



Macadamia Crumble

Macadamia
kernel style

4S or 5



Concept
Crumbles



Steam cook suitability
No



Cooking length
Short



Heat exposure to nut
Full exposure



Nut raw/roasted
Raw



Shelf life
Short & long



Processing method
Bake



Nut recommended
usage rate (%)

13-20% of style 5 in the crumb or
16-23% of style 4S in the crumb

MACADAMIA CRUMBLE

Macadamia crumble with stewed fruit offers a refined take on a popular dessert, pairing the soft sweetness of gently cooked fruit with a golden crumble infused with the buttery flavour and texture of roasted macadamias.

The naturally rich flavour and smooth crunch of macadamias enhance the fruit without overpowering it, delivering a balanced contrast of tart and sweet, soft and crunchy. The topping caramelises gently in the oven, creating a delicate melt-in-the-mouth texture that complements the vibrant yet comforting fruit layer below.

What sets this dessert apart is its balance of flavour and texture. A light drizzle of honey, a dash of cinnamon or a sprinkle of toasted coconut can introduce added dimension, appealing to consumers seeking something familiar but more layered. A nuanced take on a familiar favourite, this crumble brings depth and distinction to dessert menus, seasonal ranges and premium ready-made formats.

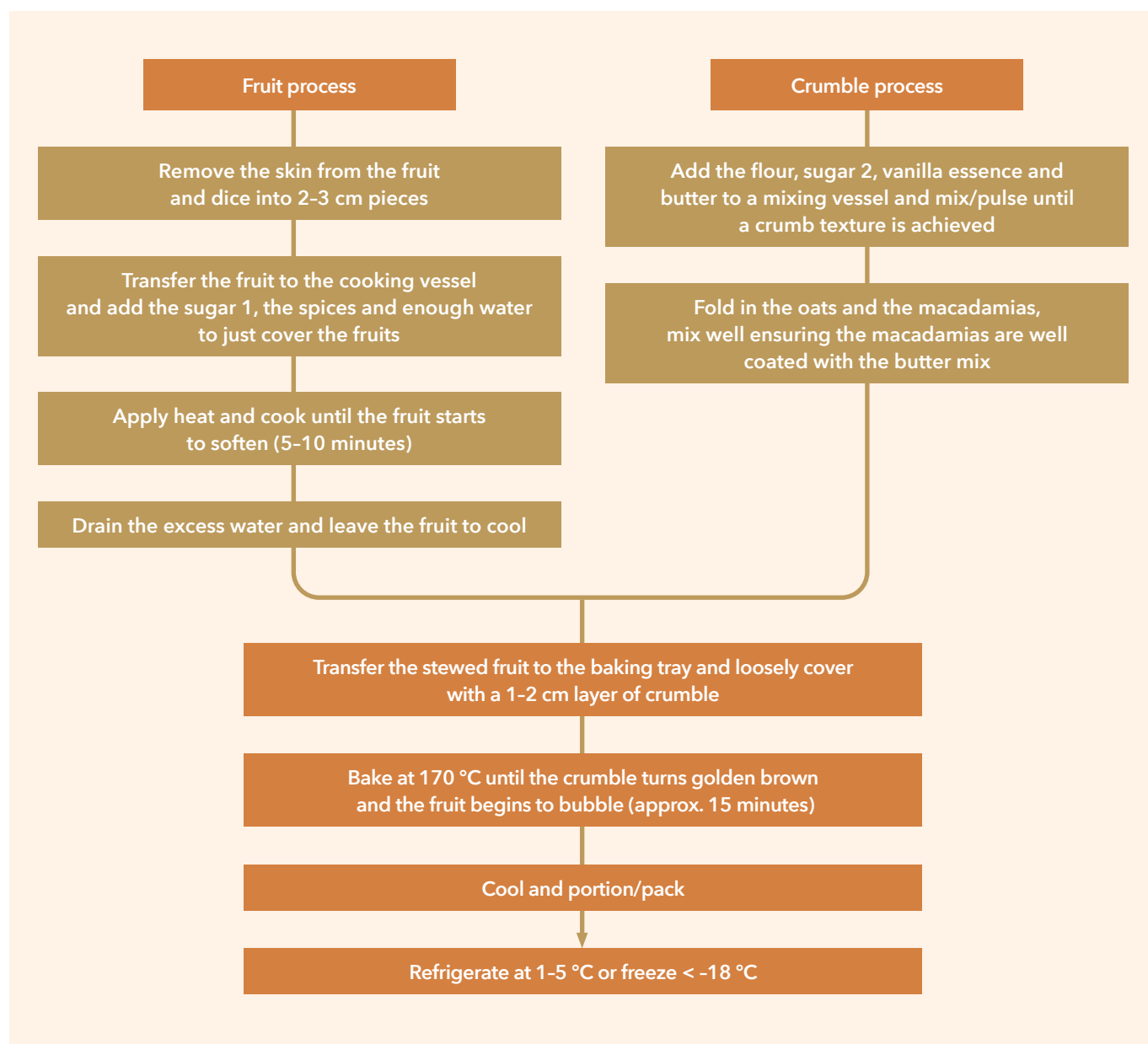
The recommendation in this application guide applies to macadamia crumble type recipes where macadamia pieces are liberally coated in butter and exposed to dry heat during baking, while also in contact with the wet fruit.



Formulation

Ingredient	Description	ADDITION RATE (%)	
		Macadamia crumble with stewed apple	Macadamia crumble with stewed peach & raspberry
Apple	Peeled and diced 2-3 cm, Granny Smith or similar	62.80	-
Peach	Peeled and diced 2-3 cm	-	43.80
Raspberry	Fresh or frozen whole raspberries	-	25.00
Sugar 1	Soft brown sugar	6.00	1.00
Cinnamon	Ground cinnamon powder	1.00	-
Oats	Rolled oats	8.70	8.70
Sugar 2	Soft brown sugar	4.50	4.50
Flour	All-purpose plain wheat flour	4.20	4.20
Butter	Unsalted dairy butter	8.10	8.10
Macadamia	Kernel style 5 (raw)	4.50	4.50
Vanilla essence	Liquid vanilla extract	0.20	0.20
Total		100.00	100.00

Processing flowchart



Shelf life

- **Fresh:** up to 7 days when stored in a refrigerated environment 1-5°C.
- **Frozen:** up to 9 months when stored in the freezer <-18°C



Note: All guidelines presented are for research purposes and provide indicative data on achievable product shelf life pertaining to the formulation, packaging and processes provided. Commercial manufacturers are responsible for validating the product shelf life and processing parameters using their specific equipment and operating conditions.

Recommended macadamia formats

- **Style 5 raw:** the kernel is exposed in the crumble topping, allowing the cooking process to effectively roast the kernel, resulting in a distinct, crunchy texture and excellent visual appeal.
- **Style 4S raw:** where a more prominent macadamia inclusion is desired.

Recommended macadamia dosages

- An inclusion level of kernel style 5 raw at 4–6% of the total product weight or 13–20% of the crumb delivers a consistent crunch throughout the crumble, providing a satisfying texture across each mouthful.
- An inclusion level of kernel style 4S raw of 5–7% of the total product weight or 16–23% of the crumb delivers a consistent crunch throughout the crumble, enhancing the overall eating experience with every bite.

Macadamia treatment and evaluations

- Raw kernel is more suitable than roasted kernel as the direct exposure to heat during the cooking process allows for adequate roasting.
- Macadamias that come into contact with the wet fruit during cooking have a slightly less roasted texture, but they still maintain their crunch.

Manufacturing considerations

- A thorough coating of macadamias with the fat from the butter mixture significantly reduces the risk of burning during baking. This layer acts as a protective barrier, promoting even heat distribution and minimising the chances of overcooking or scorching the kernel.
- The thickness of the crumble layer is crucial for achieving the desired texture. A layer thinner than 1 cm may expose excessive fruit, compromising the crumble's ability to form a crisp texture. A medium thickness (1–2 cm) offers the optimal balance of crunch and texture, while a thicker layer (>2 cm) can insulate the macadamia kernel from direct heat, resulting in reduced roasting and a softer, less crunchy texture.

Alternative flavour suggestions

- Macadamia crumble with alternative fruits – pears, plums, blackberry or rhubarb
- Macadamia crumble with chocolate chips, spices or coconut

Regulatory compliance check

All ingredients are permissible in Australia at the recommended levels. For specific international markets, please refer to the relevant regulatory standards in your country to ensure compliance and make any necessary adjustments to the ingredients used.



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