

## NUT CHALLENGE PROTOCOLS – APPENDIX

(Additional information for tree nut and peanut challenges)

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Food Challenges should generally have a final dose of >2g of **protein** and a cumulative **total protein** dose of 4 grams (for each nut). Nuts should be weighed for challenge purposes.

**TABLE 1**

NUT	% Nut protein of total weight	Average weight of <u>ONE</u> single NUT	Average Protein content <u>ONE</u> single NUT	Average number of nuts for protein cumulative total of 4 grams
Almond (blanched)	31	1 gram	300mg	13
Hazelnut	15*	1.4 grams	200mg	20
Cashew (dry roasted)	21	1.4 grams	300mg	13
Pistachio	21	0.6 grams	125mg	30
Walnut halve	25	3 grams	750mg	5
Pecan kernel (halve)	10*	1.5grams	150mg	25***
Brazil	14*	5 grams	700mg	6
Macadamia	10*	2.5 grams	250mg	16***
Peanut (raw)	25	1 gram	250mg	16
Nutella paste	1.5**/***	NA		
Peanut butter	25	NA		
Defatted peanut flour	50	N/A		

\* These nuts have significantly less than 25% protein

\*\* Nutella has 7.3% protein, but this includes milk solids.

\*\*\* This is a larger amount than a standard serving size and lower total protein cumulative dose for challenge may be reasonable.

**TABLE 2**

1 level 5 ml teaspoon	Average total weight in 1 <u>level</u> <u>teaspoon</u>	Average total mg nut protein in 1 <u>level</u> <u>teaspoon</u>	Estimated total number of teaspoons for cumulative OFC protein dose 4g
Almond meal	4 grams	1200mg	4 teaspoons
Hazelnut meal	4 grams	600mg	7 teaspoons
Nutella paste	7.5-10 grams	200mg	20 teaspoons***

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Peanut butter	10 grams	2500mg	2 teaspoons
Chopped/crushed walnuts (1 teaspoon)	2 -2.5 grams	550mg	6.5 teaspoons
Chopped/crushed cashews	2.5-3grams	700mg	5.5 teaspoons
Chopped macadamia	3 grams	300mg	13 teaspoons***
Chopped pecan	2.5 grams	250mg	16 teaspoons***
Chopped pistachio	3 grams	600mg	6.5 teaspoons

**TABLE 3**

<b>Crushed Nut in grams</b>	<b>Grams of protein (approximately 25% of crushed nut/meal weight is protein)</b>
40mg	10mg
120mg	30mg
400mg	100mg
1200mg (1.2g)	300mg
4000mg (4g)	1000mg(1g)
12000mg (12g)	3000mg(3g)

ASCIA Food Allergen Challenge Protocols were 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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