



# FOOD ALLERGEN

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# CONTENT

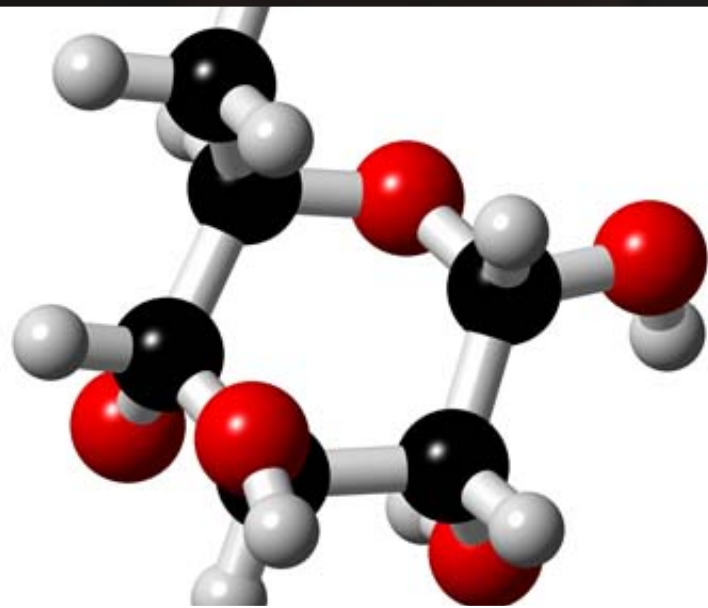


Types of food

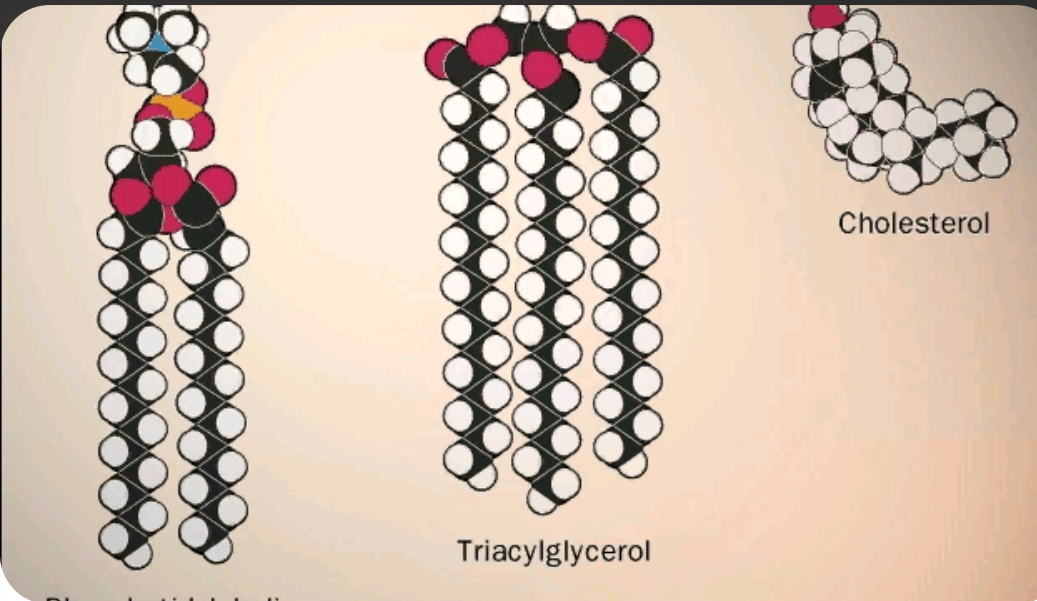
Allergen labelling

Allergic reaction

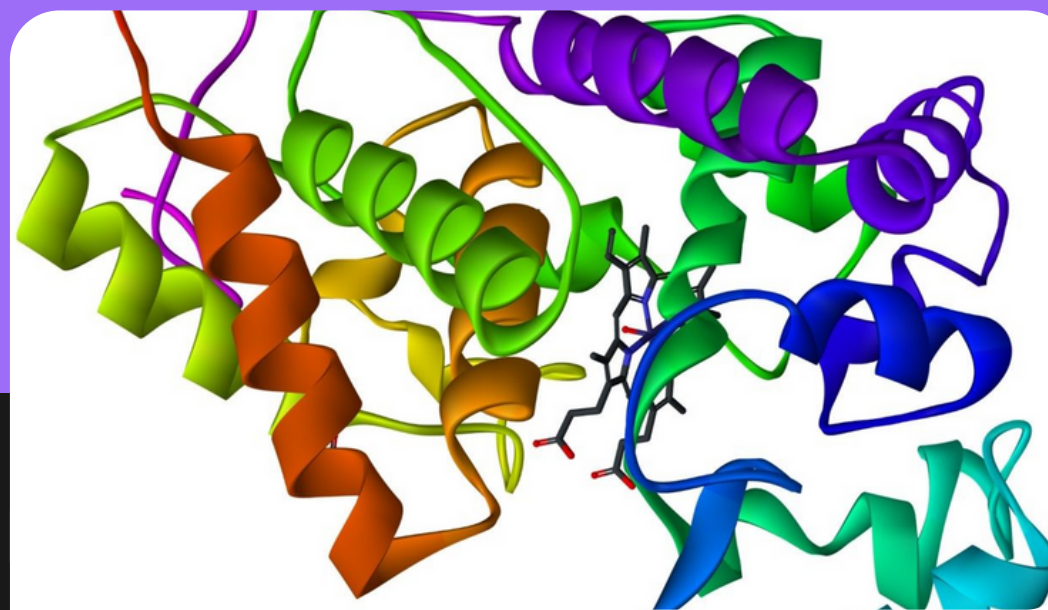
# Food Components



**Carbohydrate**



**Lipid**



**Protein**

Can cause allergic reactions in certain people



**Micronutrient**



**MILK**



**TREE NUTS**



**EGGS**



**PEANUTS**

**8 MAJOR FOOD ALLERGENS**



**FISH**



**WHEAT**



**SHELLFISH**



**SOYBEANS**



# MILK

Milk allergy is caused by alpha S1-casein protein in cow's milk.

Milk allergy involve the immune system & trigger allergic reaction (safety issue)

Lactose intolerance involve the digestive system (not a safety issue)

- person lacks the enzyme (lactase) to metabolize lactose — a milk sugar — in the intestines.
- undigestive lactose is broken down by bacteria - cause bloating and gas



# EGGS

Both egg white and yolk can trigger allergic reaction

Some people can safely consumed baked/heated product that contain egg

Many children may outgrow egg allergy within a few years



# FISH

Fish allergies are more predominant in adults

An allergy to fish tends to be lifelong.



# SHELLFISH

Protein (tropomyosin) in shellfish trigger immune response

Adults may suddenly develop shellfish allergy & the allergic reaction become more severe with each exposure





# WHEAT

Wheat proteins that can trigger immune response — albumin, globulin, gliadin and gluten.

Wheat allergy is most common in children and may outgrow it within a few years



# PEANUT

Peanut allergy is common in children and could be a lifelong conditions



# TREE NUT

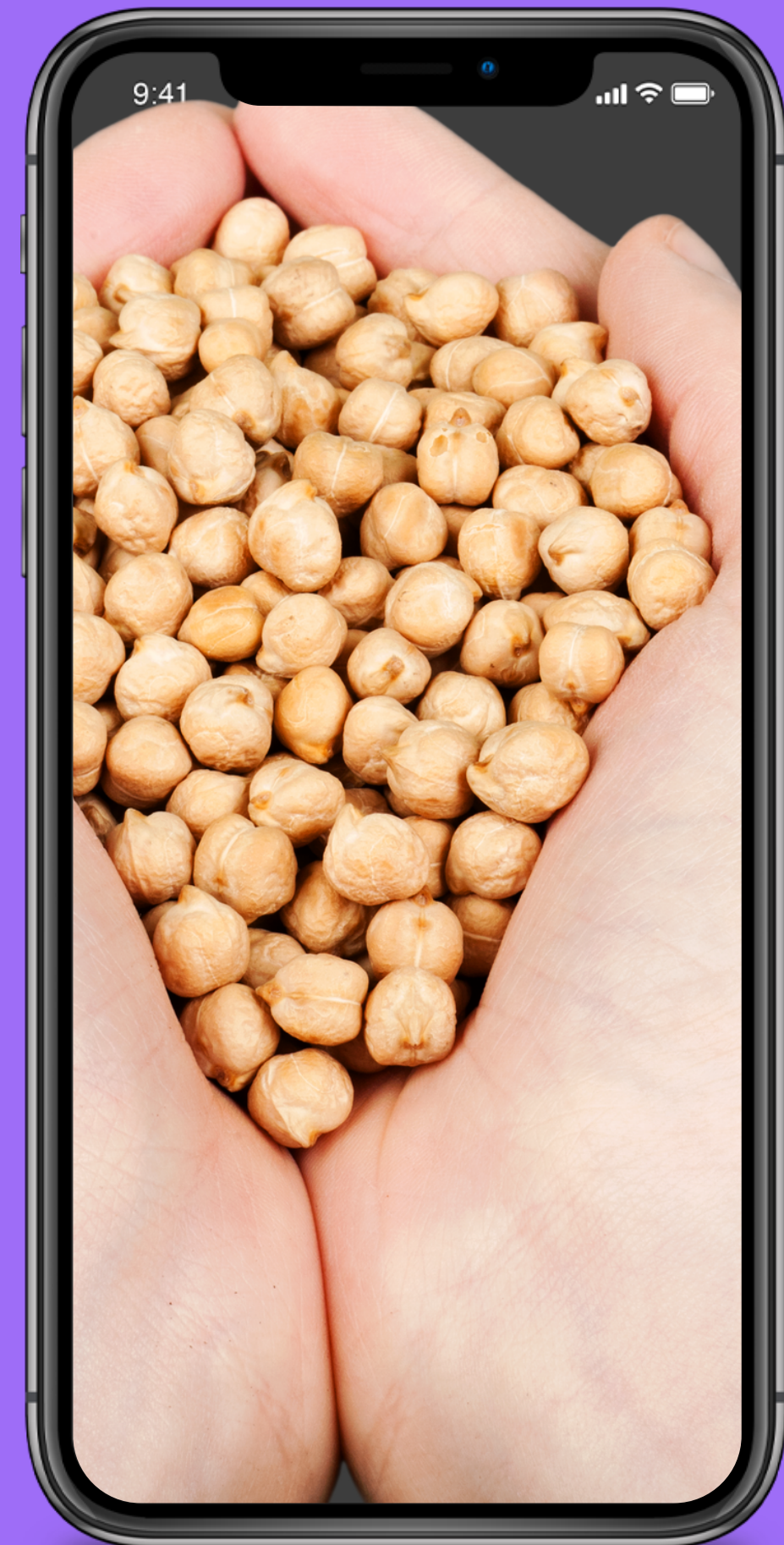
Tree nut includes walnut, almond, hazelnut, pecan, cashew and pistachio

An allergy to tree nuts tends to be lifelong.



# SOYBEAN

Common ingredient in infant formula  
Most children can outgrow soy allergy  
Rarely cause anaphylaxis,



# OTHER FOOD ALLERGENS

## CEREALS CONTAINING GLUTEN

A group of protein found in certain grains (wheat, rye, barley)



## COLOUR AND FOOD ADDITIVES

Colour additive (e.g. FD&C Yellow No. 5 / tartrazine / E 102)



## SULPHITES

Food additive used as preservative



## CELERY

Protein in the pollen trigger allergic reaction



## MUSTARD

Condiment made from the seeds of a mustard plant



## SESAME

Seed, oil, paste



## LUPIN

legume belonging to the same plant family as peanuts





**Unlabeled  
allergens  
presents a  
significant  
health hazard  
for food-  
allergic  
consumers!!!**

INGREDIENTS
Water, Carrots, Onions, Red Lentils (4.5%) Potatoes, Cauliflower, Leeks, Peas, Cornflower, <b>Wheat</b> flour, Cream ( <b>milk</b> ), Yeast Extract, Concentrated Tomato Paste, Garlic, Sugar, <b>Celery</b> Seed, Sunflower Oil, Herb and Spice, White Pepper, Parsley
ALLERGY ADVICE
For allergens, see ingredients in <b>bold</b>



**Allergy Advice**

**Contains: Egg, Mustard**


May contain:  
 Nuts, Peanuts, Sesame Seeds, Celery, Wheat, Barley, Fish, Soybeans, Milk, Sulphites and Cereals containing Gluten.

not nut allergy sufferers

Sunflower Vegetable Glycerate (E450, E501).  
**ALLERGY INFORMATION**  
**CONTAINS Milk, Eggs, Wheat, Gluten.**  
 factory that uses Nut ingredients

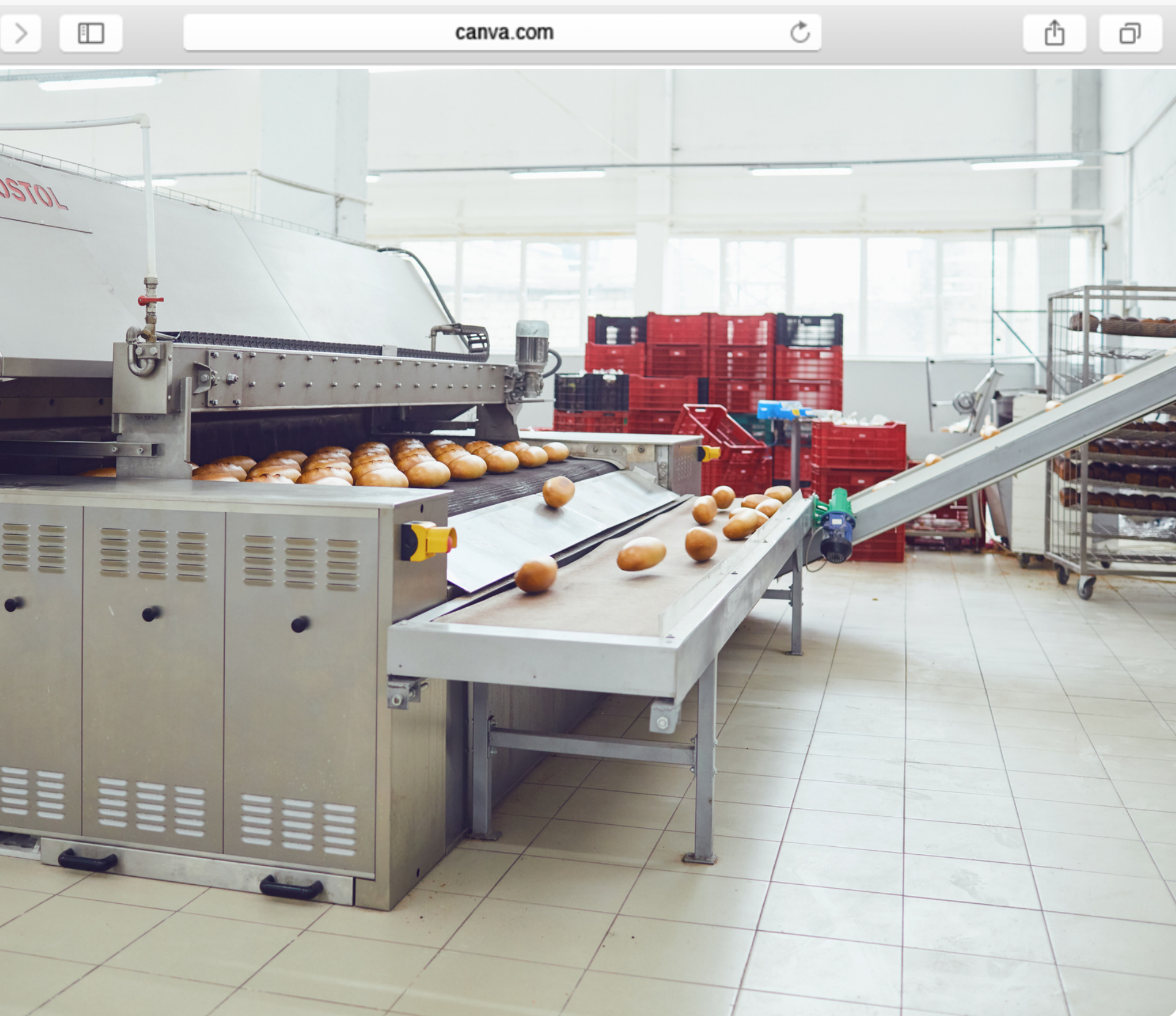
**12 Breaded mozzarella sticks.**

**Ingredients** Mozzarella Cheese Filling (65%), Breadcrumb Coating, Batter. **Mozzarella Cheese Filling** contains: Mozzarella Cheese (**Milk**), Water, Dried Potato, Potato Starch, Stabiliser (Methyl Cellulose). **Breadcrumb Coating** contains: Breadcrumb, Intermediate Breadcrumb, Sunflower Oil, Batter, Water. **Breadcrumb** contains: **Wheat** Flour, Water, Yeast, Salt. **Intermediate Breadcrumb** contains: **Wheat** Flour, Water, Yeast, Salt, Sunflower Oil. **Batter** contains: **Wheat** Flour, **Wheat** Starch, Cornflour, Rice Flour, Salt, Paprika, Dried **Egg**. **Wheat Flour** contains: Wheat Flour, Calcium Carbonate, Iron, Thiamin, Niacin.

 **Allergy advice** For allergens, including cereals containing gluten, see ingredients in **bold**. Also, may contain nuts.

# Method for allergen labelling

- In parentheses following the name of the ingredient.  
 e.g: "lecithin (soy)," "flour (wheat)," and "whey (milk)"
- Immediately after or next to the list of ingredients in a "contains" statement.  
 e.g: "Contains Wheat, Milk, and Soy."



# What is "cross-contact" ??

REDISUES OF ALLERGENIC FOOD  
BECOME INCORPORATED INTO  
ANOTHER FOOD WHICH NOT  
INTENDED TO CONTAIN IT

Manufacturer can include an advisory statement  
on the food packaging to notify the consumer  
about the possible presence of the allergen

e.g "may contain [allergen]", "produced in a  
facility that also uses [allergen]"





# FOOD ALLERGY SIGNS & SYMPTOMS



**DID YOU KNOW?** Allergic reactions to foods can occur within minutes of eating or up to hours later.

**HIVES OR ECZEMA**  
Red, swollen, dry or itchy skin rash



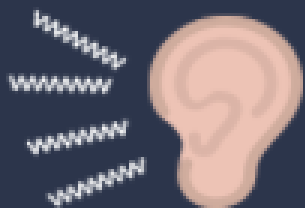
**RUNNY/STUFFY NOSE & SNEEZING**



**ITCHY, WATERY OR RED EYES**



**ITCHY/TINGLING MOUTH OR EARS**



**ABDOMINAL CRAMPS**  
Upset stomach, cramps, vomiting or diarrhea



**COUGHING OR WHEEZING**



**DIZZINESS/LIGHTHEADEDNESS**



**SWOLLEN LIPS, TONGUE OR THROAT**



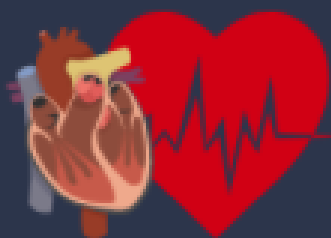
**TROUBLE BREATHING OR SWALLOWING**



**FUNNY TASTE IN MOUTH**



**CHEST PAIN**  
Weak, uneven heartbeat



**LOSS OF CONSCIOUSNESS**



# Anaphylaxis

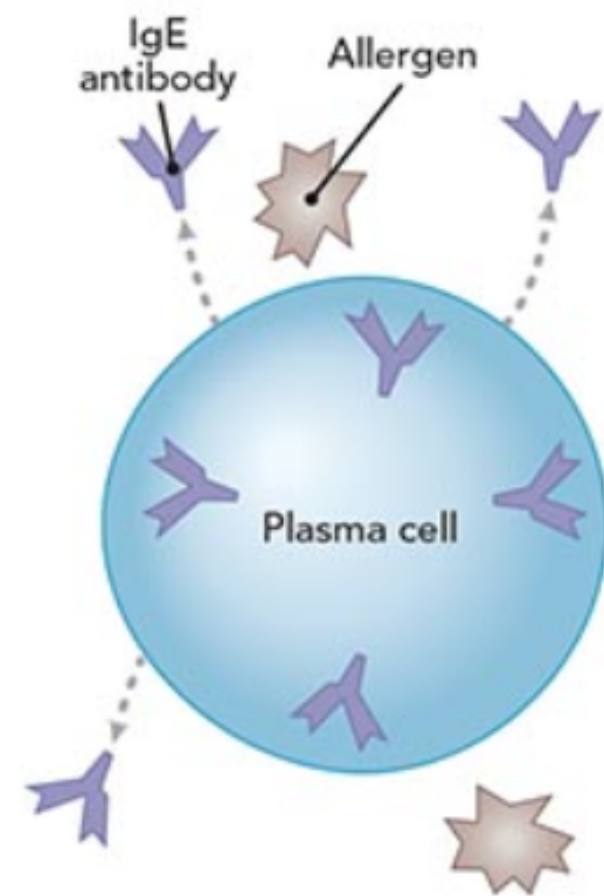
Severe, potentially life-threatening allergic reaction & Require epinephrine injection

- SUDDEN DROP IN BLOOD PRESSURE
- SUFFOCATION BY SWELLING OF THE THROAT
- NARROW AIRWAYS IN THE LUNGS

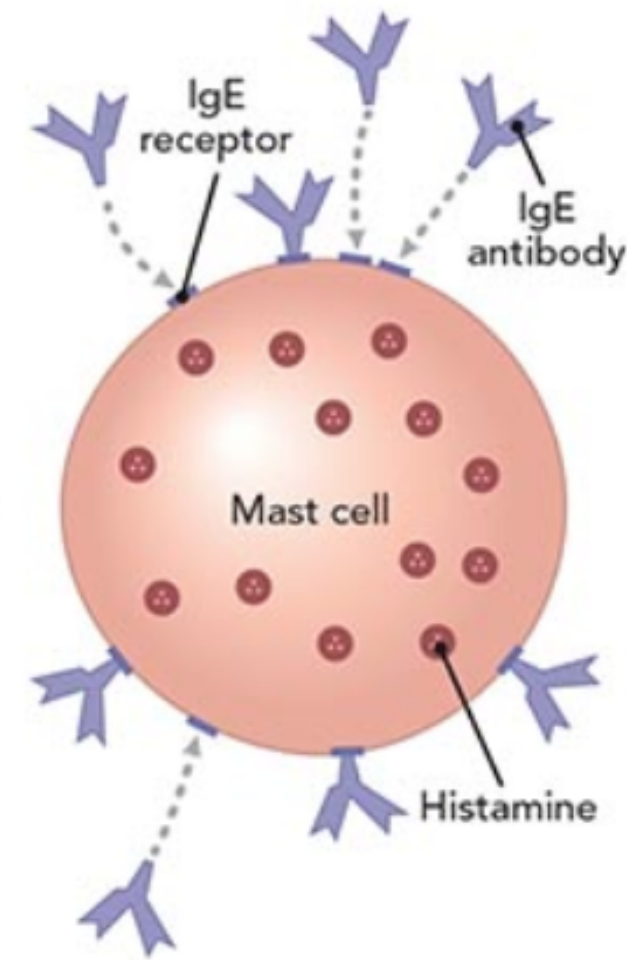


# HOW DOES A FOOD ALLERGY WORKS?

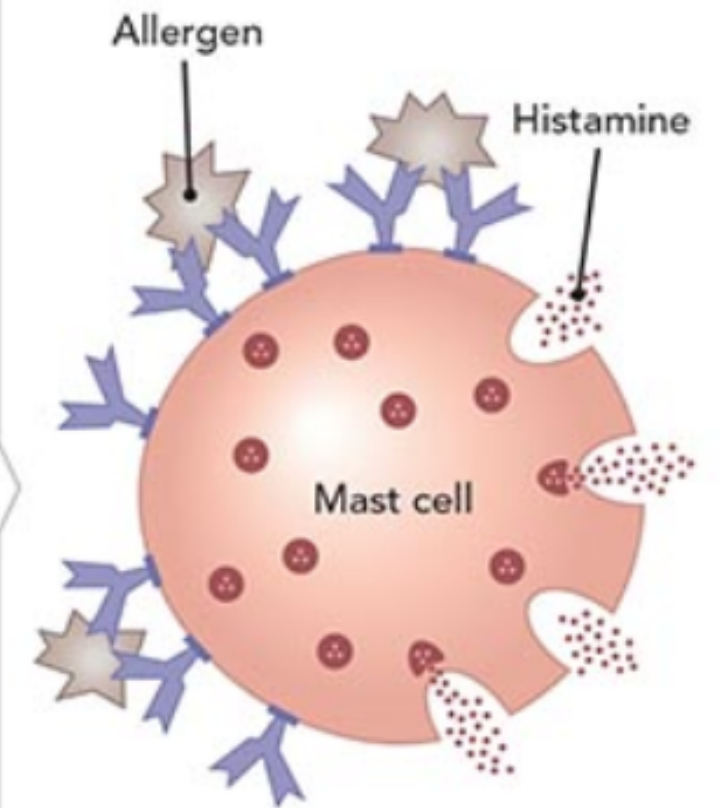
## IMMUNE CELLS ON HIGH ALERT



**1 You're exposed.** Immune cells called plasma cells (or B cells) release immunoglobulin E (IgE) antibodies after you eat an allergen.



**2 You get sensitized.** IgE antibodies bind to the surface of two other types of immune cells: mast cells and basophils.



**3 You're exposed again...and react.** When an allergen binds to IgE on a mast cell, the cell releases histamine and other chemicals that cause allergy symptoms.

THANK YOU

