

Apple Crumble

Two apple varieties, 60:40 — one holds, one melts. A 71°C stovetop pre-cook that firms the fruit before it bakes. A brown-butter oat topping scattered loose and salted on top.

Yield: **10–12** (30x20 cm) Active: **25 min** Total: **1 hr 30** Oven: **200°C** (400°F) Done: **93–96°C** filling

WHERE IT WAS BORN

Britain, 1940s — a wartime thrift dish. With butter and sugar rationed, the pastry pie gave way to flour rubbed into fat over stewed fruit. Named for what it does.

EATEN, AUTHENTICALLY

A hot pudding, brought to the table in its dish and spooned warm — with cold *crème anglaise* (custard), cream, or ice cream against the syrupy fruit.

HOW IT'S USED NOW

A British autumn staple in every register; the oat-topped version is, by the old rule, an American *crisp*. Apple is the classic; rhubarb and blackberry-apple are the cousins.

INGREDIENTS

WEIGHT (LB/OZ) · CUPS / VOLUME IN RIGHT COLUMN

FILLING — APPLES (60:40)

Holds-shape apple 1 lb 9.4 oz ~4–5
(Braeburn, Granny Smith)

Melts apple (Golden Delicious) 1 lb 0.9 oz ~3

Light brown sugar (packed) 2.5 oz ½ cup

Lemon juice (arrests browning) 0.63 oz 1 tbsp

Cornflour 0.42 oz 1 tbsp

Cinnamon · fine sea salt 0.09 oz +2.5g

PRE-COOK

Unsalted butter (*sauté*) 1.3 oz 2½ tbsp

BROWN-BUTTER OAT CRUMBLE

Unsalted butter (*brown it*) 5.9 oz 12 tbsp

Plain flour 6.3 oz 1½ cups

Rolled oats (*NOT instant*) 4.2 oz 1¼ cup

Light brown sugar (packed) 4.2 oz ½ cup

Demerara (*top crunch*) 1.7 oz 3 tbsp

Cinnamon · fine salt 0.09 oz +3.5g

Flaky salt (*on top*) — 2 pinch

THE RATIO — TOPPING BY WEIGHT

Flour 3 · Oats 2 · Sugar 2.8 · Butter 2.8. Lean by design — flour and oats outweigh the fat, so it bakes to loose rubble, not a greasy sheet. Filling runs **~17 : 1** fruit to sugar — the apples carry the sweetness.

Kit: 30x20 cm (or 23 cm round) dish, 5 cm deep · wide sauté pan · light pan for brown butter · scale · instant-read probe · sheet tray under, for bubble-over.

METHOD

- Prep the fruit.** Oven to 200°C (400°F); butter the dish. Peel, core + cut both apples to **2 cm chunks**. Toss with lemon first, then sugar, cornflour, cinnamon, 2.5g salt.

Firm high-acid apples hold; soft low-acid ones melt. 60:40 = chunk and bind in one spoonful. — McGee pp. 361–364

- Pre-cook to 71°C.** Melt 36g butter, foaming; add apples + liquid. Cook **8–10 min**, stirring, until the melts apple softens, the firm one stays cubed, liquid reduces to glossy syrup — centre **71°C (160°F)**.

Pectin methylesterase (50–80°C) demethylates pectin; freed carboxyls cross-link with cell-wall calcium → firm, heat-stable fruit that bakes tender, not mush. — Van Buggenhout / McGee pp. 285–286

- Spread + cool.** Tip into the dish, level, cool to **warm, not hot**, while you make the crumble.

Topping laid on hot fruit steams from below + never crisps. Cool first.

- Brown 168g butter.** Light pan, medium, swirl. Foam, subside, golden solids, toasted-hazelnut smell — **6–8 min**. Pull immediately (carryover browns on). Cool to warm.

Past ~120°C the milk solids run Maillard → hundreds of nutty, caramel aromatics. The biggest flavour for 30 sec of effort. — McGee pp. 32–38

- Build the crumble.** Whisk flour, oats, both sugars, salt, cinnamon. Pour warm brown butter over (every bit); fork to **pea-to-walnut pebbles**, not sand. Range = texture.

Old-fashioned oats absorb fat without dissolving + add chewy bite. Instant melts back to flat streusel. — Figoni 2010

Done: Deep golden, mahogany edges; thick syrup bubbling through the cracks (not just a simmer at the rim); filling **93–96°C (200–205°F)**. Bake 200°C on a tray, rotate once, **35–45 min**.

Serve: Top warm fruit with the crumble loose — **do not pack** (air gaps crisp it). Scatter flaky salt before baking. Rest **10 min** (cornflour sets at ~75°C), serve warm with custard, crème fraîche, or ice cream. Never microwave; never serve straight from the oven.

ONE FILLING, TWO PUDDINGS — APPLE CHARLOTTE

Double the pre-cooked filling, reduce half a little thicker. Line a deep tin with **butter-soaked white bread**, crust-side out; pack the apple in tight; cap with more buttered bread. Bake **200°C, 30–35 min** to deep gold, rest, then turn out — a crisp golden case round a dense apple centre. *The older English pudding the crumble half-replaced.*

ELEVATION

TIER 1 — NO EXTRA TIME

- Calvados** — 15ml into the pre-cook, cook off
- Toasted oats** — dry-toast 3 min before mixing
- Orange zest** — with the lemon, in the fruit

TIER 2 — WORTH IT

- Blackberry + apple** — 150g berries into cooled filling
- Spiced brown butter** — cardamom, clove, star anise; strain
- Pecans / hazelnuts** — 60g toasted, folded into crumble

TIER 3 — RESTAURANT

- Brown-butter ice cream** — the right scoop
- Miso caramel** — 100g sugar, 50g butter, 20g miso, 75g cream
- Apple-chip garnish** — 1mm slice, dried crisp

TROUBLESHOOT

Watery bottom	Skipped/under-reduced pre-cook. Reduce to syrup, not water.
All mush	One variety or over-pre-cooked. 60:40; pull at 71°C.
Centres raw	Chunks too big / no pre-cook. 2 cm max; true 200°C.
Pale, soggy top	Oven cool / packed / filling hot. 200°C, loose, cool fruit.
Greasy topping	Butter too hot / over-mixed. Warm butter; fork to pebbles.
Filling pours	Served too hot. Rest 10 min — cornflour sets at ~75°C.

CHARTER PREP & STORAGE

The galley move	Assemble in ramekins, par-freeze, bake from frozen — 35 min to plate .
Crumble mix	1 wk fridge / 3 mo frozen. Bake from cold or frozen, +3 min.
Pre-cooked filling	3 d fridge sealed. Top + bake from cold, +5 min.
Assembled raw	24 h fridge / 3 mo frozen. From frozen 190°C, 55–65 min.
Baked whole	3 d fridge / 3 mo frozen. Refresh 180°C, 10–15 min.
Never	Microwave (steams the top soft); serve straight from oven.