

**NORTH CAROLINA FFA ASSOCIATION
FOOD SCIENCE CAREER DEVELOPMENT EVENT**

**Potential Food Processing
Sanitation and Safety Problems**

1. Facilities, ingredients and packaging supplies and processed foods shall be free of:
 - a. insects (such as flies, cockroaches, worms, etc.), insect parts (in excess of allowable limits), and insect eggs;
 - b. rodents (such as rats and mice);
 - c. birds;
 - d. domestic animals (such as cats and dogs);
 - e. fecal droppings or urinary discharges from any of the above.
2. Holes in walls or window screens are not permitted (as they may allow entry of insects or rodents).
3. Cracks or spacing under doors or windows are not permitted.
4. Open outside doors or windows without screens or air curtains are not permitted.
5. Rodent control programs are required (including traps or baits).
6. Open top trash containers (inside or outside) are required to be covered.
7. Rust, rough solder and seams on processing equipment contacting foods are not allowed.
8. Proper temperature control of processes throughout the facility is required, such as:
 - a. cooler storage temperatures;
 - b. freezer storage temperatures;
 - c. frozen ingredients may be thawed prior to use, but containers cannot be dripping moisture or other liquids prior to usage.
9. Food supplies shall not be stored directly on floor - skids, pallets or racks required.
10. Equipment, facilities, walls, floors and overhead utilities must be dirt, dust, mold, or otherwise contamination free.
11. Equipment or utilities above the processing line shall not drop anything into the food line (such as grease, water, dust, or dirt on equipment or food).
12. All parts of a disassembled processing equipment line shall be cleaned immediately after usage and stored on clean racks (off the floor) when not in use. (Any contact with floor shall be considered re-contamination).
13. All food contact surfaces shall be constructed of heavy stainless steel or of food grade quality sanitary plastic or rubber.
14. All overhead lights shall be shielded to avoid glass breakage and contamination of foods.
15. All processing cooking vessels shall be covered whenever possible to prevent contamination and control temperatures.
16. All processing room walls shall be constructed of washable, waterproof materials.
17. All raw ingredients shall be sound and wholesome.
18. Food-handling employees must wear hairnets and/or beard nets.
19. Food-handling employees must not touch ready-to-eat foods with their bare hands.
20. Food-handling employees must wash their hands prior to starting work, after picking up anything from the floor, after every visit to the toilet or at any other time whereby their hands have become contaminated.
21. Food-handling employees shall wear clean, impact-resistant, sanitary gloves made of impermeable plastic or rubber whenever in direct contact with foods, ingredients, or containers for these foods and supplies.
22. All hand wash sinks in food operation and toilet areas shall be clean and sanitary, with cold and hot water and proper temperature controls and mixing valves and accessible at all times.
23. Hand wash sinks and equipment wash sinks shall not be used to store soiled or clean equipment, supplies, or packaging containers.
24. Adequate covered trash containers must be available in food operation, toilet, and hand-wash sink areas.

25. Processed foods shall not contain any foreign materials (such as glass, metal, wood, insects or parts of insects, or toxic substances).
26. Only government approved and properly labeled chemicals may be used for cleaning the processing equipment and plant work areas.
27. Only government approved chemicals may be used for maintaining the food plant and storage areas from contamination by insects, rodents, birds, etc. and shall be applied by a certified pest control operator.
28. Workers with open cuts, bruises or wounds shall not handle foods or raw ingredients.
29. Ingredients and workers shall be free of any disease that can be communicable through food or equipment.
30. Uncooked foods and cooked foods shall be stored in separate areas with proper identification.
31. All processed food products offered for public sale and consumption shall be sound and wholesome and free of adulterants.
32. Food plant buildings shall not have any walls with peeling paint or other toxic substances that could be exposed to any food ingredients or processing equipment.
33. All walls, ceilings, floors and equipment exposed to foods in the processing or storage areas shall be rust free.
34. All packaging materials, equipment and storage and delivery supplies must be free of dust, dirt, rust or other possible contaminants.
35. All food ingredients to be added to food and/or processed for human consumption must be clean and free from any contact with contaminated surfaces prior to usage.

Sources of "Good Sanitation" Operations Information

U.S. Food & Drug Administration Web Addresses:

<http://www.cfsan.fda.gov> – FDA Home page

<http://www.cfsan.fda.gov/list.html> - FDA Center for Food Safety and Applied Nutrition

<http://www.cfsan.fda.gov/~dms/guidance.html> - Food Guidance Documents

<http://www.cfsan.fda.gov/~dms/gmp-toc.html> - Good Manufacturing Practices and Regulations

<http://www.cfsan.fda.gov/~dms/fc05-toc.html> - The 2005 Food Code (retail and food service operations)

<http://www.cfsan.fda.gov/~dms/dalbook.html> - The Defect Action Levels – (allowable non-hazardous, unavoidable filth in foods)

<http://www.cfsan.fda.gov/~dmslinsp-toc.html>

<http://www.cfsan.fda.gov/~dmslinsp-toc.html> – Ensuring shipments are clean, sanitary, and safe

<http://www.cfsan.fda.gov/~lrd/part110t.html> - (legal food processing - Manufacturing regulations)

<http://www.cfsan.fda.gov/~dms/selfinsp.html> - (self inspection of food processing facility)

<http://www.cfsan.fda.gov!dms/foodcode.html> - (The Food Code - retail and food service operations)

Retail Store Sanitation Book:

"Food Store Sanitation," by R. B. Gravani & D. Roshoi (1998)

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