
DONENESS & CORE TEMPERATURE

COOKED RIGHT MEANS 54 °C.

Doneness is not a question of minutes but of degrees Celsius in the core of the meat.
A twenty-euro thermometer replaces all experience – and it is the only way to get a steak right twice in a row.

 BLUE 45–47 °C Sealed outside, core almost raw and cool	 RARE 48–52 °C Deep red, soft core, releasing juice	 MEDIUM RARE 53–56 °C Red core with a pink rim – the reference point
 MEDIUM 57–60 °C Pink throughout, noticeably firmer	 MEDIUM WELL 61–65 °C Only a narrow pink band remains	 WELL DONE from 66 °C Grey-brown throughout, little juice

Figures apply to beef, measured in the middle of the thickest point. On French menus they correspond to *bleu*, *saignant*, *à point* and *bien cuit* – though French *à point* in practice lands closer to medium rare or medium.

BY CUT

NOT EVERY CUT WANTS THE SAME POINT

Lean cuts dry out sooner, heavily marbled ones need a little more warmth so the fat can melt. This table gives the target temperature at which each cut reaches its optimum.

CUT	RECOMMENDED CORE TEMPERATURE	DONENESS	WHY
Tenderloin	52–54 °C	Rare to medium rare	Very lean – above 56 °C it turns mealy
Ribeye / entrecôte	54–57 °C	Medium rare to medium	The eye of fat needs heat to melt
Striploin	53–55 °C	Medium rare	Firm grain turns tough quickly above that
T-bone / porterhouse	53–56 °C	Medium rare	Place the fillet side in the cooler zone
Tomahawk	54–56 °C	Medium rare	The thickness calls for a reverse sear
Picanha	54–58 °C	Medium rare to medium	The fat cap has to render
Flank / bavette	52–55 °C	Medium rare	Coarse grain, tough immediately above
Skirt / hanger	52–54 °C	Rare to medium rare	Very short cooking time, high heat
Flat iron	53–55 °C	Medium rare	Tender, but never past medium
Wagyu A5	50–54 °C	Rare to medium rare	The fat already melts at 25 °C
Mince / burger	from 68–70 °C	Cooked through	Hygiene: bacteria are spread through the whole patty
Short ribs / brisket	92–95 °C	Far beyond well done	Collagen has to turn into gelatine

CARRY-OVER COOKING

A steak keeps cooking after it comes off the heat. The hot outer layer passes warmth to the cooler core until the temperature evens out. How strong this effect is depends on the temperature gradient:

- **Pan or grill at high heat:** 3 to 5 °C of carry-over. More for pieces thicker than 5 cm.
- **Reverse sear:** 1 to 2 °C, because the core was already close to target.
- **Sous vide:** practically none – which is why you cook straight to the target here.

Practical rule: with the classic pan method, take the steak off the heat about 3 °C below your desired temperature. For medium rare that means pulling it at 51 °C and serving it at 54 °C.

MEASURING PROPERLY

A probe thermometer measures at the tip, not along the shaft. Insert the probe *from the side*, horizontally into the middle of the thickest area, rather than from above – that way the tip stays reliably in the core instead of sliding through.

- Do not measure near a bone: bone conducts heat differently and distorts the reading.
- Avoid seams of fat for the same reason.
- With T-bone and porterhouse, measure each side separately.
- A thermometer with a two- to three-second reading time is entirely sufficient; more expensive devices are mainly faster, not more accurate.

THE TOUCH TEST — FOR EMERGENCIES

Without a thermometer, comparing against the base of your own thumb helps. Press the muscle below the thumb with the index finger of your other hand:

HAND POSITION	FEEL	EQUIVALENT
Hand relaxed	very soft, yielding	Blue / rare
Thumb to index finger	soft with slight resistance	Medium rare
Thumb to middle finger	springy	Medium
Thumb to ring finger	firm	Medium well
Thumb to little finger	hard	Well done

The method is a rough approximation and only works for cuts with an even structure. With flank, hanger or wagyu it will reliably mislead you.

RESTING — HOW LONG, REALLY?

During cooking the muscle fibres contract and push liquid towards the core. As the steak rests, the fibres relax and the juice redistributes. Cut too early and it runs onto the board instead of into your mouth.

- **200–300 g steak:** 4 to 6 minutes
- **Tomahawk, porterhouse, côte de bœuf:** 8 to 12 minutes
- **Whole roast, whole picanha:** 15 to 20 minutes

Rest the meat on a rack or an upturned plate, loosely covered with foil – not wrapped tightly, or the crust steams and softens. If the resting time worries you, warm the plates: a hot plate holds a steak at temperature far better than any foil.

WHY THE STEAK LOOKS DIFFERENT IN A RESTAURANT

Professional kitchens often work with a salamander and a holding cabinet: the steak is seared, rests at 55 °C and is briefly reheated just before service. The core is therefore more evenly coloured than with the pan method at home, where a temperature gradient from edge to centre remains. If you want that even look at home, use reverse sear or sous vide.

FREQUENTLY ASKED

DONENESS — BRIEFLY EXPLAINED

WHAT EXACTLY DOES MEDIUM RARE MEAN? ✖

Medium rare denotes a core temperature of 53 to 56 °C. The core is red and warm, the colour shifts to pink towards the outside, and a brown crust sits on the surface. For most cuts this is the point with the best balance of juiciness and structure.

IS PINK MEAT DANGEROUS? ✖

Not with whole steaks cut from a single piece of muscle: bacteria sit on the surface and are reliably killed during searing. It is different with mince, larded or tumbled meat – there bacteria are distributed throughout the product, which is why it has to be cooked through. Stricter recommendations apply to pregnant women, small children and people with weakened immune systems.

WHY IS MY STEAK GREY INSTEAD OF BROWN? ✖

Too little heat, too much moisture or an overcrowded pan. As long as water is evaporating from the surface, the temperature stays at 100 °C – but the Maillard reaction only begins at around 140 °C. Pat the meat dry, let the pan get properly hot, and cook only one steak at a time.

CAN YOU RESCUE A STEAK THAT IS OVERCOOKED? ✖

There is no going back. What helps: slice it thinly against the grain and serve it with a fatty sauce or herb butter. An overcooked striploin also makes an excellent salad the next day.

WHAT CORE TEMPERATURE IS WELL DONE? ✖

From 66 °C upwards. The meat is then grey-brown throughout, juice loss is considerably higher and the fibres are firm. If you order well done, choose heavily marbled cuts such as ribeye – there the melting fat compensates for some of the dryness.
