

## **Food Allergy Treatment at the Dallas Food Allergy Center (DFAC)**

### **Food Allergy Prevalence**

The incidence of food allergy has increased over the past 10-20 years with up to 8% of the population having food allergy. Food allergy is a problem that is routinely treated at DFAC, and our doctors have over 60 years of cumulative experience in this field.

### **Making the Diagnosis**

The information that parents and patients provide during an office visit is the most important part of making the diagnosis of food allergy. Your allergist may decide to order skin testing or lab testing or both to support the diagnosis, but the history of exposure to the allergenic food is most helpful in establishing the diagnosis.

### **Food Challenges**

Food challenges are the gold standard used to determine if there is or is not a food allergy. Your allergist may recommend a food challenge if there is a suspicion that a positive test is falsely positive or if your doctor feels that the patient may no longer be allergic to the food. Challenges are performed at the Medical City Dallas office under close observation with staff that is experienced in treating severe allergic reactions.

### **Avoidance Management Strategies**

Patients with food allergies should completely avoid the allergenic food. Even small or trace amounts of the allergenic food may cause a severe reaction, so complete avoidance is necessary. Patients and families should read labels of all foods to ensure that the ingested food does not contain any amount of the food allergen. Parents must also confirm that food eaten at restaurants has not been prepared or contaminated with the food allergen. We teach patients and parents the key elements of avoidance including label reading and how to protect the patient in restaurants.

### **Treatment of Reactions**

Because accidental exposures to food allergens can occur at any time, it is important that families and patients are well-educated on how to treat allergic reactions. An epinephrine auto-injector (Epipen or Auvi-Q) should be available to food allergic patients at all times, and all family members should be trained on the correct use of their device. At DFAC, parents and patients are taught how to recognize reactions and when to treat with epinephrine. Mild reactions such as hives may be treated with antihistamine but remember “Antihistamine for hives, but Epi saves lives!”

## **Food Oral Immunotherapy (OIT)**

There is a treatment option for food allergic patients that offers an alternative to complete avoidance of the food. Food OIT, sometimes referred to as food desensitization, is a process modeled after allergen immunotherapy (allergy shots), that carefully exposes patients to slowly increasing doses of the allergenic food over a period of months. Early doses of the food are given in microgram amounts (about 1/10,000 of an ounce) and increased on a weekly basis. By the end of the program patients are eating whole servings of the previously allergenic food on a regular basis. In most cases they are able to incorporate the food into their diet whenever they please.

Food OIT has been a mainstay of treatment at DFAC for more than 11 years, and we have successfully desensitized more than 650 food allergic patients. Food OIT is currently available for the treatment of egg, milk, soy, peanut, wheat, chickpea, coconut, tree nut, and seed allergy.

### **OIT Program Outline**

**Day 1:** Patients are given slowly increasing doses of the allergic food in a very diluted liquid form every 20 minutes in the Medical City Dallas office, with up to 9 doses given on the first day. Patients will continue dosing at home with the last dose tolerated in the office.

**Escalation:** Dosing continues once daily at home, and after at least 1 week of successful dosing at home patients return to the DFAC office for a dose increase. Patients ingest the increased dose in the office and are observed for 45 minutes before they are sent home with that dose. Home dosing continues once daily until the next dose increase in the office. Dose escalation continues until a whole serving of the food is ingested once daily with no problems.

**Maintenance:** When the target dose is reached the patient is then required to ingest a minimum of one serving of the food once daily (e.g., 4 oz milk, 8 peanuts, 5.7g Vital Wheat Gluten flour) for at least 6 months. Changes in the frequency of dosing will be discussed at the OIT follow up visits. The maintenance dose varies according to the amount of protein in the food. In the standard maintenance phase the now tolerated food may also be freely added to the diet.

**Potential problems:** Less than 10% of our patients will require epinephrine throughout the food OIT process. The majority of these epinephrine-requiring reactions are related to an identifiable cause, for example, not following illness or exercise precautions. About 10% of our patients undergoing food OIT can develop a temporary complication called eosinophilic esophagitis-like OIT-related syndrome (ELORS) caused by the allergenic food. When this condition is confirmed, the dose is reduced until the symptoms resolve. The patient is then maintained at the lower dose for 4-12 weeks before dose escalation is resumed. The majority of patients who develop ELORS are able to complete the OIT program.