



EVA, 19 YEARS SUSPECTED NUT & PEANUT ALLERGY

CLINICAL CONTEXT

- Eva had long-standing rhinitis
- Experienced stomachache and diarrhoea after an Asian dish → peanut allergy suspected
- Singleplex IgE tests showed high IgE to multiple nuts and peanut
- Provocation and prick-to-prick tests were negative

Multiple
sessions,
wrong
assumption



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ALEX
ALLERGY XPLOER

ALLERGY XPLOER CASE STUDY

HOW USING ALEX³ LED TO A BETTER THERAPY FOR EVA



EVA, 19 YEARS SUSPECTED NUT & PEANUT ALLERGY

EXCERPT FROM EVA'S IgE TEST RESULTS

Total IgE result: 624 kU/L Reference range total IgE Adults < 100 kU/L

Allergen source	IgE Singleplex without CCD blockade	IgE Multiplex without CCD blockade	ALEX ³ IgE Multiplex with CCD blockade
Timothy grass Phl p 1	-	14.78	12.43
Dust mites Der f 1	-	4.67	6.16
Dust mites Der p 1	-	14.16	13.69
Hom s LF, CCD marker	-	17.13	< 0.10
Cashew Extract	17.8	-	-
Cashew Ana o 1	-	1.5	< 0.10
Cashew Ana o 2	-	< 0.10	< 0.10
Cashew Ana o 3	-	< 0.10	< 0.10
Pecan Extract	12.9	5.8	< 0.10
Pecan Car i 1	-	< 0.10	< 0.10
Pecan Car i 2	-	3.9	< 0.10
Pecan Car i 4	-	< 0.10	< 0.10
Hazelnut Extract	28.7	-	-
Hazelnut Cor a 8	-	< 0.10	< 0.10
Hazelnut Cor a 9	-	3.27	< 0.10
Hazelnut Cor a 11	-	3.54	< 0.10
Hazelnut Cor a 14	-	< 0.10	< 0.10
Almond Extract	67	2.36	< 0.10
Almond Pru du 6	-	< 0.10	< 0.10
Peanut Extract	21.1	-	-
Peanut Ara h 2*	-	< 0.10	< 0.10
Walnut Jug r 2	-	9.83	< 0.10
Macadamia Extract	-	1.25	< 0.10
Brazil Nut Extract	0.74	< 0.10	< 0.10

* other peanut components also negative
IgE measured in kU_A/L, test range IgE Singleplex: 0,35 - 100, test range ALEX³: 0,3 - 50
For convenience, not all results are shown.

HOW ALEX³ CHANGED THE THERAPY FOR EVA

CCD BLOCKADE

Revealed that Eva's positive IgE results to peanut and nuts were **due to cross-reactive carbohydrate determinants (CCDs)**, not true allergy → cleared up misleading specific IgE results.

MULTIPLEX TEST

Allowed testing of **all major nut allergens, grass pollen, dust mites and CCD marker** from **one sample** → no need for additional tests.

MOLECULAR ALLERGY DIAGNOSTICS

Identified that Eva had **no clinically relevant IgE** to peanut or nut proteins like **Ana o 3, Ara h 2 or Cor a 14**, confirming the absence of a dangerous allergy.



BENEFITS FOR THE DOCTOR

Avoided misdiagnosis of severe nut allergy

No prescription of unnecessary emergency treatment (e.g., adrenaline auto-injector)

Shifted focus to Eva's actual sensitisations (grass, dust mite) and potential immunotherapy

Saved time and uncertainty in allergy clarification

HOW IT CHANGED EVA'S LIFE

Nut and peanut allergy ruled out

Eva could **reintroduce previously avoided foods** without fear → no lifelong restriction, no social or dietary burden.

Clarity on symptoms

She now knows the stomach issues were **not allergy-related** → avoided a mislabelled food allergy diagnosis.

No emergency precautions needed

Eva did **not require adrenaline** or special precautions at restaurants, school, or during travel.

Freedom from misdiagnosis

Avoided becoming part of the growing group of patients with **overdiagnosed food allergy** based on sIgE-only testing.

Relevance of grass pollen & dust mite confirmed

Opened the path to **targeted treatment** (e.g., immunotherapy) for her actual allergic symptoms (rhinitis).

COMPREHENSIVE. SPECIFIC. EFFICIENT.