

Food Safety:

Good Manufacturing Practices

Extension Consumer Food Safety Fact Sheet

Food producers and processors of all sizes want to produce the safest food possible for their customers and consumers. While not all food producers and processors are legally required to follow specific regulatory requirements due to the type of products they produce¹, all can and should use some basic Good Manufacturing Practices (GMPs), which are the basic sanitary and processing requirements necessary to ensure the production of safe food. GMPs are also essential to meeting current and future FDA and USDA food safety requirements, and are a key pre-requisite for Hazard Analysis and Critical Control Point (HACCP) programs, which are required for certain food products, including meat and poultry, juice, seafood, and some vacuum packed products, and by some food buyers¹.

Key Good Manufacturing Practices and associated programs that all food processors should have in place are as follows:

1. Buildings and facilities: The grounds around the area where food is processed should be kept tidy by mowing turf, cleaning or washing pavement, and removing weeds from gravel, etc. Standing water and mud should be prevented through good drainage. Processing facilities must have cleanable surfaces and well-maintained and sanitary handwashing and restroom facilities. Restrooms should have self-closing doors that do not open directly into processing areas. Water used for food processing, washing of equipment, and washing of hands must be potable and have backflow prevention. Potable water should be tested on a regular basis.

2. Equipment and utensils for processing must be constructed of food grade, cleanable materials. Instruments used for measuring or recording conditions that control or prevent growth of undesirable microorganisms in food must be accurate and adequately maintained. Processing equipment should be covered when not in use. Only food-grade lubricants should be used in food contact areas.



3. Personnel working in the facility should be familiar with foodborne disease symptoms and must not work if they are sick. Also, they must be trained in and follow good personal hygiene practices (see text box) when working and have training on doing their task safely. Supervisors must be qualified to carry out the responsibilities of employee training and oversight.

4. Raw material control: Systems must be in place to check incoming raw materials for safety. Communication with suppliers should assure that they have effective food safety programs in place. Ingredients and packaging must be handled and stored safely (at proper temperature, in clean conditions, etc.) and used in a timely fashion (date all incoming products, use oldest products first).

5. Prevention of cross-contamination of food: Use separate cutting boards, utensils, and other equipment for raw meat and ready-to-eat products; do not store raw products above or near ready-to-eat products; clean properly.

¹More information on food safety requirements for specific food products and sales venues is available from: <https://www.agriculture.ks.gov/divisions-programs/food-safety-and-lodging>

²The 9 major allergens include: peanuts, tree nuts, milk, wheat, soy, fish, crustacean shellfish, eggs, and sesame

6. Packaging materials: Food grade packaging, appropriate for its intended use, must be used and properly stored to prevent contamination.

7. Cleaning and sanitation: Standard Sanitation Operating Procedures (SSOPs) should be developed, documented, and used on a regular schedule for cleaning and sanitizing all food processing equipment. Maintain a sanitation schedule for areas that need periodic cleaning, such as coolers and storage facilities.

8. Allergen control programs should be in place for the nine major allergens². Raw materials and final products containing allergens must be properly labeled, stored, and moved within the facility to prevent cross-contamination of products with allergens. Sanitation procedures must be in place to ensure complete removal of allergens from processing equipment (when switching processing lines from allergen to non-allergen containing products).

9. Pest control programs must control the presence of rodents, birds, insects and other pests in the following order: a) prevent entry into facilities, b) deny them food and water sources, c) exterminate as necessary.

10. Chemical control: Cleaners, sanitizers, lubricants, and any non-food chemicals used in the facility must be kept separate from food ingredients and products. They must be properly labeled, stored, and used according to label instructions. Food and food packaging must be removed or covered before cleaning or using chemicals.

11. Glass control: Glass and glass-like foreign material in a facility must be controlled. This includes covering glass light bulbs and monitoring glass packaging and any other glass in the facility to prevent or at least detect breakage.

12. Foreign material control should be in place to prevent plastics, metal, wood, and similar materials from getting into the food product. These are best controlled by a) careful visual inspection of raw materials during receiving and in-process, as well as in the final product; b) good personal hygiene of workers; and c) practicing good housekeeping.

13. Traceability and recall systems so the processor knows where their ingredients came from, which ingredients went into every batch of product, and where their products are going. This tracking is necessary in case a product must be recalled. A system for coding each “lot” of product should be in place. A “lot” may be one day of production, or one “batch” of product made in a day.

Good personal hygiene practices:

- Handwashing and personal cleanliness.
- Hair restraints, no jewelry or loose articles.
- No eating, drinking, tobacco products in production area.
- Proper attire (gloves, aprons, uniforms).

For more information:

FDA Good Manufacturing Practices (GMP) website:
<https://www.fda.gov/food/guidance-regulation-food-and-dietary-supplements/current-good-manufacturing-practices-cgmps-food-and-dietary-supplements>

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