Layer Cake Academy

Vanilla génoise · 3 15 cm layers

At a glance

Sponge cake

Beginner with guidance

Status : The owner confirmed the review on 11 October 2026. Adapt the guidance to your equipment, ingredients and working conditions.

Test this teaching recipe in your own kitchen. Results may vary.

About 711 g of batter for three 15 cm layers baked separately. Measure their height after your trial bake.

Preparation time : 25 min

Reference diameter : 15 cm

Ingredients

Whole eggs, weighed without shells : 300 g — Lightly beat the eggs before weighing. The number needed depends on their size.

Caster sugar : 180 g

T55 wheat flour : 180 g — Sift the flour. Replacing some of it with T45 flour or starch gives a more tender crumb.

Unsalted butter : 45 g — Melt, then cool to lukewarm.

Vanilla extract : 5 g — Follow the concentration guidance on the bottle.

Fine salt : 1 g

Equipment

Three 15 cm cake tins or one deep 15 cm × 10 cm cake tin

Kitchen scales

Hand mixer or stand mixer with whisk attachment

Heatproof bowl and saucepan for a bain-marie

Sieve, flexible spatula, baking parchment and cooling racks

Probe thermometer

Texture and use

The crumb should be light and springy with small, even air pockets. It is fairly dry on its own and benefits from a little syrup. A dense crumb means the eggs were under-whipped or the flour was folded in too vigorously.

Mild egg and vanilla notes let the filling stand out.

Holds its shape once soaked and filled. The sponge alone cannot bear the weight of another tier.

Layer cakes with light fillings such as mascarpone cream or whipped ganache, fruit cakes and variations on fraisier.

Baking

170 °C · Conventional oven (no fan) · 18–25 min

These timings are for three separate tins. For a tall sponge to slice into layers, use one 15 cm × 10 cm tin and line the sides with a collar of baking parchment that extends above the rim. The 1.3 to 1.6 L of batter will already be 7–9 cm deep before baking. Bake at 170 °C for 40 to 55 minutes, then check the centre. Put the batter straight in the oven so the foam does not collapse.

Step 1 — Prepare

Preheat the oven and line the bases of the cake tins. Weigh the ingredients. Melt the butter without browning it, then let it cool until lukewarm.

Step 2 — Warm gently and whisk until thick and airy

Set a bowl over a gently simmering bain-marie. Whisk the eggs, sugar and salt until the mixture reaches 40 to 45 °C and the sugar dissolves. Take the bowl off the heat. Whisk on high for 8 to 10 minutes, then on medium for 2 minutes. The mixture should fall from the whisk in a thick ribbon that stays visible for a few seconds.

Step 3 — Fold in the flour

Sift the flour over the egg foam in three batches. Fold from the bottom with a flexible spatula, turning the bowl as you go. Avoid vigorous circular stirring, which would knock the air out.

Step 4 — Add the butter

Stir a generous spoonful of batter into the lukewarm butter and vanilla, then pour it back over the batter and fold gently. Scrape the bottom of the bowl where the butter tends to settle.

Step 5 — Divide the batter and bake

Divide into three equal portions of about 237 g each. Bake immediately and start checking after 18 minutes.

Step 6 — Check for doneness and cool

The centre should spring back when touched, and the edges should just start to pull away. After 5 minutes turn the cakes out onto a rack, then turn them top-side down onto baking parchment to keep the tops flat. Cool completely before adding syrup or filling.

What to watch for

Get a stable ribbon.

Stir in flour and butter without dropping the foam.

Troubleshooting

The genoise is flat and compact. — The eggs were not whipped enough, or the foam collapsed while folding. — Warm the eggs, whisk to the ribbon stage, then fold from the bottom up.

Oily and dense layer at the bottom. — Unmixed butter sank to the bottom. — Stir a little batter into the butter before folding it into the rest. Scrape the bottom of the bowl.

The genoise comes back at the outlet of the oven. — The sponge was underbaked, or the oven door was opened too soon. — Keep the oven door closed for the first 15 minutes. Check that the centre is baked before removing the sponge.

Storage

Cool completely, wrap cleanly and use storage conditions validated for the recipe. No shelf life has been established for this sponge. Once filled, follow the requirements of the most perishable component.

To test freezing quality, cool the unfilled sponge, wrap it well, label it with the date and thaw it in its wrapping in the refrigerator. No frozen shelf life or thawed quality has been established for this sponge.

Allergens

Eggs

Wheat (gluten)

Milk

Scaling the recipe

18 cm : factor ×1.44

20 cm : factor ×1.78

25 cm : factor ×2.78

Multiplying the masses retains the proportions but does not validate the amount of cover required or the cooking time.

Variations

Génoise chocolat : see the dedicated recipe.

Replace 30 g of flour with 30 g of almond powder for a softer genoise. Revise the allergen declaration for the nut actually used.