REFERENCE · FOOD SAFETY

Safe Cooking Temperatures

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One sheet
Federal minimums & placement

Cooking time, color, and texture do not reliably show whether food has reached a safe internal temperature. Use a food thermometer whenever the chart gives a temperature, and follow any listed rest time or category-specific doneness indicator.

> **Default:** Insert a food thermometer into the thickest part of the food, away from bone, fat, gristle, the pan, and open cavity space. Cook whole cuts of beef, pork, veal, lamb, bison, or goat to **145°F** with a three-minute rest; ground non-poultry meats and egg dishes to **160°F**; and poultry, casseroles, and reheated leftovers to **165°F**. Cook finfish to **145°F**.

Safe Cooking Temperature Quick Reference

FOOD	SAFE MINIMUM TEMPERATURE OR DONENESS INDICATOR	WHERE TO MEASURE OR WHAT TO OBSERVE
Beef, bison, veal, goat, lamb — steaks, roasts, chops	**145°F (63°C), then rest three minutes**	Thickest part, away from bone, fat, or gristle
Pork — steaks, roasts, chops	**145°F (63°C), then rest three minutes**	Thickest part, away from bone
Ground beef, pork, veal, lamb, non-poultry sausage	**160°F (71°C)**	Thickest part; check more than one spot when the food is thin or irregular
Chicken, turkey, other poultry — whole, parts, ground, giblets, sausage	**165°F (74°C)**	Parts: thickest part away from bone. Whole bird: innermost thigh, innermost wing, thickest breast
Stuffing cooked inside poultry	**165°F (74°C)**	Center of the stuffing; also check the bird in the locations above
Finfish, whole or fillet	**145°F (63°C)**	Thickest part. Where measuring is impractical, cook until the flesh is opaque and separates easily with a fork
Shrimp, scallops, crab, lobster	**FDA advises cooking most seafood to 145°F (63°C)**	Where measuring is impractical, cook until the flesh is firm, pearly, and opaque
Clams, oysters, mussels in the shell	**Cook until the shells open; discard any that do not open**	Observe each shell during cooking
Shucked clams, oysters, mussels	**Cook until the flesh is opaque and firm**	Observe the flesh during cooking
Shell eggs	**Cook until both the yolk and white are firm**	Use pasteurized eggs or egg products in foods served raw or undercooked
Egg dishes, including frittata and quiche	**160°F (71°C)**	Center or thickest part
Casseroles, with or without meat	**165°F (74°C)**	Center or thickest part; check more than one location
Leftovers	**165°F (74°C)**	Center or thickest part; stir and check several areas when reheating unevenly
Precooked ham	**Follow package directions: 140°F (60°C) or 165°F (74°C) by packaging**	USDA-inspected plant: 140°F. Other precooked ham: 165°F. Thickest part, away from bone

PLACING THE THERMOMETER

Insert into the thickest part, away from bone, fat, gristle, the pan, and open cavity space. For thin foods such as burgers or chops, insert from the side so the sensing area sits in the center. Check more than one location when the food is large, irregular, or heated unevenly.

For a whole bird, verify 165°F in the innermost thigh, innermost wing, and thickest breast — and at the center of any stuffing cooked inside. Wash the probe with hot, soapy water before and after each use.

SAFETY MINIMUMS ARE NOT CULINARY DONENESS

A safe minimum is the federal consumer-recommended endpoint for that food category, including any required rest. It is not a promise of texture or browning. Cook higher when the recipe calls for it. **Do not substitute color, cooking time, firmness, or oven temperature for an internal-temperature reading when the chart gives one.**

REHEATING IS A DIFFERENT DECISION

The reheating temperature is not always the original cooking temperature. A beef roast is safely cooked to 145°F with a three-minute rest, but a refrigerated portion reheated as a leftover should reach **165°F**. Casseroles use 165°F.

Stir soups, sauces, gravies, and mixed foods so heat reaches the center. FDA additionally directs bringing leftover sauces, soups, and gravies to a boil.

In a microwave, cover and rotate or stir, allow the standing time, and check several locations.

WHEN THIS DOES NOT APPLY

Home-cooking guidance. Commercial and institutional kitchens work under adopted food codes with different time-temperature combinations. Sous-vide, canning, fermentation, preservation smoking, and reduced-oxygen packaging need process-specific controls.

Pregnant people, young children, older adults, and people with weakened immune systems have a higher risk of serious foodborne illness and should avoid raw or undercooked meat, poultry, seafood, and eggs.

Sources: FoodSafety.gov · USDA FSIS · FDA. Full source links are on the web page.

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