Supposing safe and high quality foods is more important than ever, as importers of food products demand safe food in compliance with strict hygiene rules. Quality improvement, however, is a continuous process.

The present concerns in quality with respect to insects, extraneous matter, moisture, ash, micro-organisms, insects, mites, mycotoxin, pesticide residues, heavy metals, non permitted colors, animal excreta, etc. will be addressed if appropriate pre- and post-harvest operations, storage and packaging are adopted.

Though this is not an easy task, a fair degree of acceptability of produce will be attained, if normal care and attention are given at various stages of handling the produce, from growing to packaging.

Anyone who owns, manages or works in a food business in the EU – apart from those working in primary food production – is affected directly (and indirectly if supplying to the EU) by the common food hygiene rules across the European Union, as set out in the Food Hygiene Directive (93/43/EEC). Application of the Food Hygiene Directive (93/43/EEC) will force exporters to a higher and safer quality of produce supplied and to improve production circumstances and methods in the country of origin.

Every process which deals with preparing or selling food can be classed as a food business activity, including: preparation, processing, manufacturing, transportation, distribution, handling, packaging, storage, selling and supplying.

**Confused about HACCP and HACCP Plans?**
HACCP was developed in the 1960s by the Pillsbury Corporation and NASA as a way to ensure food safety for the first manned space missions. It started with just 3 principles. Today, HACCP has improved to feature 7 principles and 12 steps. Internationally recognised, HACCP principles are included in the international complete Food Safety and Quality Management System (ISO 22000-2005) by the International Standards Organisation. It is also included in food safety legislation across the world, making it very important that your food business develop a HACCP Plan.

HACCP stands for Hazard Analysis Critical Control Point. HACCP is now the benchmark for food safety programs across the entire food supply chain, but it dates back to the early
days of the NASA space program. HACCP has had several variations and adaptations through the years and it can be difficult to grasp.

If you’re feeling a bit overwhelmed by the process of creating your HACCP plan or applying HACCP principles, you’re not alone. Confusion about HACCP is commonplace, but must be avoided. Recently, one food manufacturer listed his product name (e.g. “salmon”) as the only control point in their “plan”. This underscores the point that even competent manufacturers are having a tough time understanding what is expected when the FDA requires them to develop a HACCP plan. Needless to say, the FDA was not amused. Regardless of which types of foods your facility produces or handles, there are straightforward steps to create your HACCP plan.

**Let’s start by briefly explaining what HACCP is:**
HACCP is a process- not the product. The HACCP process when correctly implemented should ensure only safe food products are handled in your facility. In a nutshell- understanding the HACCP process requires a thorough understanding of prerequisite sanitation programs (Good Manufacturing Practices, Good Agricultural Practices, and Good Retail Practices) and begins with five preliminary steps followed by Seven HACCP Principles.

**What are the Steps to implementing your HACCP plan?**
Create the HACCP Team
Describe the Product and its Distribution
Describe the Users and Consumers of the Product
Create Process Flow Charts
Verify Process Flow Charts
Conduct a Hazard Analysis of your processes
Identify your Critical Control Points
Establish Critical Limits for each Critical Control Point
Create your Monitoring Requirements and Procedures
Implement a process of Corrective Actions to apply when Critical Control Points are out of bounds
Create and implement a Recordkeeping system
Create a procedure to Verify that your HACCP plan is effective and functioning as intended

We need to implement a HACCP program, how do we do it?

We start by understanding the following 5 Rules for HACCP Success and the Seven Principles for HACCP.

**5 Rules for HACCP Success**

The HACCP system incorporates 7 principles and 12 steps to ensure your food business is providing customers with hazard-free products. Here are five rules for a successful HACCP plan.

Rules for Success

1. **Gain an Understanding of HACCP**
2. **Get Commitment and Support from Senior Management**
3. **Compare HACCP to Your Existing Food Safety Systems**
4. Get Customer and Supplier Feedback
5. Motivate Staff with Training and Incentives

1. Gain an Understanding of HACCP Gaining an understanding of the HACCP system is one of the most important steps toward implementing HACCP. Without sound knowledge of the steps and principles involved in HACCP, it will be impossible to implement the system successfully. The 12 steps and 7 principles of HACCP are easy to understand with proper instruction and continued study. Each step must be followed in detail so that your company will be able to deliver safe food to your consumers. The HACCP SAFE Pro Kit provides documents and templates which will help you to easily follow the steps and principles in order to deliver a HACCP plan. By using the templates to develop a thorough and accurate HACCP plan, you will be well on your way toward providing a safe food service for your customers.

2. Get Commitment and Support from Senior Management Senior management officials must be committed to implementing and maintaining a HACCP plan. When management are knowledgeable about the system, they will be able to get involved in the development of the HACCP plan and train others on the HACCP team. Senior Management’s commitment and support to the HACCP plan is vital to the success of the system. Senior Management must: 1. Help to put the HACCP plan in place by leading a HACCP team. 2. Ensure that their employees are well trained. 3. Maintain a document checklist which is provided in the HACCP SAFE Pro Kit.

3. Compare HACCP to Your Existing Food Safety Systems The HACCP system allows you to develop, maintain, and document every step toward providing safe food to your consumers. It is important to compare the HACCP system to the systems that you currently have in place so that you can fully understand the scope of work to implement HACCP in your organisation. The HACCP system is a globally accepted food safety system and provides many benefits to your company:

- Meeting legal requirements for food safety in your country
- Establishing procedures to deal with problems if they do occur
- Creating a plan specific to your business and food products
- Documenting the process
- Identifying problem areas
- Making sure your food is safe, from delivery to distribution
- Establishing procedures so problems do not occur

**Seven Principles of Hazard Analysis and Critical Control Point (HACCP) System**

In order to enhance food safety, every stage of the food production (from purchasing, receiving, transportation, storage, preparation, handling, cooking to serving) should be carried out and monitored scrupulously.

The HACCP system is a scientific and systematic approach to identify, assess and control of hazards in the food production process. With the HACCP system, food safety control is integrated into the design of the process rather than relied on end-product testing. Therefore HACCP system provides a preventive and thus cost-effective approach in food safety.

The seven principles of a HACCP System are-

1. Analyze hazards
2. Determine critical control points
3. Establish limits for critical control points
4. Establish monitoring procedures for critical control points
5. Establish corrective actions
6. Establish verification procedures
7. Establish a record system

Principle 1 Analysis hazards
A food safety hazard is any biological, chemical or physical property that may cause a food to be unsafe for human consumption. We analyze hazards to identify any hazardous biological, chemical, or physical property in raw materials and processing steps, and to assess their likeliness of occurrence and potential to render food unsafe for consumption.

Principle 2 Determine critical control points
A critical control point is a point, a step or a procedure in a food manufacture process at which control can be applied and, as a result, a food safety hazard can be prevented, eliminated, or reduced to an acceptable level.

Not every point identified with hazards and preventive measures will become a critical control point. A logical decision-making process is applied to determine whether or not the process is a critical control point. The logical decision-making process for determining critical control points may include factors such as:

- whether control at this particular step is necessary for safety;
- whether control at this step eliminates or reduces the likely occurrence of the hazard to an acceptable level;
- whether contamination with the hazard identified could occur in excess of acceptable levels;
- whether subsequent steps will eliminate or acceptably reduce the hazard.

Principle 3 Establish limits for critical control points
Limit for critical control point is a criterion which separates acceptability from unacceptability. It is the maximum or minimum value to which a physical, biological, or chemical hazard must be controlled at a critical control point to prevent, eliminate, or reduce to an acceptable level the occurrence of the identified food safety hazard.

Examples of limits for critical control point are time, temperature, humidity, water activity and pH value. The limits should be measurable.

In some cases, more than one critical limit is needed to control a particular hazard.

Principle 4 Establish monitoring procedures for critical control points
Monitoring is a planned sequence of observations or measurements to assess whether a critical control point is under control and to produce an accurate record for future use in
verification. Monitoring is very important for a HACCP system. Monitoring can warn the plant if there is a trend towards loss of control so that it can take action to bring the process back into control before the limit is exceeded. The employee responsible for the monitoring procedure should be clearly identified and adequately trained.

**Principle 5 Establish corrective actions**
Corrective action is an action taken when the results of monitoring at the critical control point indicate that the limit is exceeded, i.e. a loss of control.

Since HACCP is a preventive system to correct problems before they affect food safety, plant management has to plan in advance to correct potential deviations from established critical limits. Whenever a limit for critical control point is exceeded, the plant will need to take corrective actions immediately.

The plant management has to determine the corrective action in advance. The employees monitoring the critical control point should understand this process and be trained to perform the appropriate corrective actions.

**Principle 6 Establish verification procedures**
Verification is the application of methods, procedures, tests and other evaluations, in addition to monitoring, to determine compliance with the HACCP plan.

Some examples of verification are the calibration of process monitoring instruments at specified intervals, direct observation of monitoring activities, and corrective actions. Besides, sampling of product, monitoring records review and inspections can serve to verify the HACCP system. The plant management should check that the employees are keeping accurate and timely HACCP records.

**Principle 7 Establish a record system**
Maintaining proper HACCP records is an essential part of the HACCP system. Accurate and complete HACCP records can be very helpful for: documentation of the establishment’s compliance with its HACCP plan; tracing the history of an ingredient, in-process operations, or a finished product, when problem arise; identifying trends in a particular operation that could result in a deviation if not corrected; identifying and narrowing a product recall.

The record of a HACCP system should include records for critical control points, establishments of limits, corrective actions, results of verification activities, and the HACCP plan including hazard analysis.

To establish recordkeeping procedures, plant management may: develop forms to fully record corrective actions taken when deviations occur; identify employees responsible for entering monitoring data into the records and ensure that they understand their roles and responsibilities.