

# Food Allergens in Babies



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**M**ost of the food allergies begin in the 1<sup>st</sup> or 2<sup>nd</sup> year of an infant's life. While some of these allergies may go away with time (such as allergies to cow's milk or eggs), other food allergies acquired in infancy (such as allergies to nuts or shellfish) may persist throughout life.

Before giving the details of the most common allergens, it is very important to understand the meaning of allergens and why they cause allergic reactions. Allergens are usually proteins. It is these proteins in foods that mimic very closely to proteins present in viruses and bacteria. Hence, in some babies and children, their immune system is not able to distinguish between the food protein and that of the virus or bacteria. Hence, it attacks these food proteins causing a reaction.

As the baby gets a few months old, apart from breast feeding, certain selected foods are introduced to the baby's diet from about 6 months. Along with these foods the baby should ideally be breast-fed for a year. Research has shown that apart from meeting a baby's nutrition requirement, breast milk also helps to protect against allergies by reducing the intestinal absorption of food allergens.

It is recommended to wait until age 1 or later to introduce solid foods that are common allergens. The American Academy of Pediatrics (AAP) however suggests that this delay does not help keep allergies from developing. It is still a wise idea to wait several days after each new item is introduced to make sure your baby does not have an allergic reaction to it. If allergies run in your family - check with your doctor to determine the best strategy for introducing the common allergic foods like eggs, milk, peanuts, wheat, soy, tree nuts, fish, and shellfish.







## Following are the main group of food allergens -

1. **MILK:** The major allergens in milk are casein and whey protein. Two out of a hundred infants under one year old suffer from cow's milk allergy. Children lose this sensitivity as they grow up with 9 out of 10 losing it by the age of three.

**Recommended after 1 year.**

2. **SOY:** The allergens in soybean are conglycinin, glycinin proteins and trypsin inhibitor.

3. **PEANUTS:** Children with allergy to peanuts can be very sensitive to foods with even very small amounts of peanuts in them. Avoid all foods with peanuts including candies, baked food and cuisines with peanuts, peanut butter and mixed nuts.

**Recommended after 3 years**

4. **EGG WHITE AND FOODS CONTAINING EGG WHITE:** The proteins in egg white are the common cause of allergies. The main allergens in egg white are ovomucoid, ovalbumin and ovotransferrin proteins. Avoid foods that are prepared with eggs, which may include French toast, cake, cookies, pancakes, eggnog and puddings Like milk, egg white allergy fades with time. Rarely children do outgrow an egg white allergy.

**Recommended after 2 years**

5. **TREE NUTS (like almonds & cashews):** The allergens in peanuts are similar in structure to allergens in tree nuts. This may explain why many children who are allergic to peanuts can also be allergic to tree nuts, such as almonds, walnuts, hazelnuts, pistachios and cashews.

**Recommended after 3 years**

6. **SEAFOOD (like fish & shellfish):** The major allergens in fish are proteins called parvalbumins, which are present in all kinds of fish.

**Recommended after 3 years**

7. **SESAME SEEDS:** The allergic reaction from sesame seeds is similar to the one caused by nuts.

**Recommended after 3 years**

8. **SULPHITES (food additives):** Ingredients used in Chinese cuisine like aginomoto or monosodium glutamate is often the culprit.

9. **WHEAT:** Wheat allergy can develop in infants and is probably best to offer rice, rye, oat cereal first and delay giving wheat until your child is 6-8 months old. Proteins such as wheat gluten and other proteins which protect it from attacks by mould and bacteria have been found to be the major allergens.

**Recommended after 6 – 8 months.**

## Common allergic reactions include :

1. Flushed face, skin rash or red itchy skin
2. Swollen eyes, face lips, throat or tongue
3. Trouble breathing, speaking or swallowing
4. Wheezing, coughing
5. Appearing anxious, weak, "faint" or looking pale
6. Stomach pain, cramps, diarrhoea or vomiting
7. Shock or complete collapse (anaphylactic shock) affects one to two per cent of the population

Please consult a doctor to know what measures you can take in case your baby has an allergic reaction to food.