

Kiwi Allergy – the facts

Background

Allergy to kiwi fruit is becoming increasingly common and severe reactions are occasionally reported, especially among children.

Kiwi fruit is a native plant of the Yangtze River Valley region of China. In 1904 one male and two female plants were taken to New Zealand. Almost all of the fruit cultivated outside China is descended from those three plants. Kiwi fruit used to be known as the Chinese gooseberry.



Kiwi fruit started to be grown commercially in New Zealand in the 1930s and 1940s, but it was not until the 1960s that it was exported to America. It has since been cultivated in North America, and in the past 30 years has become a common food throughout the world.

Kiwi fruit became a part of the UK diet in the early 1970s. Reports of allergy became increasingly common in the 1980s, predominantly among adults, and then among children in the 1990s.

Symptoms of kiwi allergy

A study of kiwi allergy by researchers at the University of Southampton shed some light on the problem. The research team was contacted by nearly 400 people who reported symptoms to kiwi fruit; 276 people completed a questionnaire.

The symptoms that people reported were varied and included reactions in the mouth (tingling, sore mouth, swelling of lips, etc.) and more severe symptoms including wheeze, blue lips and even collapse. The study found that severe symptoms were more likely to occur in young children than people over 15.

The researchers concluded that people who suffer severe reactions the first time they eat kiwi fruit are likely to continue to have severe symptoms on subsequent reactions, but if the first reaction is mild, future reactions may be mild. A few people in the study went from having mild to severe reactions.

Nearly three-quarters of children of five or under had reacted on their first known exposure to the fruit in comparison with only one-fifth of adults.

Treatment

People with suspected kiwi allergy need good medical advice, initially from a GP and subsequently at an NHS allergy clinic. Unfortunately, the blood tests and standard skin prick tests for the diagnosis of kiwi allergy are not particularly reliable, due to the fact that allergens within the kiwi fruit are very easily destroyed by

processing. In order to confirm the diagnosis it is necessary to use a fresh kiwi fruit and a small amount of the fresh juice used in a skin prick test and this method has been shown to be more reliable in confirming the diagnosis than using blood tests or a standard skin prick test solution. If there is the possibility of severe reactions occurring, the patient should be prescribed injectable adrenaline (also called epinephrine).

As with any food allergy, if you react to kiwi and also have asthma it is vital that the asthma is well-controlled. A severe reaction to food is more likely if coexisting asthma is poorly managed. People can get advice from their local GP's surgery.

Allergies to other foods and substances

Some people with kiwi allergy may also react to natural rubber (latex), avocado, banana, apple and carrot. A significant proportion may be tree pollen allergic because of a phenomenon known as "cross-reactivity" – where proteins in one food or substance are similar to those in another.

Some people in the Southampton study reported allergies to other foods and substances that have no relationship to kiwi including peanut, tree nut, milk and egg.

Vigilance is needed

People allergic to kiwi fruit should be careful of Smoothies and tropical fruit juices. Check the ingredients.

Be careful of cross-contamination. The *Journal of Allergy and Clinical Immunology* reported a case where anaphylaxis was triggered by minute amounts of kiwi left on a knife that was subsequently used to prepare a strawberry dessert served in a restaurant.

Kiwi can be used to glaze paté and, in New Zealand at least, to tenderise meat.

It is probable that a large proportion of people with kiwi allergy are also allergic to Zespri gold – a different but similar species. Zespri gold is easily identifiable by its gold colour and similarity to kiwi fruit, but in a fruit salad, it might be mistaken for melon or some other tropical fruit. Kiwi berry is another form of kiwi that is likely to cause a reaction.

The content of this Fact Sheet has been **Peer Reviewed by Professor John O Warner, Professor of Paediatrics and Head of Department, Imperial College London.**

Disclaimer – The information provided in this leaflet is given in good faith. Every effort has been taken to ensure accuracy. All patients are different, and specific cases need specific advice. There is no substitute for good medical advice provided by a medical professional.



About the Anaphylaxis Campaign – *"Supporting people with severe allergies"*

The Anaphylaxis Campaign is the only UK wide charity to exclusively meet the needs of the growing numbers of people at risk from severe allergic reactions (anaphylaxis) by providing information and support relating to foods and other triggers such as latex, drugs and insect stings. Our focus is on medical facts, food labelling, risk reduction and allergen management. The Campaign offers tailored services for individual, clinical professional and corporate members.

Visit our website www.anaphylaxis.org.uk.