

# The Association between Food and Exercise Induced Anaphylaxis

## Abstract:

Sir,

Exercise induced anaphylaxis (EIA) and its subtype food dependent (FD)- EIA are uncommon and easily missed forms of allergy. Exercise induced anaphylaxis (EIA) is a unique form of physical allergy characterised by rapid onset of generalised urticaria and occasionally complicated by respiratory compromise and/or cardiovascular collapse during or shortly after exercise. The first case report was published in 1979 by Maultiz et al. EIA has since been described in association with the use of medications (such as aspirin and non steroidal drugs, which may also cause spontaneous urticaria and angioedema), and with premenstrual hormonal change. A variant of EIA that is perhaps more common in clinical allergy practice is anaphylaxis triggered by exercise soon after ingestion of food allergens. A clinical scenario emerged whereby patients would develop EIA following the intake of specific foodstuffs. This disease is now termed FD-EIA.

The first case report which described an association with shellfish of FD-EIA associated with wheat. Since then , further foods have been implicated in causing FD-EIA, including nuts (hazelnuts, almonds, peanuts and pistachio), vegetables (celery, onions, tomatoes, maize, matsutake mushroom, lentils and chickpeas), fruits (pomegranate, grapefruit, apples, oranges, grapes and peaches) and some other type of food (snails, cuttlefish, tofu, egg, cowâ s milk and poppy seeds). Clinical records from a tertiary referral adult allergy clinic and training centre in London (Guys and St Thomas Hospital) suggest that 3-5 cases of EIA fit the definition of FD- EIA every month. The few epidemiological studies that are available to date show a female predominance with a mean presentation age of 37.<sup>3</sup> In the acute settings, the emergency management of FD-EIA is the same as that for any Ig E- mediated systemic anaphylactic reaction. The cornerstone of successful longer term management of FD-EIA are first to recognise the problem and second to educate the patient. Avoidance of culprit foods, preferably with the help of specialist advice from an allergy dietician, teaching the patient to recognise symptoms, to terminate exercise when necessary and to self manage systemic episodes with adrenaline if necessary are crucial.

Allergy as a specialty does not exist in Ireland to a level that an effective service is provided to patients in a consistent and equitable fashion. Therefore increasing the awareness of the presence of FD-EIA is crucial as this condition can lead to life threatening situations if not recognised early.

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