne illness and top CDC and FDA foodborne illness risk factors

Opportunity, benefits and outcomes for food service operators during today's trends and environment.

Knowledge of trends and their impact on **Food Safety** and **Food Operations**

Best practices to improve guest experience & protect your guests, the community and your Brand

TODAY'S PRESENTER



THE GLOBAL BURDEN OF FOODBORNE DISEASE IS SUBSTANTIAL

Every year, foodborne diseases cause:

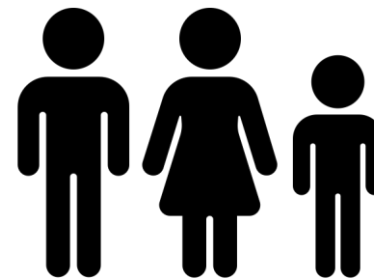
almost
1 in 10
people to fall ill

33 million
healthy life years lost

Foodborne diseases can be deadly, especially in children <5

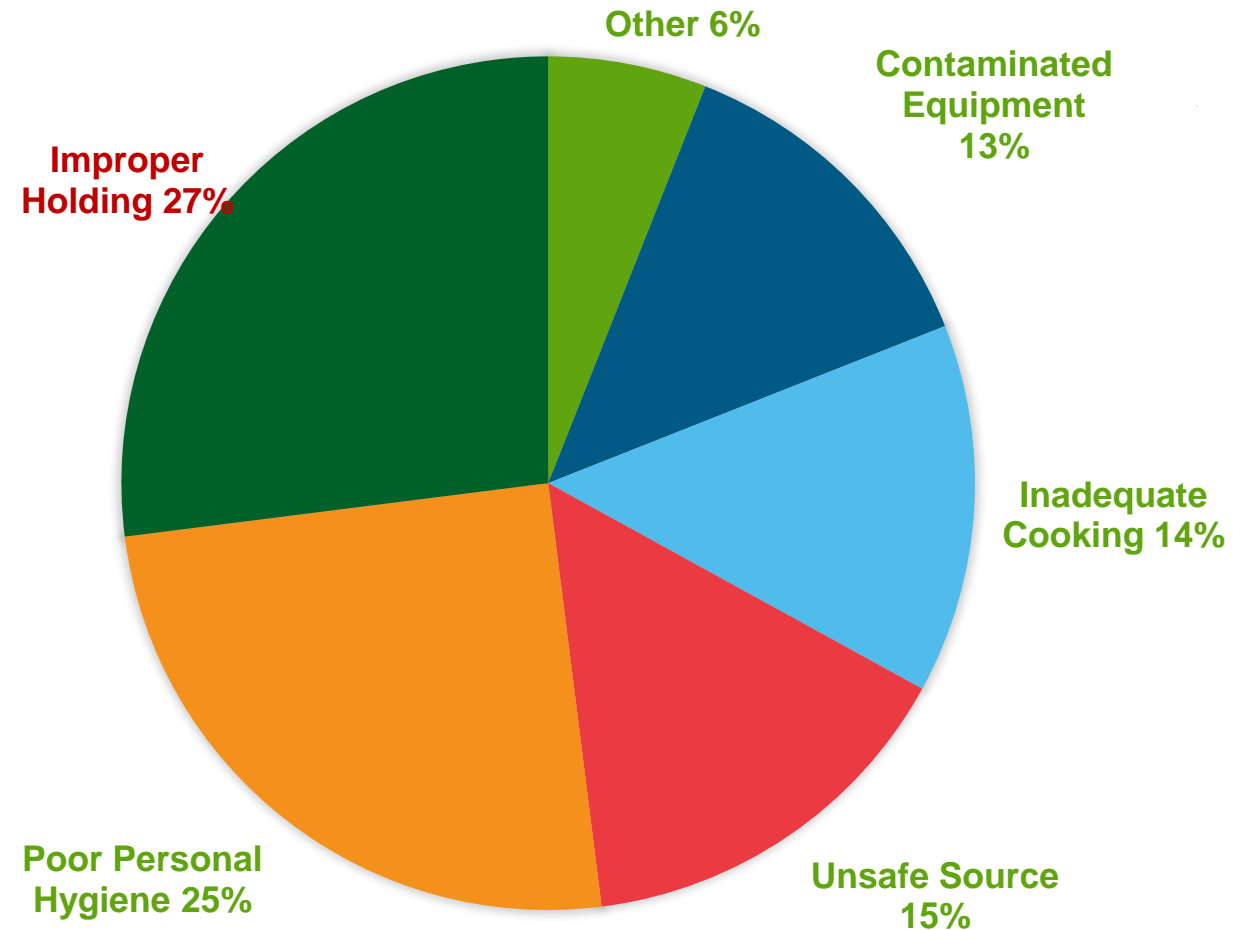


420,000
deaths



Children account
for almost
1/3
of deaths from
foodborne diseases

CDC CONTRIBUTING RISK FACTORS TO FOODBORNE ILLNESS – NORTH AMERICA



Source: CDC

https://www.cdc.gov/fdoss/pdf/2016_FoodBorneOutbreaks_508.pdf

FDA RISK FACTOR STUDY

Need to gain **better control** over the food safety behaviors and practices of:

Employee **handwashing**

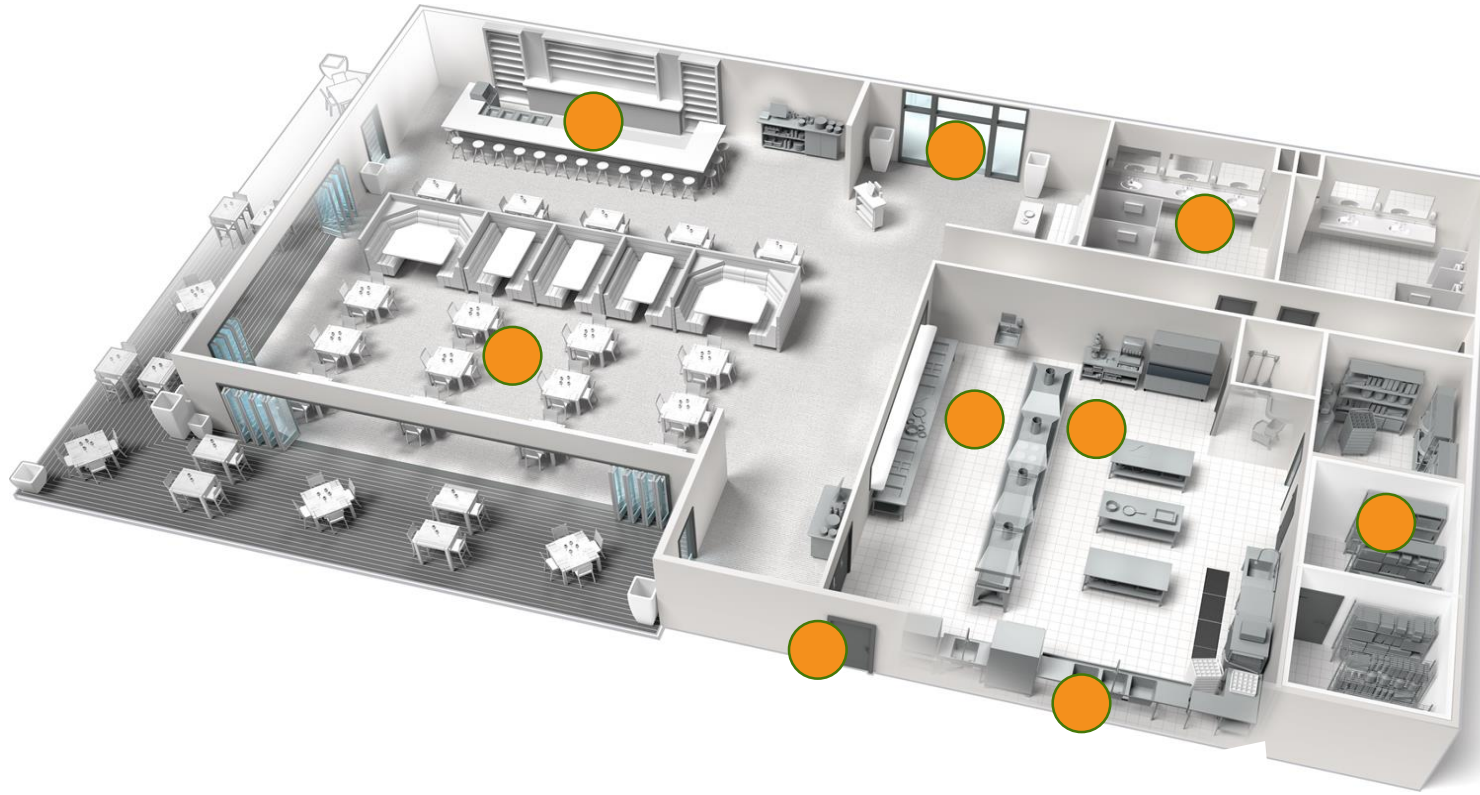
Cold holding of foods requiring refrigeration

Foodborne Illness Risk Factor	Fast Food Restaurants (# OUT)	Total Obs. (IN & OUT)	% OUT	Full-service Restaurants (# OUT)	Total Obs. (IN & OUT)	% OUT
Poor Personal Hygiene	283	425	66.59	329	396	83.08
Contaminated Equipment	242	425	56.94	325	396	82.07
Improper Holding/Time and Temperature	330	425	77.65	375	396	94.70
Inadequate Cooking	42	277	15.16	105	323	32.51

Source: FDA REPORT ON THE OCCURRENCE OF FOODBORNE ILLNESS RISK FACTORS IN FAST FOOD AND FULLSERVICE RESTAURANTS, 2013-2014

FOOD SAFETY PRACTICES AND BEHAVIORS CAN IMPACT OTHER AREAS OF THE RESTAURANT





Improve
Food Safety



Increase
Profitability



Reduce
Food Waste



Ensure Guest &
Employee Safety



Ensure
Guest Satisfaction



Protect
Brand Reputation

PROVEN RESULTS BEYOND FOOD SAFETY



IMPROVED SAFETY

70%
REDUCTION IN CRITICAL FINDINGS



DECREASED COSTS

34% LESS HDI FINDINGS
19% LOWER TURNOVER



INCREASED GUEST SATISFACTION

53% FEWER GUEST COMPLAINTS IN TOP UNITS
1.8% REVENUE INCREASE

HIGH MARKET LEVEL FORCES THAT IMPACT FOOD SAFETY



INCREASING CONSUMER DEMANDS



Is it safe?

Can I get it delivered?

Where did it come from?

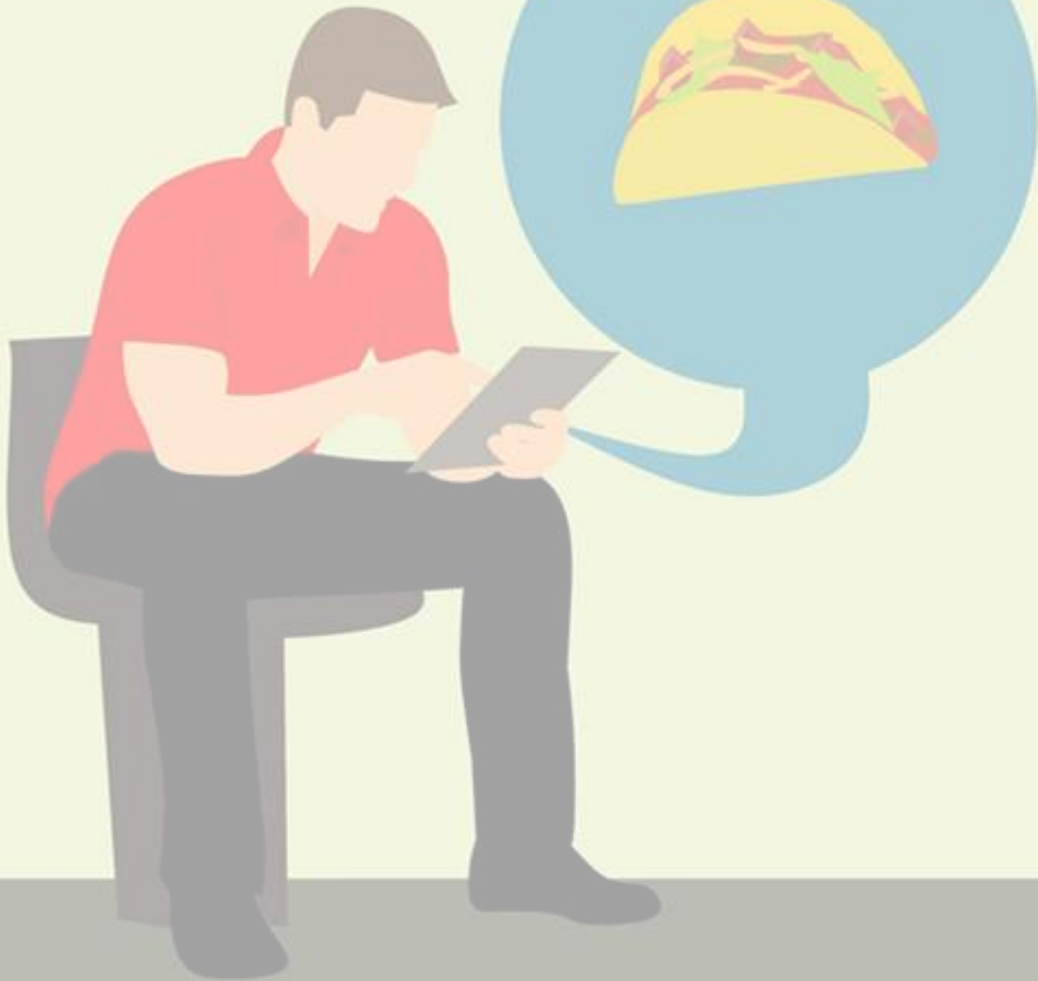
Is it sustainable?

HOW CONVENIENCE IS AFFECTING YOUR BUSINESS



FOOD DELIVERY

By the numbers



- By 2023, restaurant delivery is projected to **grow more than 3x the rate of on-premises sales**, with the majority going to digital orders.
- **More than 50%** of consumers order directly from the restaurant's app or website
- Key segments are high-income households and millennials.
- In 2020, **70% of customers** will order food off premises

FOOD DELIVERY



Adds new **food safety** and **new operational challenges** for food service operations and introduces new food **security concerns**.

- Increased orders via phone or POS systems
- Additional pressure on production, cooking line and assembly
- Increased volume on the line
- Additional space needed for storage (hot, cold or room temperature with time control)
 - New food packaging considerations
 - Food Quality
 - Food Security
- Possible additional partnerships to manage
 - Contracts
 - Delivery position
- **Maintain foundational food safety practices**
 - Personal Hygiene
 - Proper Time Temperature Control/Holding
 - Cooking / Cooling / Reheating / Approved Sources

FOUNDATIONAL FOOD SAFETY

Cooking, Holding, Cooling and Reheating in a full capacity kitchen

- Cooked Foods
 - Orders must be cooked and held at the recommended temperatures to kill pathogens.
 - Do not rush orders through without checking final cooked food temperatures
- Holding:
 - Hot food should be held at $\geq 135^{\circ}\text{F}$ and cold food should be held at $\leq 41^{\circ}\text{F}$
 - Production, line, assembly and staging hot and cold holding equipment must be functioning properly
- Cooling:
 - Cool food in shallow pans to $\leq 70^{\circ}\text{F}$ within 2 hours and $\leq 41^{\circ}\text{F}$ within an additional 4 hours
 - Maintain a depth of 3 inches or less for optimal cooling



Improve
Food Safety



Protect
Brand Reputation



Ensure
Guest Satisfaction



Increase
Profitability

FOUNDATIONAL FOOD SAFETY

- Reheating:
 - Reheat products to 165°F within 2 hours.
 - The timing and temperatures of this process is of utmost importance.
 - Monitor and document the process; moving through the danger zone quickly. The danger zone is anywhere in between 42°F and 136°F.
- Approved Sources:
 - Guest counts can be unpredictable. Running short on products can result in purchases from unapproved sources. Brand Standards, Food Quality and Food Safety can be compromised.
 - Develop an approved vendor list.
 - If substitutions are allowed, communicate guidance on approved secondary sources.



FOUNDATIONAL FOOD SAFETY

A close-up photograph of a person's hands being washed with white soap foam. The hands are positioned in the center of the frame, with the fingers slightly curled. The background is a soft, out-of-focus light blue and white, suggesting a clean, bright environment. The overall image conveys a sense of hygiene and cleanliness.

Personal hygiene remains important for everyone involved in the delivery process

- Food Handlers should not work with symptoms of vomiting or diarrhea
 - Ill Employee Policy
 - Restrict and Exclude
- No bare hand contact
 - Proper tools and systems
- Excellent Handwashing
 - Accessible, stocked, functioning hand sinks
- Studies have identified barriers to handwashing:
 - Too Busy
 - Hand sinks out of sight
 - Soap and paper towels not available
 - Wearing gloves, creating a false sense of security
 - Hand Hygiene not considered a priority
 - Connection between hand hygiene and foodborne illness not understood
 - Irritated skin due to frequent washing

BUILDING A FOOD SAFETY CULTURE



Proven systems and procedures

Effective **Training**

Active monitoring

Consistent **execution**

Corrective action



ECOLAB[®]



IMPACT OF TRAINING ON YOUR BUSINESS



IMPROVED OPERATIONS

18% INCREASE IN SERVICE STANDARD SCORE

15% REDUCTION IN FOOD WASTE



DECREASED COSTS

40% LOWER EMPLOYEE TURNOVER

60% REDUCE TRAINING SEAT TIME



INCREASED PROFITS & GUEST SATISFACTION

16 POINT INCREASE IN INTENT TO RETURN

22% INCREASE IN PRODUCT SALES

DELIVERY CONSIDERATIONS

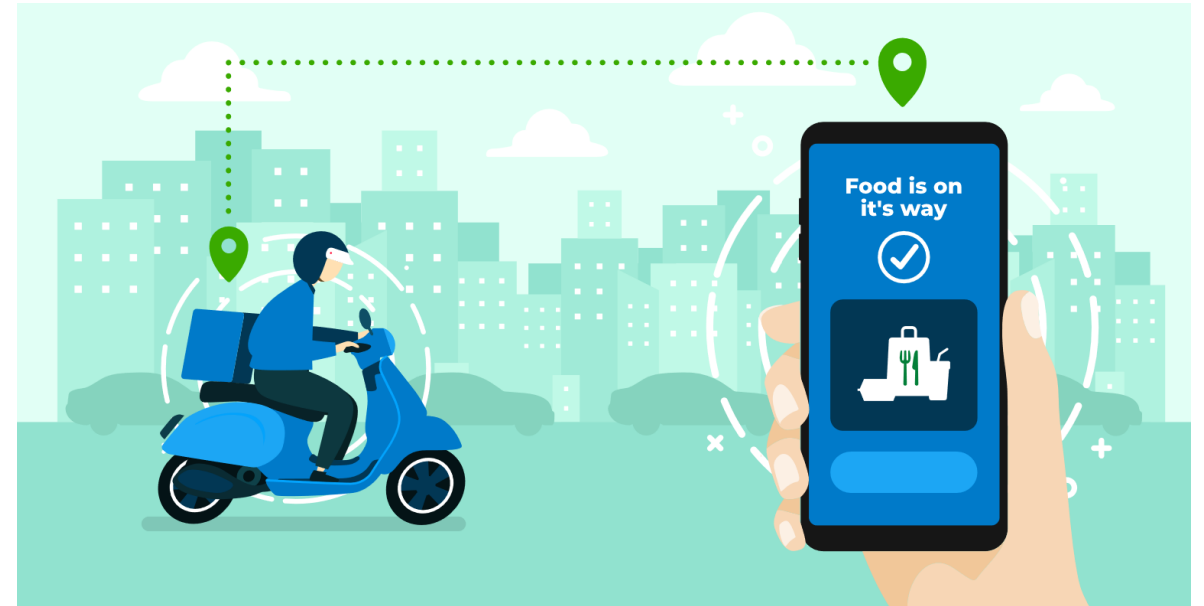


- **Packaging:** Sets the tone of the guests dining experience upon delivery. It should touch on three areas; **Food Safety, Food Security and Food Quality**
- Seal bags and beverages
 - **Tamper resistant seals** can be used. Ensure the seals are secure and cannot be compromised.
 - Don't forget to double check the order first so you have everything to complete a perfect order.
 - Consider different packaging or double bagging for delivery.
- Technology have more of an impact on delivery
 - Ordering
 - Packaging
 - Tracking



DELIVERY CONSIDERATIONS

- Holding:
 - Maintain hot and cold temperatures as long as possible to uphold food quality.
 - Time from cooked to assembled to staging and pick up should have minimal lag periods
 - Package hot food and cold food in separate containers
 - Stage food in hot or cold holding units whenever possible
 - Monitor time / temperature of product held at room temperature through labeling or time stamps



OTHER CONSIDERATIONS



- **Educate the consumer:**
 - Consider additional information on the seal
 - Examples are documenting the time the meal was prepared, packaged and picked up; possible add this to the tamper resistant seal. Include further instruction such as heating or reheating instructions if applicable
- **Documentation:**
 - Add new delivery considerations to daily / shift line checks
 - Document staging and pick up times
- **Delivery drivers:**
 - Handwashing
 - Packaging

Listen to your table free guests

SUSTAINABILITY

FOODSERVICE SUSTAINABILITY TRENDS

- Food Waste Reduction
- Organics/ Composting
 - **FOOD SCRAPS:** Fruits and vegetables Cheese and dairy Meat, bones, poultry, and seafood Bread, rice, and pasta Coffee filters and tea bags Cut flowers and herbs
 - **FOOD-SOILED PAPER:** Napkins, towels, and tissues Paper plates and cups Fast food wrappers (paper only. No aluminum or plastic coating.) Egg cartons Pizza boxes Paper packaging 100% (fiber based/BPI certified) compostable serving-ware and to go container packaging
 - **GREEN WASTE:** Grass clippings Leaves and branches Flower and hedge trimmings Weeds Lumber, scrap wood and plywood types (not painted or treated)
- Recycling
 - Cooking Oil
 - Grease Trap
 - Cardboard Boxes
 - Plastic jars, jugs bottles
 - Glass
 - Metal or aluminum cans
- Donations – Food Recovery



FOOD WASTE

- 1/3 of all food produced in the world is being wasted
- University of Arizona research
 - Full-service restaurants
 - 11.3% food wasted
 - Quick service restaurant
 - 9.5% food wasted

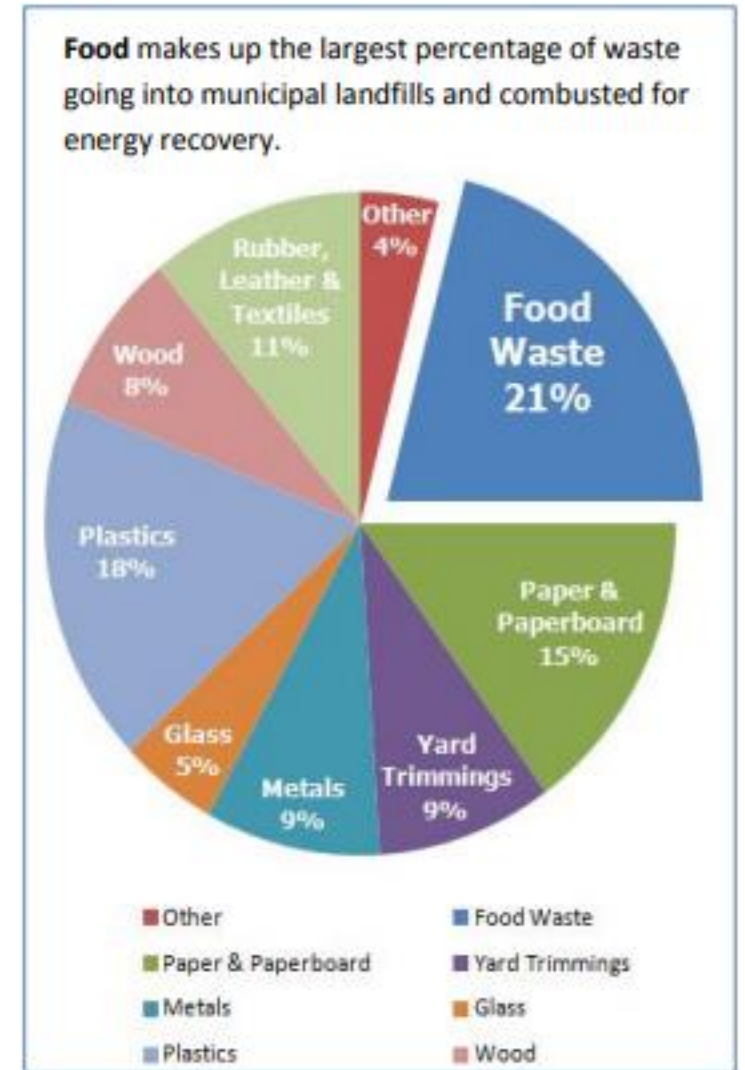
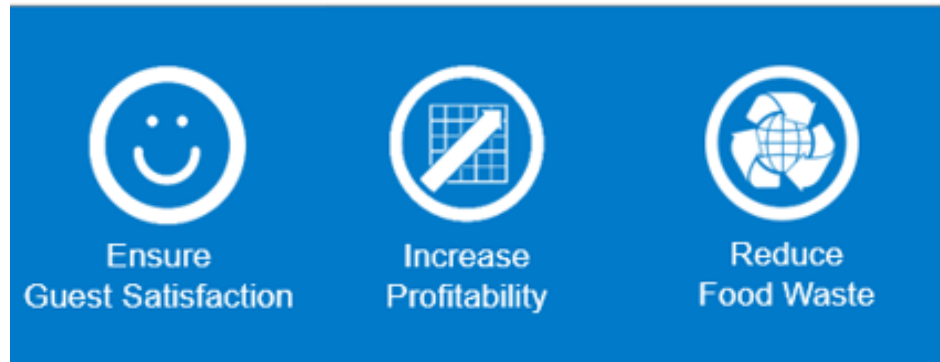


Figure 1 Data from 2011 Municipal Solid Waste Characterization Report

FOOD WASTE BY THE NUMBERS

- The average benefit-cost ratio for food waste reduction was **7:1 over a three-year time frame.**
- Within the first year of implementing a food waste–reduction program, **76 percent of the sites had recouped their investment.**
- Within two years of implementing a program, **89 percent of the sites had recouped their investment.**
- By reducing food waste, the average site saved more than **two cents on every dollar of cost of goods sold**



FOODSERVICE SUSTAINABILITY TRENDS

The NRA report found that guests can be influenced by a restaurant's sustainability practices.

Many operators engage in recycling.

Most operators source at least some packaging and supplies made of recycled content.



POSITIVE OUTCOMES

Nutrient rich soil - turn organics into compost

Divert and minimize landfill waste

Preserve environment

Positively affect the community's livelihood



CHALLENGES

- New equipment and tools
- Additional space needs
- Possible sanitation / odor concerns and pest attractions
- Time
- New vendor partnerships
- Foundational food safety systems a must



FOOD DONATIONS – SPECIFIC CONSIDERATIONS



- Nourishes community with food insecurity
- Positive community support and partnership
- Considerations:
 - Foundational Food Safety Practices
 - CDC and FDA Risk Factors
 - Additional Food Safety Practices
 - Proper **date marking and labeling**
 - Preparation for donation within **rotation**
 - **Proper finished product labeling**
 - **Proper packaging**
 - Storage for pickup
 - If product can be consider freezing
- Add new processes into existing documentation
 - Additional cooking/cooling/storage checks
 - Donation and pick up logs

SOLUTION CONSIDERATIONS

- Pre-consumer waste - food that doesn't leave the kitchen
 - Evaluate inventory, packaging and storage
 - Offer staff meals
 - Consider donating food
- Post-consumer waste - food that's purchased by a customer, but not eaten
 - Encourage guests to take their food home with them
- Disposables - paper goods, plastic utensils, and packaging
 - Consider using compostable products
 - Set up systems for recycling and composting
- Proper recycle and compost containers and placement
 - Source the right containers with effective closures
 - Large enough to keep up with volume
 - Prevent storing anything outside of the containers
 - Set up regular cleaning of storage areas
- Schedule pick ups to keep up with volume
 - Keep containers closed or covered to reduce odors and prevent pest entry

FOOD SAFETY AND BEYOND



Improve
Food Safety



Increase
Profitability



Reduce
Food Waste



Ensure Guest &
Employee Safety



Ensure
Guest Satisfaction



Protect
Brand Reputation

SUMMARY:

- Food safety benefits are multi-fold
- Train employees properly to execute foundation food safety practices
- Keep up with key trends that affect not only food safety; but good business

- **Be flexible and open to different solutions and use best practices that fit your operations to protect your guests, the community and your brand**

Q&A



ECOLAB[®]

EcoSure[®]