**OBJECTIVE**:

This work instruction can be used by HUB Users during the product development stage of their product. Allergen control is imperative within the HUB. It is **critical** that the allergens are identified throughout the process, facility, and are accurately declared on the product labels.

This procedure will identify the steps within the product development process that provides clarity which ingredients contain allergens and the potential locations within a process that allergens may become unintentional contaminants, if not noted and identified.

**SCOPE**

This procedure involves the Formulation activities to create the finished product:

* Product/Recipe development stage
* Supplier selection
* Selection of ingredients
* Sub-recipes or sub-ingredients of purchased ingredients

Is there potential of cross-contamination in the following areas through insufficient and inadequate cleaning?

* Storage areas of ingredients – are allergens stored separately? Are they labelled **BOLDY?**
* Ingredient weighing area and equipment
* Mixing or combining ingredients, even if this includes multiple steps – each step is to be considered
* Common processing lines may require planning where products containing allergens use the equipment last, provided the products are compatible for other attributes such as flavour, colour, textures otherwise a full cleaning may be required between products.

The major area that is missed when evaluating potential inclusion of allergens occurs during use of a shared space, shared equipment, utensils, if not sufficiently washed between users, and shared ingredients that are not labeled appropriately.

It is the responsibility of **all** Hub Users to be familiar with and follow the Food Hub Allergen Control program and to ensure all equipment, utensils, are washed and ingredients are accurately labelled and stored in designated areas. If the ingredient does not contain an allergen, it must NOT be stored next to or below an ingredient that contains an allergen.

**REMINDER: ALLERGENS IN CANADA**

Allergens listed in the Canada Food and Drugs Act are:

* Eggs (Eggs)
* Gluten (wheat, rye, barley, and their derivatives)
* Milk (Milk)
* Mustard (Mustard)
* Peanuts (Peanuts)
* Seafood (Fish, Crustaceans and Shellfish)
* Sesame Seeds (Sesame Seeds)
* Soy (Soy)
* Sulphites (Sulphites)
* Tree Nuts (almonds, Brazil nuts, cashews, hazelnuts, macadamia nuts, pecans, pine nuts, and walnuts)
* Wheat (Wheat)

If exporting food products the respective regulations for declaring allergens in those countries must be investigated to ensure accurate labelling of food products.

**ALLERGEN CONTROL PROCEDURES**

Various controls and procedures are in place for the control of allergens as well as providing details of their other food safety practices.

1. **Selection of Suppliers of Ingredients and Packaging – direct contact to the products.**
	1. When creating food products, your customer may dictate what ingredients are preferred and which ones are limited or undesirable based on allergens, flavour, specific nutrients or ingredients, and shelf life. There may also be dietary restrictions or preferences thus the identity and source of the materials become of great importance and often requires verification from the Supplier.
	2. Purchase ingredients from a reputable food ingredient supplier. Request ingredient and/or material specification documents that indicate that it is permitted for use in a food product. This document would indicate any sub-ingredients that are included, should list allergens contained within the ingredient.

The document may also indicate if the ingredient is produced using the same equipment, on the same production line and in the same facility as specified allergens. The manufacturer may define what activities occur when allergens are included and their sanitation practices between products. This latter statement should provide assurance and help with deciding if a declared allergen within the facility has a likelihood of being included in the non-allergen ingredient.

* 1. Purchase food packaging materials from a qualified food packaging supplier. Request documentation that the packaging material has been approved for use to have in direct contact with the food product and will protect the food product from contamination and premature spoilage. Potential allergen ingredients, such as wheat or derivative, may be included in the production of some packaging thus all packaging materials should be investigated, particularly if your product is declared as allergen free.
	2. Some customers require the nature of disposal of packaging materials such as recycling or time to decompose in a landfill. This information may be defined by the local jurisdiction or by a third party.
	3. Chemicals, both for cleaning and those approved for use as food ingredients must be supplied with Safety Data Sheets (SDS) from the supplier to ensure correct use. Some ingredient chemicals may have limits as to the addition into food. If this information is not included on this data sheet the supplier may have additional information or the amount permitted will be included in the food additives section of the Food and Drugs Regulations.
	4. Request how the products are shipped? In their company owned vehicles or do they use a contractor? Is the contractor reviewed by the Supplier? assurance that no cross contamination has occurred with other materials that were shipped or stored in that vehicle? Inspect the vehicle for non-food compatible materials such as odorous
	5. Request a letter of assurance of quality and food safety from the Supplier.
	6. Request ingredient and packaging materials specification documents from the supplier that for ingredients will identify the source material. A reputable food ingredient and packaging supplier will have verifiable food safety programs in place and can provide you with at least a letter of assurance of the quality signed by a Company Executive responsible for quality. Larger companies will have third party verification of their food safety program and its efficacy.
	7. For all ingredients that are purchased and added to a food product, the supplier should provide a Specification document that will indicate the source of the material, the composition if containing multiple ingredients, identify if allergens are contained and if they have adequate cleaning protocols that are followed that will eliminate the potential for cross contamination of allergens from other products that were produced and/or packaged on the same production line. When selecting an ingredient that contains more than a single ingredient, all ingredients and sub-component ingredients must indicate if they contain one of the top 10 allergens in Canada. If exporting products, then additional allergens may be required for disclosure based on the country for shipment.
	8. When assembling a recipe use the Formulation template that includes a space to list the allergens included in that ingredient. This information will assist when it is time to prepare the ingredient statement and allergen declaration for the final product label.
	9. The step-by-step process of preparing and packaging the products must be recorded in logical order. Use the Formulation template to record the logical steps including points of addition of ingredients, mixing instructions, any temperature-based processing (Heating and/or Cooling/Freezing).
1. **Processes that may affect allergen contact.**
2. The **location that ingredients are stored** can positively or negatively affect the potential for unintentional contamination by materials containing allergens. Accurately labelling ingredients that contain allergens with a RED sticker, **ALLERGEN**, posted on the ingredient container will advise all within the HUB of the potential risk of using that ingredient.

The label will also provide a clear indication of where the material is to be stored if there is a designated area for Allergens as well as for other Hub Users to be alerted if using that ingredient or when cleaning up in the storage area.

1. When allergens are stored or used in the Food Hub that are not added to your products it is critical that you **survey your operating area prior to start** to ensure that all spills are cleaned, that all utensils and containers have been washed and sanitized prior to use and that any allergens that are contained within the same area are sealed tightly, labelled, and away from your operating area.

Ideally, these ingredients would be stored in a physical distance that would prevent unintentional use and/or could be tipped or opened and contaminate your work area or the product itself.

As a good Food Hub user clean up as you go to ensure allergens are kept contained and respect your neighbour.

1. When **storing a product that is not fully packaged, such as** **In-Process** in a cooler or freezer, the product container / tray must be labelled and covered if it does contain an allergen and it is good manufacturing practice to do these actions even if the product does not contain an allergen.

All in-process products should also be dated with the initials or other identification of the owner of the products, particularly if retained overnight. Physical separation of products must be considered to prevent unintentional damage to any of the products as well as potential contamination as identified above.

**LABELLING**

To create an accurate label ingredient statement the recipe ingredients must be weighed and identified in the order from greatest amount to least amount added to the recipe.

Any ingredients that have sub ingredients must be identified from the specification document from the supplier and/or the label that was attached to the product.

**RELATED DOCUMENTS**

HUB.A.REC.150 Formulation template

**REVIEW**

This SOP must be reviewed as regulations are changed or at a least annually.

It must also be reviewed when changes occur within the Food Hub that may affect the potential impact of the final products resulting from allergens. This can include the addition of new equipment, new formulations, new or substituted raw materials and new Food Hub Users.