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HACCP Plan Assignment

1) HACCP stands for Hazard Analysis Critical Control Point. A HACCP plan is used by industries to prevent foodborne illness and to prevent wasting food and money. Some examples of a HACCP plan would include employee training, routine equipment maintenance, routine thermometer calibration, correct thermometer placement, and refrigerator monitoring on a continuous basis.

2) The seven principles of HACCP are built on prerequisite programs and are listed in order as follows: conduct hazard analysis, determine the critical control points (CCPs), establish critical limits, establish CCP monitoring procedures, establish corrective actions, establish verification procedures, and establish record keeping and documentation procedures.

3) The four parts that make up principle four, establishing CCP monitoring procedures, are what, how, when and who. The first component, what, is usually a measure or observation to assess if the CCP is operating within the critical limit. This can be thickness of patties, cold temperatures, pH, line speed etc. It also includes observing if a preventive measure at a CCP is being performed. The second component is how critical limits and preventive measures will be monitored. It can be a physical or chemical measurement for quantitative or observations for qualitative limits. It must provide rapid results. This would include using thermometers, clocks, pH meters, water activity meters and chemical analytical equipment. The third component, when, is the frequency that certain steps are monitored. Continuous or non-continuous monitoring may be used. Continuous monitoring is preferred and can include temperature recording charts and metal detectors. The records need to be periodically examined. Non-continuous monitoring occurs when continuous monitoring is unavailable. This can be checking temperatures in a

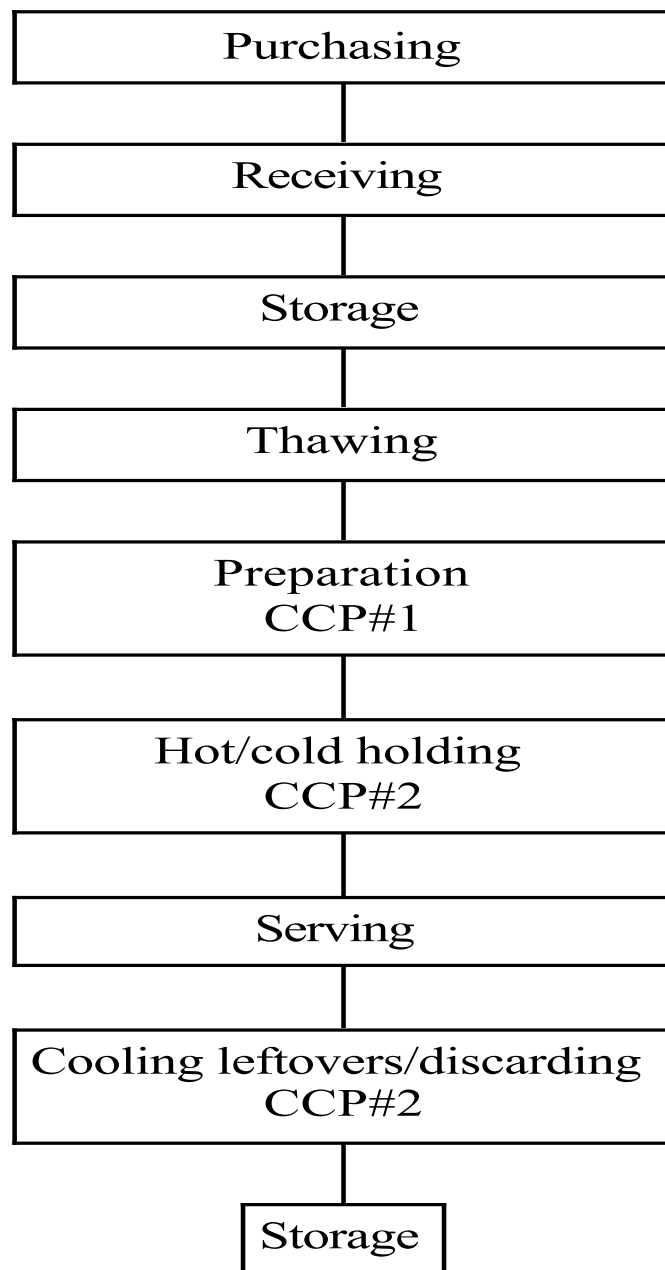
breeding line at specific intervals, and routine/daily checks. The fourth component, who, is who is responsible for monitoring certain activities. These are specific, trained workers and does not include every single worker. The workers responsible for monitoring should be trained in CCP monitoring techniques, fully understand the importance of CCP monitoring, have ready access to the monitoring activity, accurately report each monitoring activity, and immediately report critical limit infractions so that immediate corrective actions can be taken.

4) HACCP prerequisite programs include everyday practices such as sanitation, hygiene, management, chemical hazards etc. as well as standard operating procedures (SOP), good manufacturing practices (GMP), and good agricultural practices (GAP). SOPs should be written in a useable, step-by-step format and must be monitored and documented. One example of an SOP is chemical control and pest management, which are both integral to keeping food safe and servable. GMPs should be part of every food facility and applies to all visitors and employees. An example if a GMP is using a food bath that sanitized peoples shoes before they walk onto a field. Food facilities that receive raw agricultural products require that the suppliers follow GAPs. This can include proper sanitation while transporting raw products.

5) Foodservice produce: raw chicken breasts

6) Flowchart of raw chicken breasts to service at restaurant

Raw chicken breast to restaurant flow chart



7) The CCP#1 is related to cooking food to its minimum internal temperature to insure that any bacteria and microbes in the food are killed. In this flow chart example, the raw chicken may be infected with Salmonella, so the CCP is to cook the chicken to 165 degrees Fahrenheit for 15 seconds to kill the Salmonella. CCP#2 is holding food. If the chicken was cooked and is being

held for service the correct temperature must be maintained. The chicken must be held by a hot holding tray at 135 degrees Fahrenheit or higher. The food must be served within four hours and then must be discarded. CCP#3 is storing food properly to inhibit growth of bacteria. If raw chicken breasts were to be delivered to a facility without a subsequent step to destroy bacteria, storage would be a CCP. The storage for raw chicken breast would be 41 degrees Fahrenheit or lower. CCP#4 is reheating food. All food must be reheated to at least 165 degrees Fahrenheit for 15 seconds (including chicken breast).