Foods reported as responsible for OAS in Greece

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Aim: Oral allergy syndrome (OAS) is a clinical expression of food allergy mainly caused by foods of plant origin. The culprit allergens are cross-reacting proteins, like profilin, that are also present in pollen, triggering allergic respiratory symptoms. The aim of our study was to detect the foods of plant origin that are referred as responsible for OAS in Greek adults.

Methods: 264 atopic adult patients, with allergic respiratory symptoms and/or food allergy were interviewed in our study. A complete record of their atopic medical history was obtained; symptoms of allergic rhinitis, asthma and signs of atopic dermatitis, as well as their family history of atopy. Information regarding any symptoms of food allergy and the type of reaction (OAS or systemic reaction) were collected. The foods that patients considered responsible were registered.

Results: 79/264 of our atopic patients (30%) referred symptoms of OAS, while 50/264 patients (18,9%) had experienced systemic reactions. Foods of plant origin implicated in OAS symptoms were: peach; 23/79 (29%), walnut; 21/79 2(6,5%), kiwi; 17/79 (21,5%), banana; 14/79 (17,7%), hazelnut; 9/79 (11,4%), peanut; 8/79 (10%), eggplant/ apricot; 7/79 (8,8%), melon; 6/79 (7,5%), strawberry/ almond/ cherry; 5/79 (6%), cabbage/ tomato/ watermelon/ apple/ ananas/ grape/ orange/ pistachio/ spinach; <5/79 (3-5%). Finally, less common foods, each referred only once by our patients, were: sesame/ sunflower seed/ pear/ cashew nut/ brazil nut/ lemon/ cucumber/ bell pepper/ mustard/ chestnut/ fig/ mango/ papaya/ plum/ onion/ lentil/ peas.

Discussion: Our results in Greek adults show some similarities but also some diversities in comparison with the relative ones from other Mediterranean countries. Similarities are found between Greek and Spanish populations, which refer fruits of the Rosaceae family as the most common cause of OAS, followed by kiwi, peach alone, melon and banana. On the contrary, Italian studies mention melon as the most common culprit food, followed by watermelon, tomato, banana and ananas.

Conclusion: Peach, walnut, kiwi, banana and hazelnut are the top 5 foods referred as responsible for OAS in Greece.