



Cow's Milk Allergy



Reintroducing dairy food into the diet

Patients with cow's milk allergy should try to reintroduce dairy food under the guidance of a doctor or registered dietitian.

The severity of symptoms usually decreases with age in most patients with cow's milk allergy, meaning that the likelihood to tolerate milk-containing substances gradually increases. Doctors will advise patients the right time to try reintroducing dairy foods.

Uncooked dairy foods are more likely to cause allergic reactions than cooked ones. Therefore, patients usually first test their tolerance to **dairy foods that have been cooked at higher temperatures and for a longer period**, followed by **dairy foods that have been slightly cooked**, and finally test their tolerance to **uncooked dairy (such as fresh cow's milk and milk powder)**.

Points to note

- If a patient has experienced severe adverse reactions such as dyspnea, fainting, or anaphylactic shock after eating dairy food, do not try reintroducing dairy food at home on their own.
- Before reintroducing dairy food, ensure that the patient is in good health. If the patient has had allergic reactions recently, is unwell in the past 5 days or has taken antihistamines, wait for symptoms to improve before reintroducing dairy food.
- Antihistamine (such as chlorpheniramine, cetirizine, loratadine, etc.) or other prescription medications should be ready to hand before trying dairy food.
- If the patient is unwell during the trial of dairy food (such as persistent skin itchiness, rash, facial swelling, etc.), discontinue immediately, and do not consume any other dairy food or food that has not been tried before for the coming two days.
- The doctor or dietitian will instruct you on the steps to reintroduce dairy food. If you have other dietary restrictions, such as vegetarianism or food allergies besides dairy, consult a dietitian about alternatives.

If any of the following symptoms occur during reintroducing dairy food, please stop the trial **immediately**.

- Skin itchiness, urticaria (hives), swelling of the face / lips / eyes
- Throat itchiness
- Nausea, vomiting, abdominal pain, diarrhoea
- Difficulty breathing, noisy breathing, stridor, persistent cough
- Dizziness, pallor, cold sensation at extremities, weakness in limbs, loss of consciousness

Actions to take

If the patient is having **mild allergic reactions** such as skin swelling, urticaria (hives), or throat itchiness, please take **prescribed anti-allergic medications** immediately such as **chlorpheniramine, cetirizine and loratadine**.

If the condition does not improve or worsen to more **severe allergic symptoms** such as **breathing difficulty, persistent coughing, or dizziness**, after taking the medication, please use an **adrenaline autoinjector** immediately (such as Jext®, EpiPen®) and **call 999** for an ambulance or go to the hospital directly for a detailed examination.

Do not reintroduce dairy food on your own anymore before consulting the doctor for reassessment.

A step-by-step guide to dairy food challenge

Milk Ladder

- Begin to introduce foods from **step 1** and gradually work your way up to **step 4**.
- Start introducing dairy from a very small amount (e.g., 1/16th of a portion), and observe any allergic symptoms in the next 30 minutes.
- If there is no symptom observed, you may gradually increase the portion. You can refer to the table on the right:

Reference portion

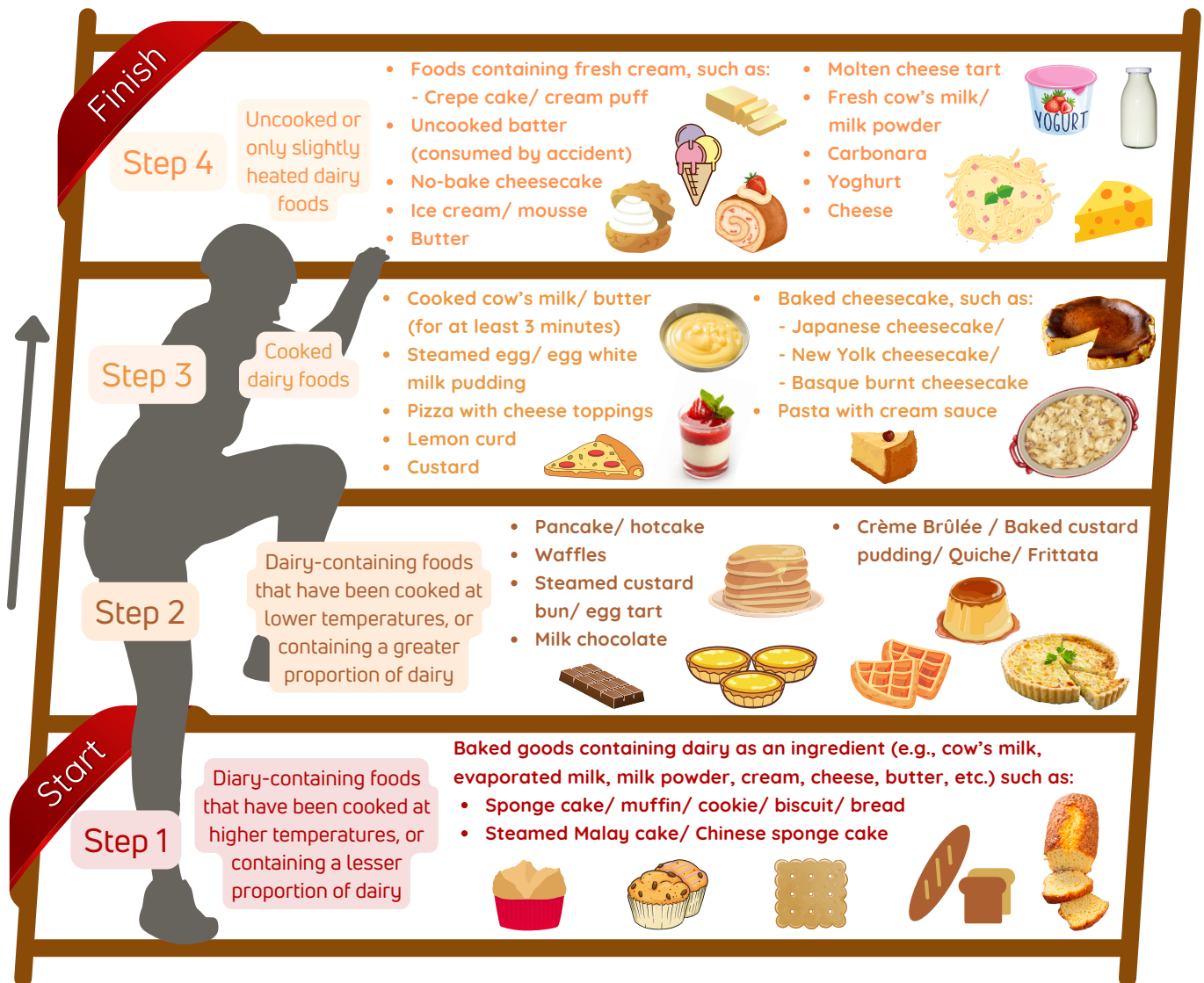
Cake/ Pancake/ Muffin 1/16 → 1/8 → 1/4 → Half → Whole portion

Fresh cow's milk 15mL (1 Tbs) → 30mL (2 Tbs) → 60mL (4 Tbs) → 125mL (1/2 cup) → 250mL (1 cup)

Yogurt 1 Tbs → 2 Tbs → 4 Tbs → 1/2 container → 1 container (150g)

Cheese 1/8 slice → 1/4 slice → 1/2 slice → 1 slice → 2 slices

Note: Tbs = Tablespoon



(This table may not be inclusive of all dairy or dairy-containing foods. Patients with cow's milk allergy should check the ingredients and food labels of unfamiliar foods before eating.)

If no symptoms appear after 2 days of reintroducing dairy:

- This means you have built a tolerance to dairy foods to a certain degree.
- You shall continue to try the same type of dairy food regularly (i.e., every 2-3 days) to facilitate sustained tolerance.
- You may try different dairy foods within the same 'step' category.
- If you tolerate most dairy foods within the same 'step' category, you may consult your doctor or dietitian about stepping up in your dairy food challenge.

If mild symptoms appear after 2 days of reintroducing dairy:

- This means you are yet to develop adequate tolerance to dairy foods in that 'step'.
- Please take your antihistamine medications.
- Do not increase the portion of your dairy food challenge; you may revert to your previous tolerating amount (e.g., 1/4 → 1/8 of a cake, 1 slice → 1/2 slice of cheese) to maintain any tolerance developed to dairy foods.
- Please consult your doctor or dietitian before proceeding to your next dairy food challenge.