

FOOD ALLERGY AND INTOLERANCE

Prepared By: Malath Jaradat

DIFFERENCE

- ◉ Food Allergy : Immune system reaction
- ◉ Food Intolerance : Inability to digest a food

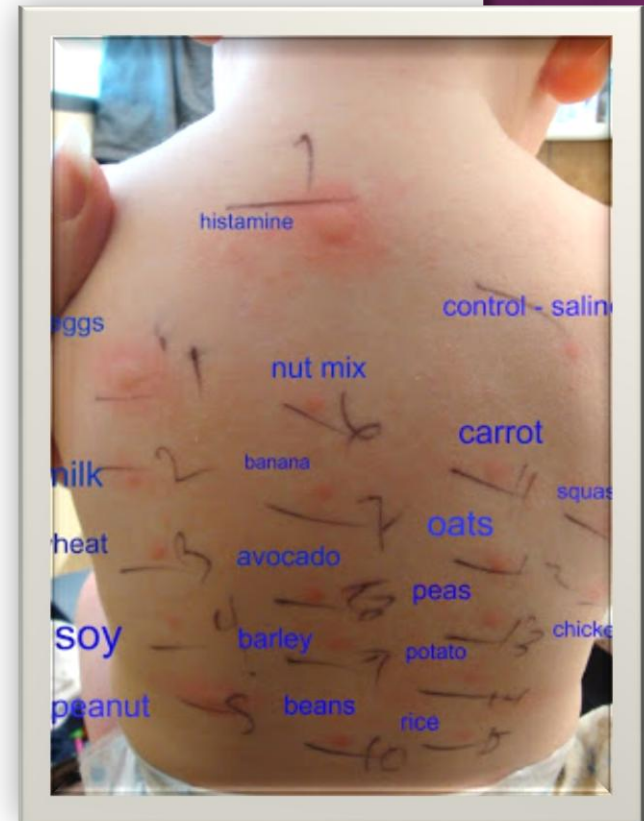
FOOD ALLERGY

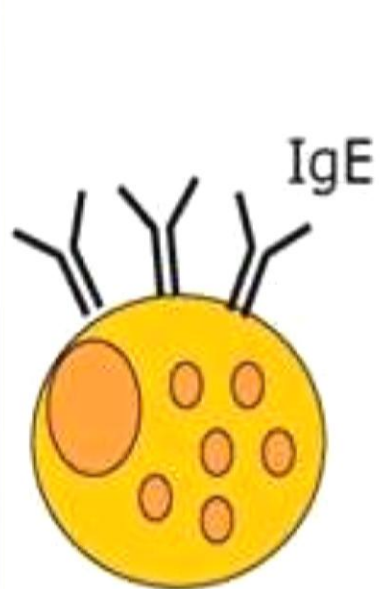
- ◉ A group of disorders characterized by immunologic responses to specific food proteins
- ◉ IgE-mediated reaction
- ◉ Reaction is not dose-dependent



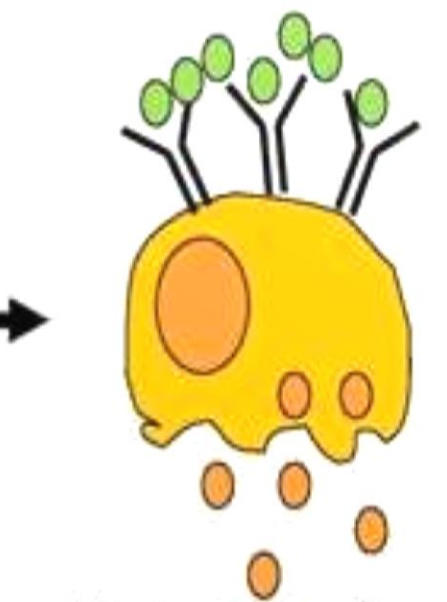
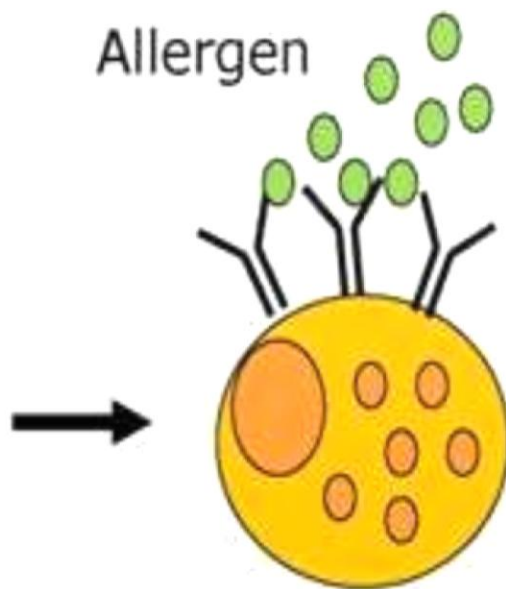
FOOD ALLERGY

- □ Over 170 foods have been documented as causing food allergy.
- □ 90% of food allergies in children are due to:
 - Milk - Soy - Peanut - Egg - Wheat
- □ 85% of food allergies in adolescents and adults are due to:
 - Peanut - Fish - Tree nuts





Mast cell



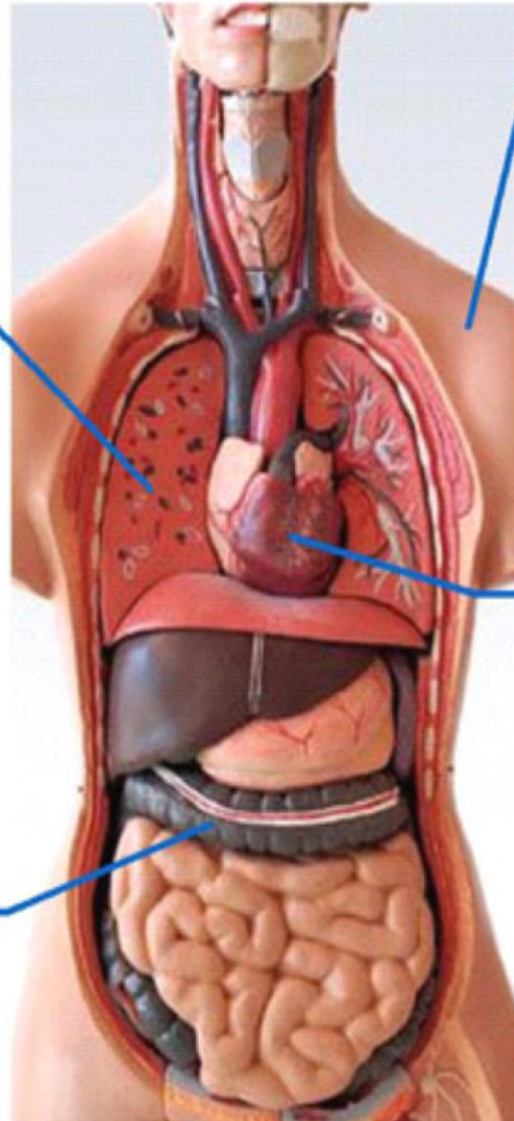
SYMPTOMS OF A FOOD ALLERGY

- ◉ Symptoms of a food allergy can range from mild to severe.
- ◉ Just because an initial reaction causes few problems doesn't mean that all reactions will be similar
- ◉ a food that triggered only mild symptoms on one occasion may cause more severe symptoms at another time.

SYMPTOMS OF AN ALLERGIC REACTION

- ◉ Vomiting and/or stomach cramps
- ◉ Shortness of breath
- ◉ Wheezing
- ◉ Repetitive cough
- ◉ Shock or circulatory collapse
- ◉ trouble swallowing
- ◉ Swelling of the tongue
- ◉ Weak pulse
- ◉ Pale or blue coloring of skin
- ◉ Dizziness or feeling faint
- ◉ Anaphylaxis

Food Allergy: Symptoms



Respiratory symptoms:

- asthma
- hoarseness

Skin / mucous membrane symptoms:

- urticaria
- angio-oedema
- rhinitis
- conjunctivitis

Cardiovascular symptoms:

- anaphylactic shock

Gastrointestinal symptoms:

- abdominal pain
- vomiting
- diarrhea

FOOD INTOLERANCE

- A generic term describing an abnormal physiological response to an ingested food or food additive which is not a result of an immune response
- Reaction is dose-dependent: symptoms are dependent on amount and frequency of consumption
- Reaction is sometimes inherited, but not always .

EXAMPLES OF FOOD INTOLERANCES

- ◉ **Lactose intolerance:** □

Deficiency of lactase

- ◉ **Sucrose intolerance:** □

Deficiency of sucrase

- ◉ □ **Sulphite intolerance:**

- Possibly deficiency of sulphite oxidase

Lactose Tolerant (has *lactase*)

Lactose Intolerant (no *lactase*)

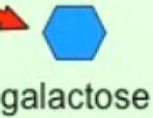
small intestine

Lactose



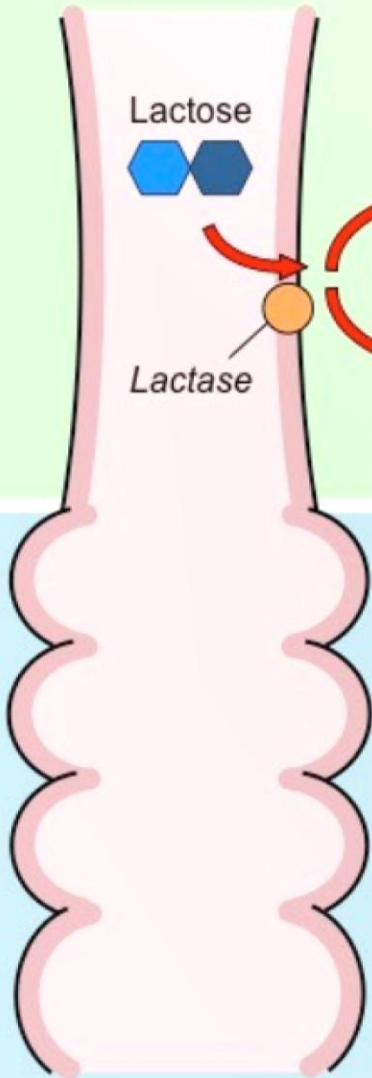
Lactase

glucose



galactose

large intestine



small intestine

Lactose



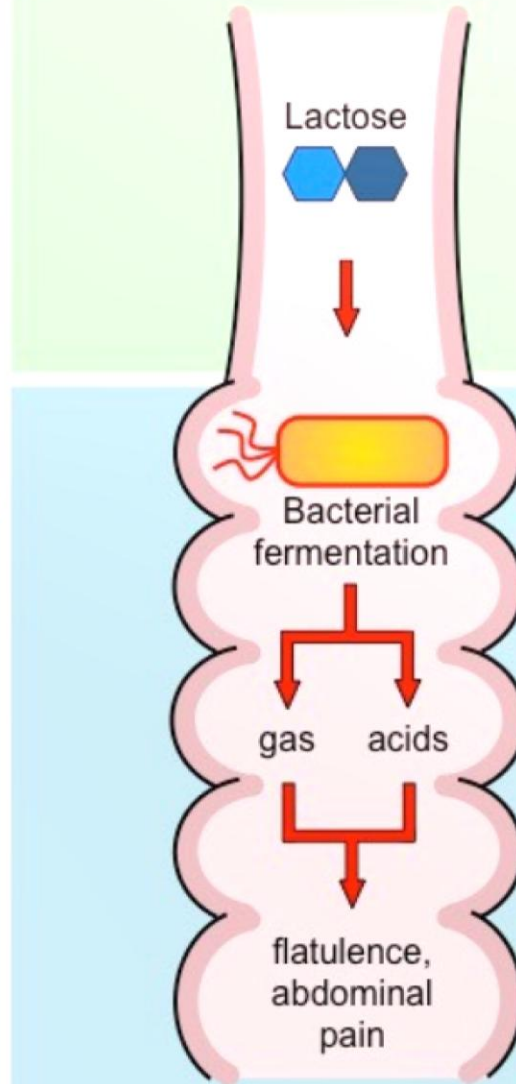
Bacterial fermentation

gas

acids

large intestine

flatulence,
abdominal
pain



SYMPTOMS OF FOOD INTOLERANCE

- ◉ Bloating
- ◉ Migraines
- ◉ Headaches
- ◉ Cough
- ◉ Runny nose
- ◉ Feeling under the weather
- ◉ Stomach ache
- ◉ Irritable bowel
- ◉ Hives

CAUSES OF FOOD INTOLERANCE

- ⦿ 1) Absence of an enzyme
- ⦿ 2) Chemical causes of food intolerance
- ⦿ 3) Food poisoning - toxins
- ⦿ 4) Natural occurrence of histamine in some foods

RESOURCES

- Asthma and Allergy Foundation of America



- Allergy UK

