

# **APPLICATION OF HACCP PRINCIPLES FOR THE MEAT INDUSTRY**

## **GUIDANCE SHEET NO: 6**

### **DEFINE THE SCOPE OF THE HACCP STUDY PRELIMINARIES FOR HACCP**



#### **DEFINING THE SCOPE OF THE HACCP STUDY**

For most food businesses the objective is to develop a HACCP system that can be applied to the entire business. This works well for businesses with a limited range of products and processes. However, many meat processors produce a wide range of different products using many different types of process. The different processes and end products typically have different food safety hazards and risk profiles associated with them. A complex business will normally have a single HACCP system with multiple HACCP plans to cover the different product lines.

For each HACCP plan will need a separate HACCP study with clearly defined limits. The process of defining the limits of the HACCP study is known as defining the scope of the study. The purpose of defining the scope is to ensure that you are absolutely clear about the nature and extent of your HACCP study. It involves:

- Selecting an appropriate plan;
- Briefly describing the product;
- Identifying the start point and end of the study;
- Considering the likely hazards to be encountered.

#### **SELECTING THE TYPE OF HACCP PLAN**

You need to choose between a “Linear” or a “Modular” plan and you should select the appropriate one based on the complexity of your food operation.

A linear HACCP plan is one which considers each product as a whole, starting from the raw materials and ending with the finished product.

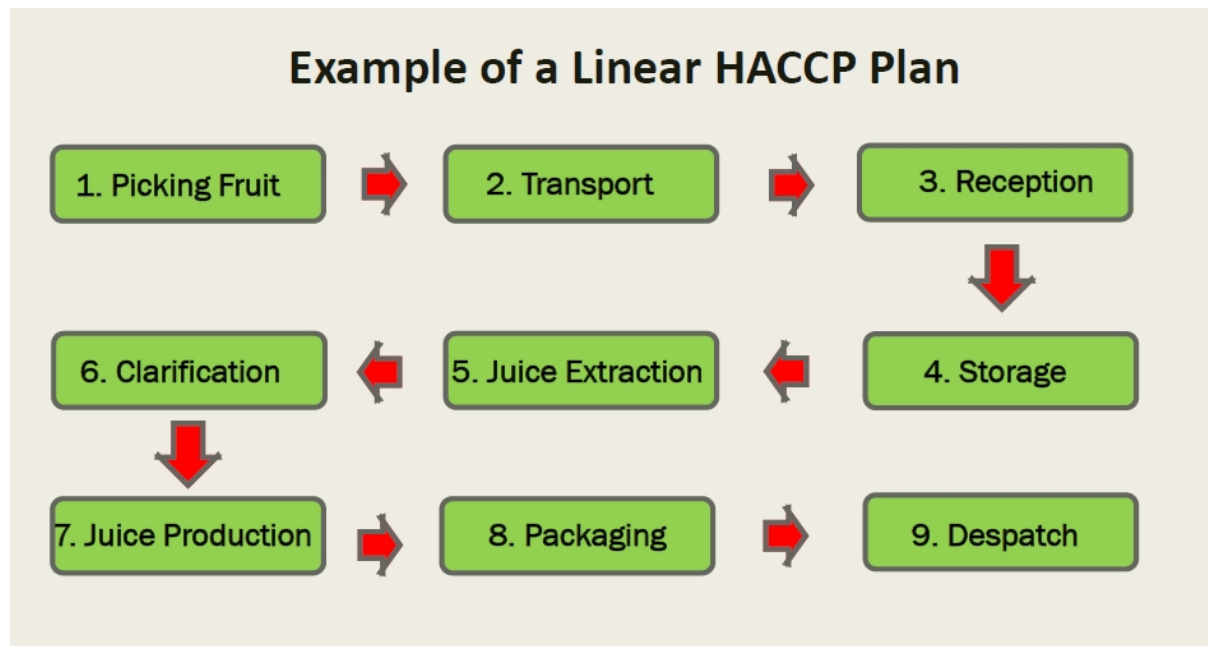
A modular plan produces a plan made up of a series of building blocks or modules.

#### **LINEAR HACCP PLAN**

The linear HACCP plan is most suitable for a basic food production process where only a limited number of products are produced.

For example, a manufacturer of orange juice may choose this approach because the manufacturing process involves a relatively small number of process steps.

However, if the manufacturer decides to extend its product range to include apple, grapefruit and pineapple juices then a modular approach may be more suitable.

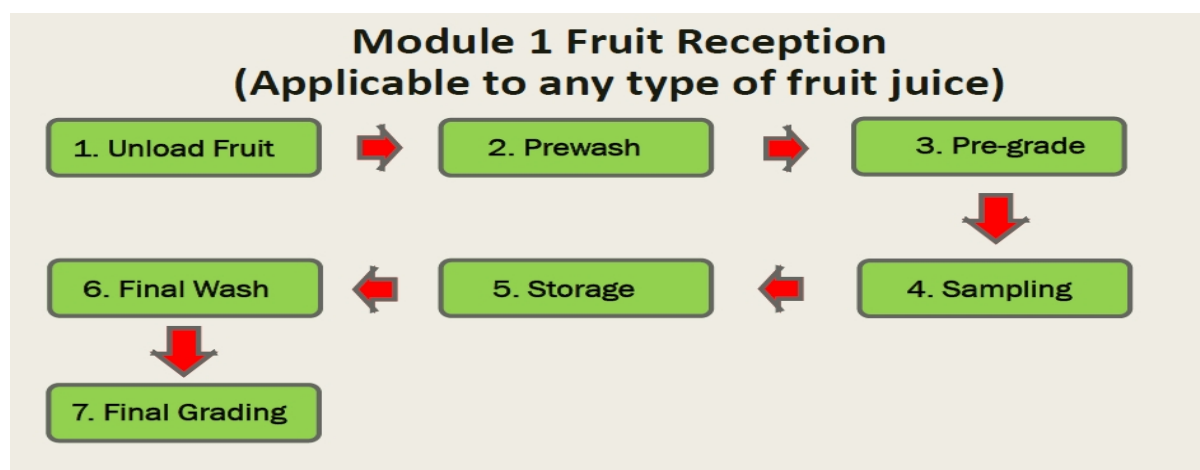


In this example of a “linear HACCP” plan process flows in a simple line from one process step to another.

### MODULAR HACCP PLAN

This is the more common approach (used by many meat processing industries) where the food production process is more complex and typically involves several steps which are shared with other products. The HACCP principles can be applied to specific activities or “modules” which are then added together to make a complete HACCP plan.

For example, a juice manufacturer may identify the following modules which are common to several products. For example: “Module 1 Fruit Reception”. The hazards and controls will be the same for these operations, irrespective of the type of juice produced and so once the HACCP has been completed for each, they can be used wherever relevant for different products.



The diagram shows one module (module 1) of a modular HACCP plan, relating to fruit reception in the production of fruit juices. The module contains steps which follow each other in order. The HACCP plan for each step of module 1 could be used for any product type where the processes involved are the same, because the hazards and controls will also be the same.

## TYPE OF PRODUCT AND HOW IT IS PACKED

You may choose to undertake a HACCP study of an individual product or prefer to group similar products together and include them in the same study.

Whichever you prefer, you should clearly state your choice and include details of any relevant packaging. For example, “Manufacture of vacuum-packed sliced ham” or “Production of individually paper wrapped beef salami”.

## START AND END POINTS OF THE STUDY

The typical study will begin with the intake of ingredients and will end with the despatch of the final product. However, in order to achieve food safety, you may need to consider activities not just within your own establishment but also those carried out by others such as distributors, retailers and customers.

You cannot be sure how your food is handled once it has left your control, but you should consider whether the study needs to include details of the likely way that others will handle your products and take these into account by, for example, providing instructions on the product label and/or suitable packaging for storage and use.

## WHAT HAZARDS WILL THE HACCP PLAN COVER?

The purpose of this step of the scoping process is to identify a “long list” of potential hazards which may be relevant to the production of your food. Hazards are anything which have the potential to cause harm and you will be required to identify hazards which fall into four categories: Physical, Chemical, Microbiological and Allergens.

## TYPES OF POTENTIAL FOOD SAFETY HAZARDS

Potential food safety hazards can be divided into four groups, namely: physical, chemical, microbiological and allergenic hazards.





**Physical hazards** are specifically associated with a food, for example bone fragments, or where a residual risk exists once appropriate pre-requisite controls have been put in place. For example, glass contamination in areas where products are packed in glass containers.

**Chemical hazards** might include, for example, detergent residues from cleaning or chemical residues from farming practices such as antibiotic residues in meat or milk.

**Microbiological hazards** will include relevant bacteria, such as Salmonella, viruses such as norovirus and parasites such as nematodes. In most cases microbiological hazards should be specifically identified rather than merely classifying them by type such as “bacteria” or “viruses”. This is because different microorganisms will have different growth, death and survival characteristics which must be addressed separately in the HACCP plan.

**Food allergens:** There are many foods which may cause allergies or intolerances to susceptible consumers but for the purposes of HACCP only the 14 internationally recognised allergens need to be included in the HACCP plan (15 allergens for businesses in member states of the EAEU or exporters in non-member states who wish to export their products to a member state of the EAEU).

The recognised allergenics are as follows:

The 14 Internationally Recognized Food Allergens (Plus Aspartame & Acesulfame for EAEU markets only)				
				
<b>Peanut</b>	<b>Nuts</b>	<b>Crustacea</b>	<b>Shellfish</b>	<b>Fish</b>
				
<b>Eggs</b>	<b>Milk</b>	<b>Gluten</b>	<b>Soya</b>	<b>Sesame</b>
				<b>Aspartame &amp; Acesulfame – are recognized allergens in the EAEU</b>
<b>Celery</b>	<b>Mustard</b>	<b>Lupin Flour</b>	<b>Sulphur Dioxide</b>	

## POTENTIAL HAZARDS

At this stage, you are simply choosing hazards from a suggested list which you consider might be relevant to your product lines. You will be required to evaluate these hazards, identifying those which are significant and placing them on a "short list" later in the study (guidance sheets 10 & 11).

Feel free to add any other hazards that you can think of but which are not included in the list, but do not get carried away. You should take a realistic approach to this step and only include hazards that are likely to be of concern.

## **RECORD DETAILS OF ANY DOCUMENTS USED IN THE HACCP STUDY**

There are a number of documents that are relevant to your HACCP study but in the section that defines the scope of the HACCP study you need only to record those documents which either set out your procedures for implementing an effective pre-requisite programme (guidance sheet 5) or those documents that you have relied upon to identify hazards.

You may wish to make reference to your prerequisite documentation, industry codes of practice and relevant legislation.

## **COMMON PROBLEMS WITH DEFINING THE SCOPE OF A HACCP STUDY**

Technical information is not properly recorded or is incomplete or inaccurate.

The scope may contain too much or too little detail to be useful – this may indicate that extra training or advice is needed.

Inadequate food safety information or advice is given on or with the product for customers and consumers to handle and consume the food safely.