

VITAL Workshop:

These examples are intended to be read in conjunction with the Voluntary Incidental Trace Allergen Labelling (VITAL) procedure and the “Food Industry Guide to Allergen Management and Labelling – 2007 Revised Edition”.

Example One

Cal’s Cannery is producing several canned products. Cal’s Cannery has a documented Allergen Management Plan, which includes their HACCP plan. They have a Vendor Assurance program that ranks their supplier by risk with a corresponding audit schedule. They have a documented and validated cleaning plan. Validation methods include daily visual inspection and ATP swabbing and annual allergen residue swabbing. Products are scheduled for production by allergen status. Production staff are trained in Good Manufacturing Practice (GMP) and food allergens.

Cal’s Cannery makes a range of soups including a Condensed Chicken and Vegetable Soup- a summary of the ingredients in this product is in Table One. The current ingredient listing for this product is:

Condensed Chicken and Vegetable Soup: Water, Wheat Flour, Chicken (9%), Carrots (5.0%), Celery (5.0%), Cream Powder, Onions (2.0%), Maize Starch, Salt, Canola Oil, Flavours (contain egg).

Made on the same line as products containing Fish and Sesame.

May contain traces of Crustacea, Egg, Sesame, Peanuts and Soy)

Cal’s Cannery has recently won the contract to supply a private label Condensed Chicken and Vegetable soup to a retailer. However, the retailer has requested that the ingredient listing is reviewed using VITAL. The current statement has not been formulated using VITAL – VITAL uses a “May be present” precautionary statement and does not allow an allergen (ie egg) to be declared in both the ingredient declaration and the precautionary statement.

Note:

-VITAL users should check that VITAL is suitable for their process/product. Some exemptions for VITAL include particulate allergens, foods formulated for infants and processing equipment where the cross contact allergens are not homogenously mixed. Refer to the VITAL Procedure and/or the Guidelines tab of the VITAL calculator for further information

Table 1: Ingredient Impact Summary

Product: Condensed Chicken and Vegetable Soup Product Code: XD114 Date of Assessment: 15/9/08 Review Date: 15/12/08				
Column 1	Column 2	Column 3	Column 4	Column 5
Ingredient Name	Quantity	Allergen Status (information obtained from PIF, correspondence with suppliers and specification)		
		Intentionally Added	Cross contact	Form of cross contact allergen (Readily Dispersible or Particulate)
Water	63.0%	-	-	
Flour	10.0%	Gluten	-	
Chicken	9.0%	-	-	
Carrots	5.0%	-	-	
Celery	5.0%	-	-	
Cream Powder	3.0%	Milk	-	
Onions	2.0%	-	-	
Maize Starch	2.0%	-	Soy (22ppm)	Soy flour – <u>Readily Dispersible</u>
Salt	0.5%	-	-	
Canola Oil	0.4%	-	Soy (10ppm), Peanut (15ppm)	Soy and peanut oils – <u>Readily Dispersible</u>
Chicken Flavour	0.05%	Egg	Crustacea (10ppm), Milk (10ppm), Sesame (50ppm), Peanut (15ppm), Soy (50ppm)	Shrimp paste, Milk Pwdr, Peanut Oil, Soy Protein Pwdr – <u>Readily Dispersible</u> Sesame Seeds – <u>Particulate</u> (see Step 3)
Onion Flavour	0.05%	-	Crustacea (10ppm), Egg (34ppm), Milk (10ppm), Sesame (50ppm), Peanut (15ppm), Soy (50ppm)	Shrimp paste, Egg Yolk Pwdr, Milk Pwdr, Peanut Oil, Soy Protein Pwdr – <u>Readily Dispersible</u> Sesame Seeds - <u>Particulate</u> (see Step 3)

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Step 1: Ingredient impact (Substances formulated into the product)

Review specifications, correspondence with the supplier, audit reports or other trusted source material to ensure all allergens formulated into the product and present as an ingredient, an ingredient of a compound ingredient, food additive or component of a food additive or processing aid or component of a processing aid are declared in the ingredient list (See Note 3). Refer the Product Information Forms (PIF's) used for this example in the Appendix.

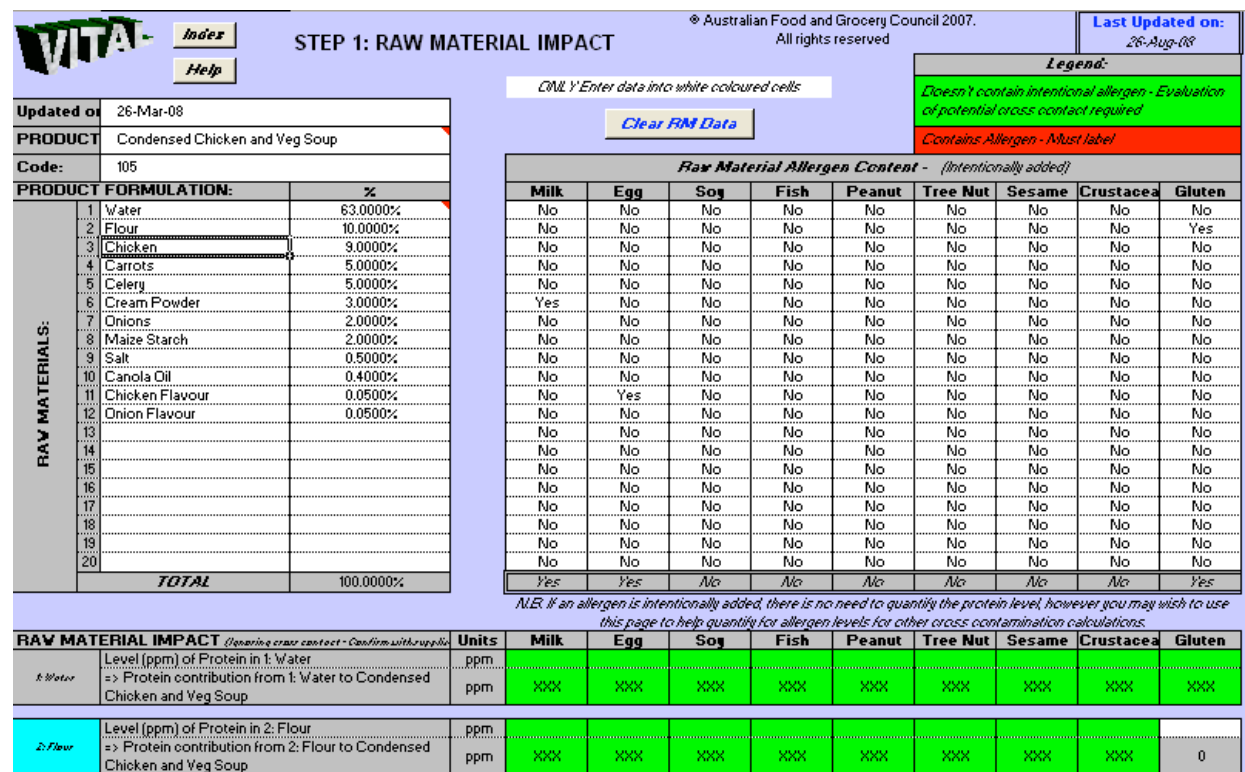
Figure 1: Worksheet "1.RM Impact", VITAL Calculator

The information from the PIF's has been summarised in *Table 1: Ingredient Impact Summary*. This information in Column 3 of Table 1 can be used to complete the "1. RM Impact" worksheet in the VITAL calculator. (See Figure 1.). Enter the date, product details, code and formulation. Use the drop down boxes to select appropriate allergens,

Notes:

1. only enter data in the white coloured cells
2. as each allergen is identified in the VITAL calculator spreadsheet, the corresponding cell at the bottom of the page will open to allow the concentration of protein to be added. When completed, this information can be used to work out cross contact from this product to a product produced on the line immediately after the Condensed Chicken and Vegetable Soup. If you do not intend to use this data, it is not necessary to complete the bottom section of this page.
3. The Australia New Zealand Food Standards Code (ANZSC) requires that intentionally added allergens present as an ingredient, an ingredient of a compound ingredient, food additive or component of a food additive or processing aid or component of a processing aid are declared. This includes cereals containing gluten, crustacea, egg, fish, milk, tree nuts and sesame seeds, peanuts and soybeans.

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STEP 1: RAW MATERIAL IMPACT

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Legend:
Doesn't contain intentional allergen - Evaluation of potential cross contact required
Contains Allergen - Must label

Product Information:
 Updated on: 26-Mar-08
 PRODUCT: Condensed Chicken and Veg Soup
 Code: 105

PRODUCT FORMULATION:

		%
1	Water	63.0000%
2	Flour	10.0000%
3	Chicken	3.0000%
4	Carrots	5.0000%
5	Celery	5.0000%
6	Cream Powder	3.0000%
7	Onions	2.0000%
8	Maize Starch	2.0000%
9	Salt	0.5000%
10	Canola Oil	0.4000%
11	Chicken Flavour	0.0500%
12	Onion Flavour	0.0500%
13		
14		
15		
16		
17		
18		
19		
20	TOTAL	100.0000%

Raw Material Allergen Content - (Intentionally added)

	Milk	Egg	Soy	Fish	Peanut	Tree Nut	Sesame	Crustacea	Gluten
1	No	No	No	No	No	No	No	No	No
2	No	No	No	No	No	No	No	No	Yes
3	No	No	No	No	No	No	No	No	No
4	No	No	No	No	No	No	No	No	No
5	No	No	No	No	No	No	No	No	No
6	Yes	No	No	No	No	No	No	No	No
7	No	No	No	No	No	No	No	No	No
8	No	No	No	No	No	No	No	No	No
9	No	No	No	No	No	No	No	No	No
10	No	No	No	No	No	No	No	No	No
11	No	Yes	No	No	No	No	No	No	No
12	No	No	No	No	No	No	No	No	No
13	No	No	No	No	No	No	No	No	No
14	No	No	No	No	No	No	No	No	No
15	No	No	No	No	No	No	No	No	No
16	No	No	No	No	No	No	No	No	No
17	No	No	No	No	No	No	No	No	No
18	No	No	No	No	No	No	No	No	No
19	No	No	No	No	No	No	No	No	No
20	No	No	No	No	No	No	No	No	No
	Yes	Yes	No	No	No	No	No	No	Yes

N.B. If an allergen is intentionally added, there is no need to quantify the protein level, however you may wish to use this page to help quantify for allergen levels for other cross contamination calculations.

RAW MATERIAL IMPACT (Ignoring cross contact - Confirm with supplier)

	Units	Milk	Egg	Soy	Fish	Peanut	Tree Nut	Sesame	Crustacea	Gluten
1: Water	Level (ppm) of Protein in 1: Water									
	=> Protein contribution from 1: Water to Condensed Chicken and Veg Soup	ppm	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
2: Flour	Level (ppm) of Protein in 2: Flour									
	=> Protein contribution from 2: Flour to Condensed Chicken and Veg Soup	ppm	xxx	xxx	xxx	xxx	xxx	xxx	xxx	0

Step 2: Cross Contact Sources

Cross contact sources, for the purposes of the VITAL assessment, can come from

- (i) Ingredient Cross Contact or
- (ii) Processing Cross Contact.

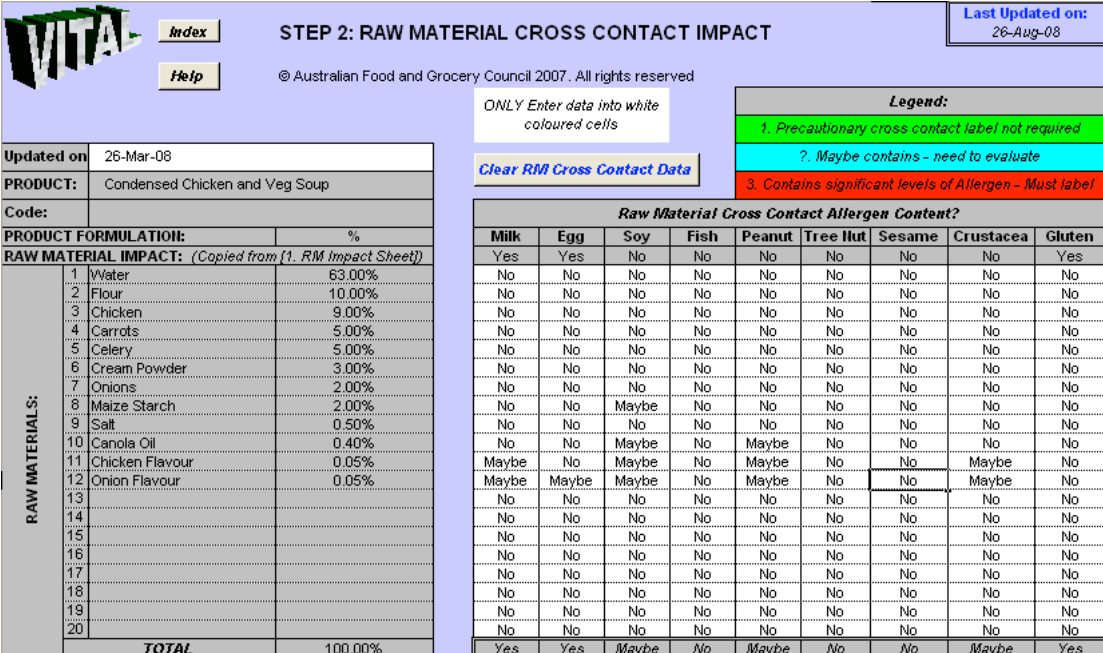
(i) Ingredient Cross Contact: this accounts for cross contact that could occur throughout the supply chain for each raw ingredient.

The cross contact sources for the ingredients have been summarised in Column 4 of *Table 1: Ingredient Impact Summary*. This information can be used to complete the “2. RM Cross Contact” worksheet in the VITAL calculator. (see Figure 2.)

Notes:

1. Cross contact should be investigated at all stages of the supply chain eg shared harvesting and storage or cross contact when your supplier processes and/or packs the ingredient.
2. The cross contact from sesame in the Chicken & Onion Flavours have not been included. Particulates are not included in the scope of the VITAL calculator and should be considered using the VITAL decision tree.

Figure 2: Worksheet “2. RM Cross Contact”, VITAL Calculator



STEP 2: RAW MATERIAL CROSS CONTACT IMPACT

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ONLY Enter data into white coloured cells

Clear RM Cross Contact Data

Legend:

- 1. Precautionary cross contact label not required
- ? Maybe contains - need to evaluate
- 3. Contains significant levels of Allergen - Must label

Updated on:		26-Mar-08	
PRODUCT:		Condensed Chicken and Veg Soup	
Code:			
PRODUCT FORMULATION:		%	
RAW MATERIAL IMPACT: (Copied from 1. RM Impact Sheet)			
RAW MATERIALS:	1	Water	63.00%
	2	Flour	10.00%
	3	Chicken	9.00%
	4	Carrots	5.00%
	5	Celery	5.00%
	6	Cream Powder	3.00%
	7	Onions	2.00%
	8	Maize Starch	2.00%
	9	Salt	0.50%
	10	Canola Oil	0.40%
	11	Chicken Flavour	0.05%
	12	Onion Flavour	0.05%
	13		
	14		
	15		
	16		
	17		
	18		
	19		
	20		
TOTAL		100.00%	

Raw Material Cross Contact Allergen Content?								
Milk	Egg	Soy	Fish	Peanut	Tree Nut	Sesame	Crustacea	Gluten
Yes	Yes	No	No	No	No	No	No	Yes
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	Maybe	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	Maybe	No	Maybe	No	No	No	No
Maybe	No	Maybe	No	Maybe	No	No	Maybe	No
Maybe	Maybe	Maybe	No	Maybe	No	No	Maybe	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
Yes	Yes	Maybe	No	Maybe	No	No	Maybe	Yes

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Step 2: continued -

After entering the Ingredient Cross Contact details at the top of the “2. RM Cross Contact” worksheet in the VITAL calculator, the corresponding cells below will change colour.

In this example, because milk, egg and gluten have been identified as intentionally added allergens, which must be declared on the label, these columns turn red. They do not require any cross contact details to be entered.

Data is required to be entered into the white cells – ie any cross contact allergens which are additional to those intentionally added to the product. The data can be either in the first seven rows which refers to your suppliers process to calculate the cross contact protein contribution or, if supplied, directly in the *Alternative Calculation* section. (See Figure 3.)

Note:

-Figure 3 shows only Onion Flavour and Chicken Flavour – information is also required to be entered for Maize Starch and Canola Oil.

Figure 3: Worksheet “2. RM Cross Contact”, VITAL Calculator

11: Chicken Flavour	% of Allergen RM used in product manufactured prior to 11: Chicken Flavour	%									
	Gty of previous product residue likely to occur at all designated hang ups	g									
	% Protein level of Allergenic Raw Material	%									
	=> Qty of protein in Residue	mg	XXX	XXX	?? Data	XXX	?? Data	XXX	XXX	?? Data	
	Batch Size of 11: Chicken Flavour exposed to Previous Product Residue	kg									
	Level of protein from Cross contact in 11: Chicken Flavour	ppm	XXX	XXX	No Data	XXX	No Data	XXX	XXX	No Data	
	Calc protein contribution to Condensed Chicken and Veg Soup	ppm	XXX	XXX	No Data	XXX	No Data	XXX	XXX	No Data	
	OR Alternative Calculation by:										
	Supplier Info: 11: Chicken Flavour protein Cross Contact Level	ppm			50		15			10	
	=> 11: Chicken Flavour Cross Contact protein contribution to Condensed Chicken and Veg Soup	ppm	XXX	XXX	0	XXX	0	XXX	XXX	0	XXX
12: Onion Flavour	% of Allergen RM used in product manufactured prior to 12: Onion Flavour	%									
	Gty of previous product residue likely to occur at all designated hang ups	g									
	% Protein level of Allergenic Raw Material	%									
	=> Qty of protein in Residue	mg	XXX	XXX	?? Data	XXX	?? Data	XXX	XXX	?? Data	
	Batch Size of 12: Onion Flavour exposed to Previous Product Residue	kg									
	Level of protein from Cross contact in 12: Onion Flavour	ppm	XXX	XXX	No Data	XXX	No Data	XXX	XXX	No Data	
	Calc protein contribution to Condensed Chicken and Veg Soup	ppm	XXX	XXX	No Data	XXX	No Data	XXX	XXX	No Data	
	OR Alternative Calculation by:										
	Supplier Info: 12: Onion Flavour protein Cross Contact Level	ppm			50		15			10	
	=> 12: Onion Flavour Cross Contact protein contribution to Condensed Chicken and Veg Soup	ppm	XXX	XXX	0	XXX	0	XXX	XXX	0	XXX

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Step 2: continued -

ii) Processing Cross Contact: accounts for cross contact at the manufacturing facility where the product is made. For example, previously run product may cross contact and transfer allergen-containing material. This data is entered in the “3. Processing Impact” worksheet of the VITAL calculator. (See Figure 4.)

Cal’s Cannery makes 4 different soup products on the same line. Scheduling is done due to allergen load. A water flush is performed between each soup variety and a full chemical clean is performed at the end of the day. The chemical cleaning process has been validated and shows no detectable allergens after a chemical clean. During standard production, an allergen-free Vegetable Soup is run first, followed by a water-flush, then the Condensed Chicken and Vegetable Soup. The HACCP team discussed assuming that the soups were always run in this order as this would mean that no cross contact allergens due to processing would need to be considered. This idea was rejected as processing conditions could mean that occasionally, the Condensed Chicken and Vegetable could be run in a different order. The HACCP team decided to set up a “worst case” allergen load taking into account all possible scenarios. This also means that the processing cross contact needs to be considered only once, rather than taking into account each combination of the product schedule. All varieties of soup run on the line were reviewed and the allergen-containing ingredients identified. The ingredients were entered into the “3. Processing Impact” worksheet of the VITAL calculator (see Figure 4). The team identified the following allergenic ingredients used on the soup line at Cal’s Cannery: fish, milk and sesame. The recipes which used the maximum amount of these ingredients are Fish Soup (contains 20% cod), Asian Soup (contains 1.0% sesame oil) and Creamy Mushroom Soup (contains 10% cream).

Figure 4: Worksheet “3.Processing Impact”. VITAL Calculator

Updated on:		26-Mar-08	STEP 3: PROCESSING IMPACT									
PRODUCT:		Condensed Chicken and Veg Soup	© Australian Food and Grocery Council 2007. All rights reserved.									
Code:		105	Last Updated on: 26-Aug-08									
Combined RM & Cross Contact IMPACT: (From [2. RM Cross Contact Sheet])			Legend: 1. Precautionary cross contact label not required 2. Maybe contains - need to evaluate 3. Contains significant levels of Allergen - Must label									
List Allergenic RMs in Previous Product	PREVIOUS PRODUCT NAME:		Milk	Egg	Soy	Fish	Peanut	Tree Nut	Sesame	Crustacea	Gluten	
	Cod in Fish Soup	20.0000%	Yes	Yes	Maybe	No	Maybe	No	No	Maybe	Yes	
	Sesame in Asian Soup	1.0000%	No	No	No	Yes	No	No	No	No	No	
	Cream in Creamy Mushroom	10.0000%	No	No	No	No	No	No	No	No	No	
PROCESSING CROSS CONTACT IMPACT:			Units	Milk	Egg	Soy	Fish	Peanut	Tree Nut	Sesame	Crustacea	Gluten
Cod in Fish Soup	% of Cod in Fish Soup in Product manufactured prior to Condensed Chicken and Veg Soup	%				20.000%						
	Qty of residual Previous Product likely to occur at all hang ups	g				2000						
	% Protein level of Cod in Fish Soup	%				20.0%						
	=> Qty of protein in Residue of Previous Product	mg	XXX	XXX	XXX	80000.0	XXX	XXX	XXX	XXX	XXX	
	Batch Size of Condensed Chicken and Veg Soup exposed to Residue	kg				500						
=> Level of protein from Previous Product Cross contact in Condensed Chicken and Veg Soup	ppm	XXX	XXX	XXX	160.0	XXX	XXX	XXX	XXX	XXX		
Sesame in Asian Soup	% of Sesame in Asian Soup in Product manufactured prior to Condensed Chicken and Veg Soup	%							1.000%			
	Qty of residual Previous Product likely to occur at all hang ups	g							2000			
	% Protein level of Sesame in Asian Soup	%							22.0%			
	=> Qty of protein in Residue of Previous Product	mg	XXX	XXX	XXX	XXX	XXX	XXX	4400.0	XXX	XXX	
	Batch Size of Condensed Chicken and Veg Soup exposed to Residue	kg							500			
=> Level of protein from Previous Product Cross contact in Condensed Chicken and Veg Soup	ppm	XXX	XXX	XXX	XXX	XXX	XXX	8.8	XXX	XXX		

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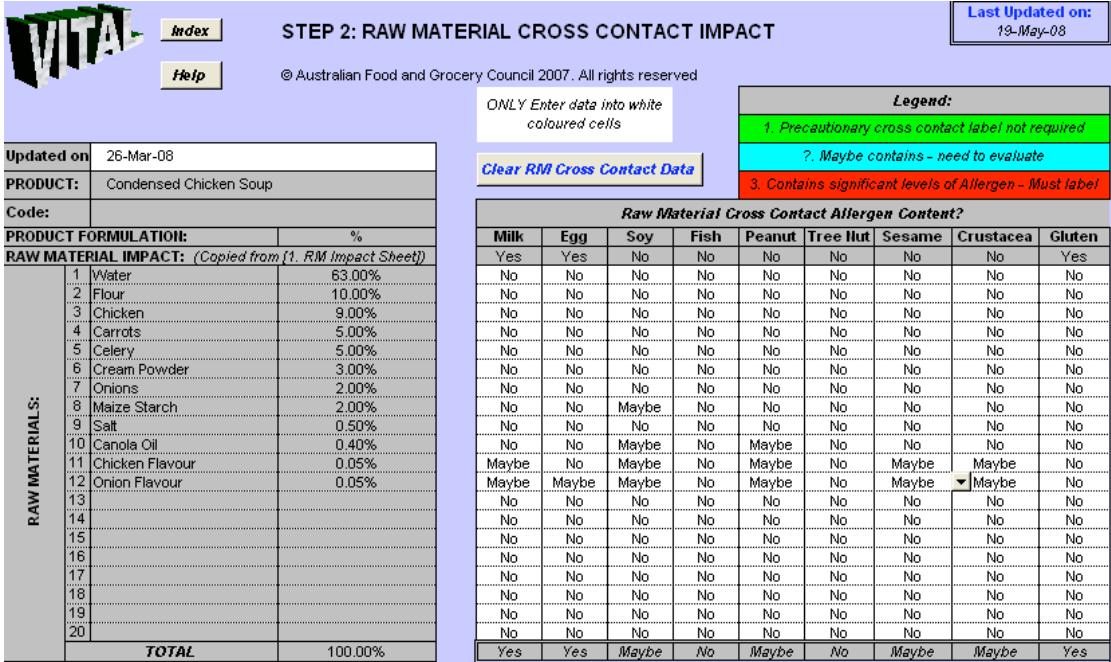
The team also needed to quantify the “worst case” amount of product that could hang up in the line and transfer to the following product. The engineering and production managers reviewed the production line for hang up points where product could hangup after the water flush when all procedures are followed. The procedure after a water flush includes flushing the line with 300kg of water, manually hosing out the filler bowl and filler heads, running water through the filler heads and discarding the first 100 cans of soup run from the 25 head filler. Visual inspection after the flush showed that some diluted product was still in a “low point” of pipework between the kettle and the filler and product in the bottom of the filler. They estimated the total amount of product was 2kg by using pipe volume and adding that to a visual estimate of the product that could be left in the bottom of the filler. This information along with the protein levels from the allergenic ingredients (determined from the VITAL Standard Protein Reference Table on the vitalallergen.com website) were entered into the VITAL calculator (see Figure 4). The Condensed Chicken and Veg Soup is a minimum 500kg batch size.

Step 3: Form of cross contact

The cross contact allergens must be identified as particulate (ie localised concentration) or readily dispersible (ie potentially uniform).

Cal's Cannery identifies that sesame seeds are a particulate allergen in the chicken and onion flavours. Upon further investigation with the supplier and a visit to the facility, the Cal's Cannery Quality team perform a risk analysis and conclude that it is highly unlikely for whole sesame seeds to contaminate the flavours. If a whole sesame seed does enter the flavour, the flavours go through a grinding and sieving process – ie the seed powder would become readily dispersible. The flavour supplier agrees to make the sieving process a Critical Control Point (CCP) in their process. They also calculate a “worst case scenario” for sesame protein concentration using VITAL and provide an updated PIF to Cal's Cannery reflecting this change. The Raw Material Cross Contact worksheet in the VITAL calculator is reviewed and sesame is added as a “readily dispersible” cross contact allergen. (See Figure 5.) The concentration of the sesame seed protein must also be entered from the PIF.

Figure 5: Worksheet “2. RM Cross Contact”, VITAL Calculator



STEP 2: RAW MATERIAL CROSS CONTACT IMPACT

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ONLY Enter data into white coloured cells

Clear RM Cross Contact Data

Legend:

- 1. Precautionary cross contact label not required
- ? Maybe contains - need to evaluate
- 3. Contains significant levels of Allergen - Must label

PRODUCT FORMULATION:		%
RAW MATERIAL IMPACT: (Copied from [1. RM Impact Sheet])		
1	Water	63.00%
2	Flour	10.00%
3	Chicken	9.00%
4	Carrots	5.00%
5	Celery	5.00%
6	Cream Powder	3.00%
7	Onions	2.00%
8	Maize Starch	2.00%
9	Salt	0.50%
10	Canola Oil	0.40%
11	Chicken Flavour	0.05%
12	Onion Flavour	0.05%
13		
14		
15		
16		
17		
18		
19		
20	TOTAL	100.00%

Raw Material Cross Contact Allergen Content?								
Milk	Egg	Soy	Fish	Peanut	Tree Nut	Sesame	Crustacea	Gluten
Yes	Yes	No	No	No	No	No	No	Yes
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	Maybe	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	Maybe	No	Maybe	No	No	No	No
Maybe	No	Maybe	No	Maybe	No	Maybe	Maybe	No
Maybe	Maybe	Maybe	No	Maybe	No	Maybe	Maybe	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	No
Yes	Yes	Maybe	No	Maybe	No	Maybe	Maybe	Yes

Note:

-VITAL assumes that the allergenic protein from cross contact sources is readily dispersible. If any allergens are identified as particulate, then they require Action Level 2 or Action Level 3 labelling (see Step 7).

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Step 4: Calculation of allergen quantity

After completing the “1. RM Impact”, “2. RM Cross Contact” and “3. Processing Impact” worksheets in the VITAL calculator, go to the “4.Summary” tab. The summary (See Figure 6) shows that milk, egg and gluten are intentionally added allergens and must be included in the ingredient listing. Fish and sesame are cross contact allergens that may be present in an amount likely to cause a reaction in a sensitive consumer. Soy, peanut and crustacea were also identified as cross contact allergens but are likely to be present at a level below that required to cause a reaction in a sensitive consumer and therefore, it is recommended that they not be included on the label. Dilution or concentration rates are added as appropriate.

The Condensed Chicken and Vegetable Soup is intended to be diluted with milk or water prior to serving. When the product is diluted, this will reduce the concentration of potential cross contact allergens in the soup. The Quality Team at Cal’s Cannery decide NOT to include a dilution factor, to take into account the worst case scenario of the product being consumed undiluted.

Figure 6: Worksheet “4.Summary”, VITAL Calculator

4. DILUTION OR CONCENTRATION:		Factor	Milk	Egg	Soy	Fish	Peanut	Tree Nut	Sesame	Crustacea	Gluten
Dilution: (e.g. Soup mix where water is added)	<i>Enter as % added, [Weight water added / weight original product] i.e. 200ml water added to 100g product is a 2:1 dilution, 200%</i>	0%									
Concentration: (e.g. Baking)	<i>Enter as % reduction, [Final baked product / Original unbaked product weight]</i>	0%									
GRAND TOTAL - RM & Processing Cross Contact, & Concentration / Dilution Impact [As Consumed]	Units		Milk	Egg	Soy	Fish	Peanut	Tree Nut	Sesame	Crustacea	Gluten
	ppm		0.0	0.0	0.5	160.0	0.1	0.0	8.9	0.0	0.0
	Labelling		Must label	Must label	No Label	May be present: Fish	No Label	No Label	May be present: Sesame	No Label	Must label

Note:

-the VITAL calculations can be done independently of the VITAL calculator. The calculator is provided to assist however calculations could be performed manually.

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Step 5: Review against VITAL grid

The VITAL grid outlines the labelling Action Levels for cross contact allergens. If the VITAL calculator is used, it will automatically generate Action Levels – the grid will be required to be used if the calculations are manually performed.

Figure 7: VITAL Grid, vitalallergen.com

VITAL GRID as at 02 July 2007									
	Allergen Milk*	Egg*	Soy [^]	Fish*	Peanuts*	Tree Nuts*	Sesame Seed*	Crustacea*	Gluten#
Action Level 1 (ppm)	<5	<2	<10	<20	<2	<2	<2	<2	<20
Action Level 2 (ppm)	5 - 50	2 - 20	10 - 100	20 - 200	2 - 20	2 - 20	2 - 20	2 - 20	20 - 100
Action level 3 (ppm)	>50	>20	>100	>200	>20	>20	>20	>20	>100

* mg/kg (ppm) of total protein
 # Gluten includes all gluten type proteins as defined in the Food Standards Code
 ^The Action Level for soy is highly conservative

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Step 6: Review cross contact options

All cross contact allergens and their impact on labelling have been identified. Where possible, cross contact allergens should be reduced or eliminated by reviewing processing procedures/equipment and/or working with suppliers.

The Cal's Cannery have identified that any soup variety which is produced directly after the Fish Soup, is at risk of having a concentration of fish allergen sufficient to cause an adverse reaction in a sensitive consumer. The product scheduling procedure is revised to ensure that the Fish Soup is always run immediately prior to a chemical clean. The processing cross contact risk of fish is removed from the "3. Processing Impact" worksheet of the VITAL calculator. The revised summary is shown in Figure 8.

Figure 8: Revised worksheet "4.Summary", VITAL calculator

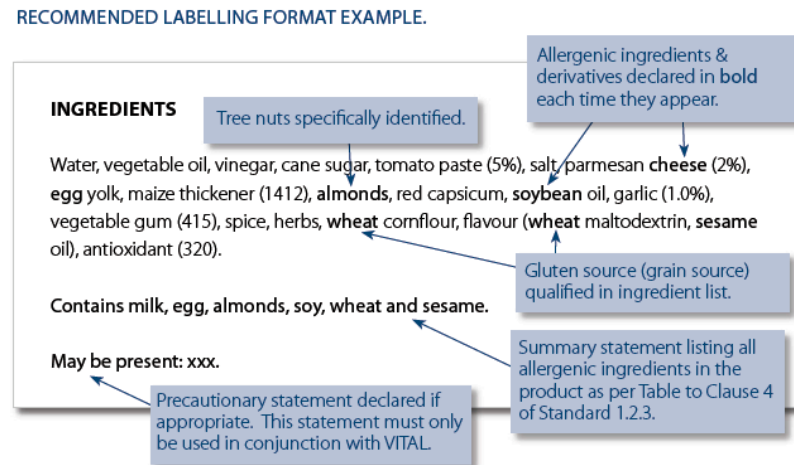
	Units	Milk	Egg	Soy	Fish	Peanut	Tree Nut	Sesame	Crustacea	Gluten
GRAND TOTAL - RM & Processing Cross Contact, & Concentration / Dilution Impact {As Consumed}	ppm	0.0	0.0	0.5	0.0	0.1	0.0	8.9	0.0	0.0
	Labelling	<i>Must label</i>	<i>Must label</i>	<i>No Label</i>	<i>No Label</i>	<i>No Label</i>	<i>No Label</i>	<i>Maybe present: Sesame</i>	<i>No Label</i>	<i>Must label</i>

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Step 7: Determination of statement

VITAL recommends the use of the labelling format from “Food Industry Guide to Allergen Management and Labelling – 2007 Revised Edition”. (See Figure 9.)

Figure 9: Extract from “Food Industry Guide to Allergen Management and Labelling – 2007 Revised Edition”, p11.



The revised ingredient statement is:

Condensed Chicken and Vegetable Soup: Water, **Wheat** Flour, Chicken (9%), Carrots (5.0%), Celery (5.0%), **Cream** Powder, Onions (2.0%), Maize Starch, Salt, Canola Oil, Flavours (contains **Egg**).

Contains gluten, milk and egg.

May be Present: Sesame

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Step 8: Ongoing monitoring of incidents and changes

All assumptions made during VITAL calculations should be recorded. They can be recorded in the Allergen Management Plan or the "Assumptions" worksheet in the VITAL calculator.

When any of the assumptions change (eg new procedures, new products, different suppliers) then the VITAL assessment should be reviewed.

Assumptions for this example could include:

- date/identification of PIF's
- details of correspondence with the chicken flavour supplier with regard to sesame seeds
- production schedule version number showing that Fish Soup always precedes a chemical clean
- product listing showing other products run on the same line , emails etc used for this example
- procedure version of water flush procedure
- processing assumptions used –eg fish soup is always made preceding a chemical clean.
- products which were considered for processing cross contact

The VITAL calculations should be reviewed, in conjunction with the HACCP plan. For example, VITAL may need to be reviewed when new recipes are formulated, ingredient suppliers or specifications change, new ingredients are introduced to the site, processing conditions change (equipment, cleaning, pipework) etc.

Incidents such as errors in processing or consumer feedback should also be considered when reviewing the VITAL calculations.