

TREE NUT CHALLENGE PROTOCOL (mixed nuts)

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RATIONALE:

- Mixed tree nut challenges are generally suited for situations where the pre-test probability of clinical allergy to each challenge nut is low.
- It is not generally recommended with a previous clinical reaction to any of the challenge nuts.
- It is generally recommended that mixed tree nut challenges are limited to 3-4 nuts, due to the total weight and volume of such a combined challenge; however older children may be able to tolerate a larger total volume.

CHALLENGE SUBSTANCE: Nuts will need to be weighed for this challenge.

Pre-weighed individual nuts should be mixed together for each dose.

- Most crushed nuts and nut meals are approximately 20-25% protein (see Table 1 of Appendix document). Defatted nut flours may have as much as 50% protein and if using these products for food challenge the dosages below should be adjusted accordingly.
- Most single nut challenges will be approximately 5-8 teaspoons of crushed nut or meal. Multiply this by the number of nuts to be challenged for feasibility.

CHALLENGE PROTOCOL - DAY 1

Time	WEIGHT OF EACH CRUSHED NUT You must multiply by total number of nuts being challenged*
0	Smear inside lip (not to touch outside lip)
20 min	40mg of each nut
40 min	120mg of each nut
60 min	400mg of each nut
80 min	1200mg (1.2g) of each nut
100 min	4000mg (4.0g) of each nut
120 min	12000mg (12.0g) of each nut
Daily total	17.8g of each nut

* For example: an almond and cashew challenge will have 40mg of each nut (80mg total mixed almond and cashew) at 20 minutes.

OBSERVATION POST-CHALLENGE: Generally for 2 hours

HOME CONTINUATION: Challenge nut should be continued in diet at least weekly following a successful challenge at normal serving size.

For high PPV and NPV the cumulate total challenge dose should be >4g of each nut protein and the final challenge dose >2g nut protein.

NOTE: Hazelnut, pecan, macadamia and brazil nut have less than 15% nut protein and you may elect to increase the challenge weight for these nuts (see Table 1 and 2 of Appendix document).

ASCIA Food Allergen Challenge Protocols have been developed to standardise protocols used by clinical immunology and allergy specialists in Australia and New Zealand. However, ASCIA takes no responsibility for any adverse outcomes that may occur using these protocols. It is important to note that food challenges:

- Are primarily used to determine if positive food allergy tests are associated with current clinical allergy.
- Should only be undertaken for patients who have been carefully selected by clinical immunology and allergy specialists or appropriately qualified and experienced medical practitioners in consultation with clinical immunology and allergy specialists.
- May provoke an allergic reaction in sensitised individuals and should therefore only be performed under medical supervision with immediate access to emergency treatment for anaphylaxis.

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