

# Allergen Bureau

## What the FAO : WHO needs to know about what the Allergen expert panel said?

NZIFST Conference

5 July 2022

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Informing the  
food industry



# Allergen Bureau

- Membership based organisation established to provide food industry with rapid responses to questions about allergen risk management in food ingredients and manufactured foods
- Established in 2005, pre-competitive, 'not-for-profit', Allergen Bureau directors provide voluntary, unpaid services

Become a member

## Global Member



## Full Members



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# CODEX - GSLPF

- Many countries adopt fully or partially CODEX – General Standard for the Labelling of Pre-packaged Foods (GSLPF) – [CODEX STAN 1-1985 rev 2018]
- Since 1999, GSLPF has included the list of 8 major Foods known to cause IgE-mediated food allergy.
- Questions were raised by Codex Committees on Food Labelling (CCFL) and on Food Hygiene (CCFH)
- **Ad Hoc Joint FAO/WHO Expert Consultation on Risk Assessment of Food Allergens** started work in Dec 2020
- All 6 Vital Scientific Expert Panel (VSEP) members were invited to join this Expert consultation, and also included other regular FAMS speakers.



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## Ad Hoc Joint FAO/WHO Expert Consultation on Risk Assessment of Food Allergens Aims

1. Validating and updating the list of foods and ingredients in the GSLPF based on risk assessment;
2. Establishing threshold levels in foods of the priority allergens;
3. Evaluating the evidence in support of precautionary labelling.



## **Part 1:**

# **Review and validation of Codex priority Allergen list through risk assessment**

Are the criteria for assessing additions and exclusions still current and appropriate?

And therefore:

- Are there foods that should be added or deleted from the list?
- Clarification of allergen groupings?
- Can certain foods, such as highly refined foods, be exempted from mandatory declaration?





## **Part 1:** **Review and validation of Codex priority Allergen list through risk assessment**


Evaluated “The Big 8” and other food allergens based on 3 criteria:

- ✓ community prevalence
- ✓ severity (objective reactions to a food/ingredient such as anaphylaxis)
- ✓ potency of food/ingredient (amount of the food/ingredient required to cause objective symptoms).

# Part 1: Recommendations

- Recommended global priority allergens should be limited to:

- ✓ Cereals containing gluten (i.e., wheat & other Triticum species, rye & other Secale species, barley & other Hordeum species & their hybridized strains),
- ✓ Crustacea
- ✓ Milk
- ✓ Specific tree nuts (almond, cashew, hazelnut, pecan, pistachio and walnut).
- ✓ Eggs
- ✓ Peanuts
- ✓ Fish
- ✓ Sesame

- Recommended that some allergens such as: buckwheat, oats, celery, lupin, mustard, soybeans and Brazil nuts, macadamia and pine nuts **should not** be included in the CODEX listing, but instead included as required in individual countries
-  Watch list for CODEX: pulses, insects, kiwi fruit...





## ***Part 2:*** **Review & establish threshold levels in foods of priority allergens for use in PAL**

1. What are the threshold levels for the priority allergens below which the majority of allergic consumers would not suffer an adverse reaction?
2. For the priority allergens, what are appropriate analytical methods for testing food and surfaces?
3. What should be the minimum performance criteria for these different analytical methods?





## **Part 2:** **Review & establish threshold levels in foods of priority allergens for use in PAL**

4 approaches were considered:

1. Analytical-based –  
*similar to approach currently in Switzerland & Japan*
2. No Observed Adverse Effect Level [NOAEL] +  
Uncertainty Factor [UF] – **VITAL 1**
3. Benchmark Dose combined or not with the application  
of a Margin of Exposure - **VITAL 2.0 & 3.0**
4. Probabilistic Hazard Assessment –  
*option 3 with a probabilistic modelling overlay*



## Part 2: Recommendations

- ✓ Based around a Reference Dose (RfD) approach similar to VITAL 2.0
- ✓ Use Eliciting Dose ED05.  
(Up to 5% of reactions at both ED01 & ED05 could be classed as anaphylaxis, but none were severe.)
- ✓ Simplify RfD by rounding ED05 down to 1 significant figure.
- ✓ Analytical results to be standardised as mg total protein of allergenic food per kg of food.

## Part 2: Recommendations – VITAL 3 vs ED05



	RfD Recommendation (mg total protein from the allergenic source)	VITAL 3.0
Walnut (and Pecan*)	1.0	0.03
Cashew (and Pistachio*)	1.0	0.05
Almond (**)	1.0	0.1
Peanut	2.0	0.2
Egg	2.0	0.2
Milk	2.0	0.2
Sesame	2.0	0.1
Hazelnut	3.0	0.1
Wheat	5.0	0.7
Fish	5.0	1.3
Shrimp	200	25




## **Part 3: Review and establish precautionary labelling in foods of the priority allergens**

- I. What methods to determine whether allergen cross-contact is reasonably likely to occur after cleaning, & the level of cross-contact?
- II. Guidance for using PAL, based on the use of scientifically based threshold levels
- III. How can thresholds be used by FBOs to determine:
  - the extent cleaning removes an allergen to minimise risk to allergic consumers;
  - whether an ingredient that contains a low-level allergen (e.g. an ingredient with a PAL) warrants control of its use to prevent cross-contact





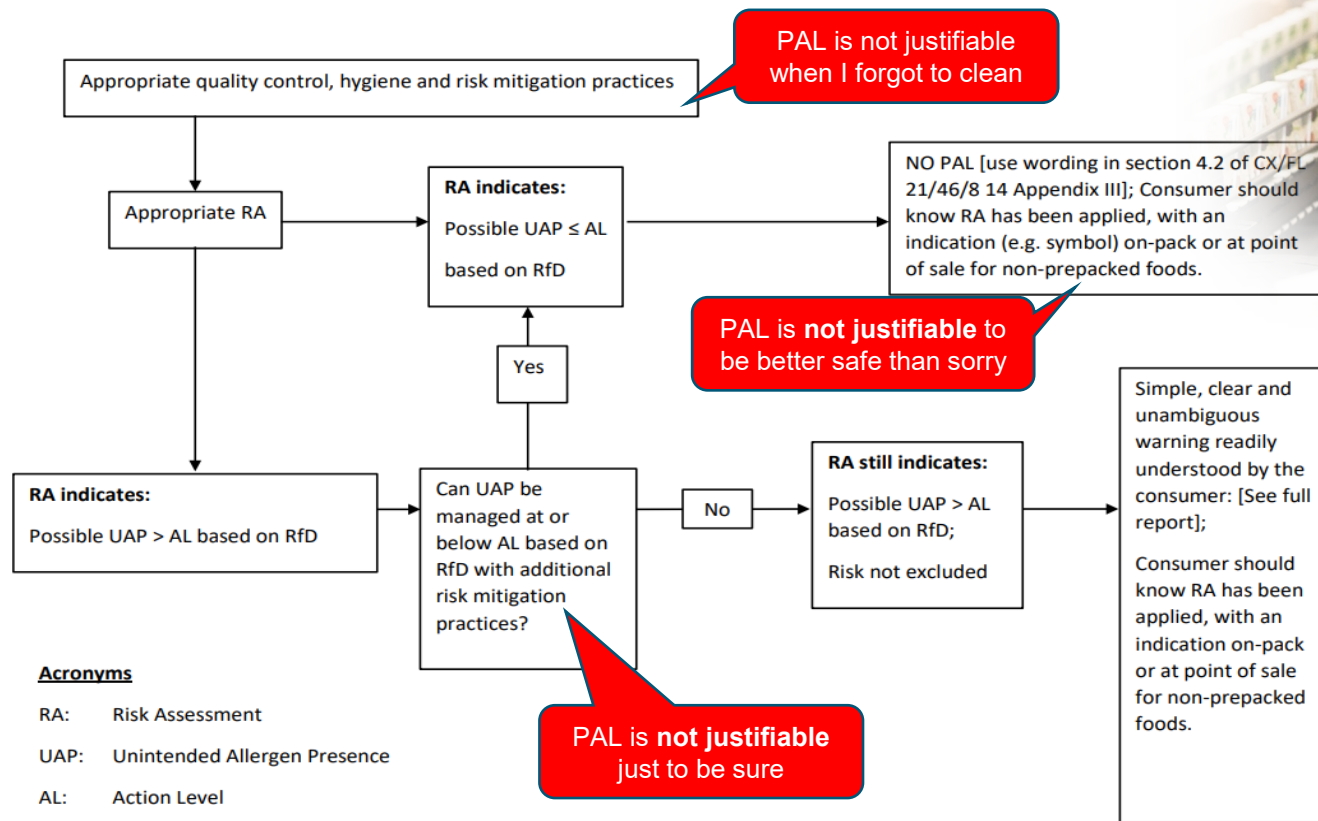
## Part 3: Recommendations

- PAL only when Unintended Allergen Presence (UAP),  cannot be prevented and exceeds RfD
- Provide label indication (e.g. using a symbol) that  a qualified RA has been done, irrespective of RA outcome
- If RfD not established for a particular priority allergenic food, an estimated RfD can be used
- Compliance with existing Codex codes of practice,  good allergen management are a prerequisite, to ensure that the level and frequency of UAP is minimized
- PAL to the consumer should be simple, clear, unambiguous and not false or misleading, with use of a single unified and harmonized wording, and thus “**is not suitable**” for them.
- Education of allergic consumers and other relevant stakeholders is critical, to ensure understanding of the applied principles and the implications of the chosen phraseology





# Part 3: Recommendations



## Acronyms

RA:	Risk Assessment
UAP:	Unintended Allergen Presence
AL:	Action Level
RfD:	Reference Dose



# Joint FAO/WHO Expert Consultation on Risk Assessment of Food Allergens



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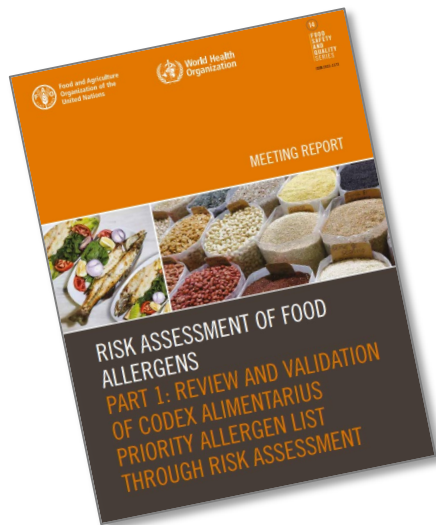


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Part 1: Review and validation of Codex priority allergen list through risk assessment (Nov 20 – Feb 21)

Part 2: Review and establish threshold levels in foods of the priority allergens (Mar 21 – Apr 21)

Part 3: Review and establish precautionary labelling in foods of the priority allergens (Oct 21 – Nov 21)



- Achieved consensus on recommended revision to global priority allergens
- Established threshold levels (ED05) for these priority allergens and reviewed available analytical capabilities for the monitoring of food allergens.
- To be effective, PAL should only be used when the level of Unintended Allergen Presence (UAP), demonstrated through risk assessment, exceeds established risk-based threshold values for a particular food allergen

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# The VITAL Standard

- Voluntary
- Consumer visibility
- Cost effective
- Internationally recognised
- Complements a GFSI Food Safety Certification
- Robust
- Product specific
- Auditable

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# Working group on Consumption data

- Food Category Consumption data rather than nominated Reference Amounts?
- Another level of consistency and robustness
- Working group activity  
TNO and AB have ongoing discussions around how consumption data can inform risk assessment.

*Watch the AB website for more information.*



# Key Tools....

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# Reduce the risk of labelling errors

Are you and your  
suppliers aware of the  
**Allergen Risk Review**  
website?

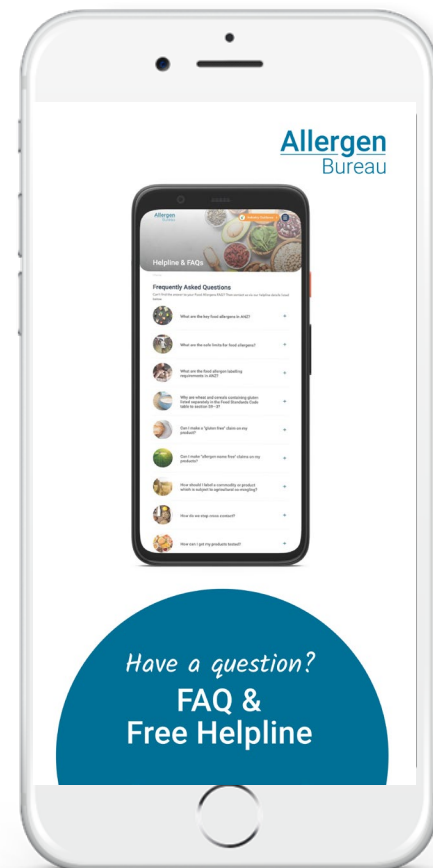
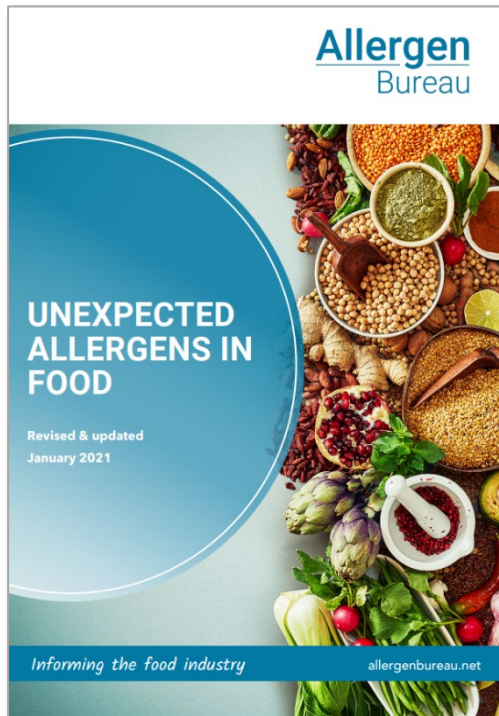
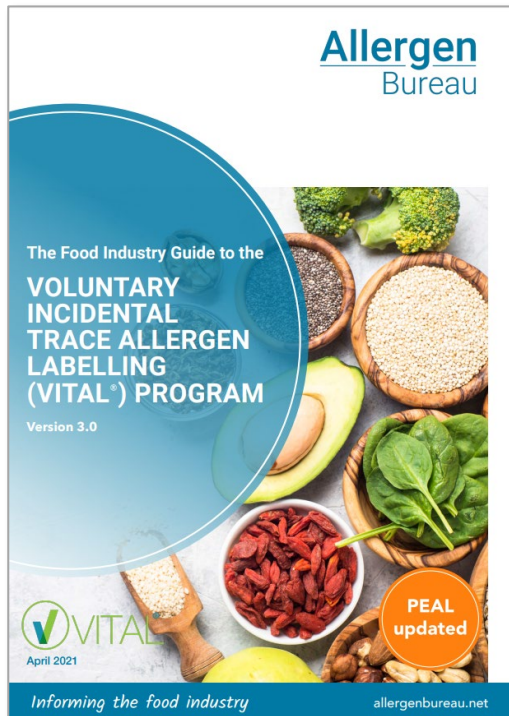
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[Factory Map - ARRW](#)

# Industry Guidance

Access via the Allergen Bureau website > [Resources](#)



## Other Useful references

- **MPI:** [Allergen labelling - Knowing what's in your food and how to label it \(mpi.govt.nz\)](https://www.mpi.govt.nz/allergen-labelling-knowing-whats-in-your-food-and-how-to-label-it/)
- **FSANZ:** [Food allergen portal \(foodstandards.gov.au\)](https://www.foodstandards.gov.au/)
- **CODEX:** [Code of Practice on Food Allergen Management for Food Business Operators](https://www.codexalimentarius.org/code-of-practice-on-food-allergen-management-for-food-business-operators/)
- **ILSI EU:** [Practical Guidance on the application of Food Allergen Quantitative Risk Assessment within Food Operations](https://www.ilsieurope.eu/practical-guidance-on-the-application-of-food-allergen-quantitative-risk-assessment-within-food-operations/)



# THANK YOU

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