What is HACCP?

There are many systems used to manage risk factors that can lead to food borne illness and HACCP (Hazard-Analysis-Critical-Control-Point) is just one of them. HACCP identifies hazards at specific points throughout the flow of food and develops ways to prevent, eliminate or reduce those hazards to safe levels. This is done by using 7 principles to build and utilize a HACCP plan.

Building a HACCP Plan – The 7 Principles

To simplify to explanation, we used the example of preparing a hamburger; specifically the burger patty, in order to demonstrate how the process works.

1. **Conduct a Hazard Analysis** – Look at all the ingredients used and decide which will be at risk and what risks for each of those ingredients are. ***Example*** – The burger patty is made with ground beef and the hazard is E-coli.	
2. **Determining Critical Control Points (CCPs)** – The critical control points are points in time during the flow of food where the foodborne hazard can be prevented, reduced or eliminated. ***Examples*** - Receiving the burger patty from the supplier - Storing the patty correctly until preparation preventing cross contamination - Cooking the burger patty reduces the risk of E-coli.	
3. **Establish Critical Limits** – Identify the actual temperature or limit that prevents the hazard. ***Example*** – During cooking burger patties the critical limit is a minimum internal cooking temp of 155°F.	

4. **Establishing Monitoring Procedures** – How will the food be monitored and by whom and how often to ensure the critical limit has been met. ***Example*** – A food handler monitors the cooking process of the burger patty to ensure it has been properly cooked.	
5. **Identifying corrective actions** - Determine what may go wrong and what action needs to be taken when an unanticipated hazard or critical control limit isn't met. ***Example*** – A food handler checking the temperature of a burger patty and reading it at 143°F degrees then returning it back to the grill to continue cooking to 155°F.	
6. **Verify that the system works –** Review the records that were kept throughout the flow of food to ensure all limits were met and procedures were followed. ***Example*** - At the end of the day, a manager looking over all recording done by food handlers at all points of the cooking process for hamburger patties.	
7. **Establish Procedures for Record Keeping and Documentation –** Maintaining the HACCP plan and keeping all documentation that were created. ***Example*** – A manager keeps records for the burger patty HACCP plan for 2 years after the burger has been cooked.	 And that's just for the hamburger?

Example HACCP Plan for the Reduction of Pathogenic E. coli in Ground Beef Burgers

				E. coli	**Hazard Analysis**
Cooking	Holding	Preparing	Storing	Receiving	**Critical Control Points**
≥155°	≤41°	≤2hrs	≤41°	≤41°	**Critical Limits**
½" burger patties will be placed on a 375° flat grill for 5 minutes per side using a timer. Burger will be cut to check that juices run clear. Grill will be calibrated with a surface thermometer per shift and recorded. One burger will be temped per grill cook daily with a probe and recorded on cooks log.	Temperatures will be checked in the holding area every 4 hrs by the line cook and logged	A timer will be started when the GB is removed from the cooler and then stopped when returned to the cooler. Prep times will be logged.	Head chef will check temperatures of all refrigeration units and record on storage logs. A food from each unit will be sampled per shift(2) and recorded on log	Deliveries will be received by the PIC on Mondays and Thursdays and TTI's will be checked and logged for correct temperatures	**Monitoring**
If juices do not run clear burger is under cooked and will be returned to the grill to cook for 2 minutes per side or until juices run clear.	Ground Beef found above 41° will be discarded and PIC will investigate the cause.	Ground beef left out for longer than 2hrs will be discarded and prep cook will disciplined	Storage units found out of compliance will be taken out of use until a technician repairs it and food will be stored in another unit or by other means i.e. ice chests. Non compliant samples will discarded and an	Ground beef that is ≥41° will be rejected and logged on receiving log.	**Corrective Action**
PIC will inspect and sign off daily cooking logs and GM will compare cooing logs side by at the end of month reconciliation to check for discrepancies	PIC will inspect and sign off daily holding logs and GM will compare holding logs side by at the end of month reconciliation to check for discrepancies	PIC will inspect and sign off daily prepping logs and GM will compare prepping logs side by at the end of month reconciliation to check for discrepancies	PIC will inspect and sign off daily storage logs and GM will compare storage logs side by at the end of month reconciliation to check for discrepancies	PIC will inspect and sign off daily receiving logs and GM will compare receiving logs side by at the end of month reconciliation to check for discrepancies	**Verification**
2yrs	2yrs	2yrs	2yrs	2yrs	**Record Keeping**

Who Needs HACCP?

Establishments that:

- Cure food
- Smoke food to preserve it
- Use food additives (ex.– vinegar used for pickling)
- Custom process animals (ex. Offering live shellfish in a display tank)
- Treat juice onsite (ex. pasteurizing)
- Package food using the ROP (reduced oxygen packaging) method
- Sprout seeds or beans.

What is a Variance?

A variance is simply a document that your regulatory agency issues when you prep food in certain ways. Most of those ways are actually the same as the establishments listed above. When you apply for a variance your regulatory authority will more than likely require you to submit a HACCP plan.

You will need a variance if your establishment:

- Cures food
- Smokes food to preserve it
- Uses food additives (ex.– vinegar used for pickling)
- Custom processes animals (ex. Offering live shellfish in a display tank)
- Treats juice onsite (ex. pasteurizing)
- Packages food using the ROP (reduced oxygen packaging) method
- Sprouts seeds or beans.

If you see the words CURE, SMOKE, ROP (reduced oxygen packaging) or shellfish in a display tank…

THINK…