Peanut desensitization can ease parents fears

By ACSH Staff — January 31, 2014

One of the most dangerous food allergies in children is peanut allergy.

For highly allergic individuals even a tiny amount of peanut, or contamination with peanut protein, can lead to a life-threatening reaction, known medically as anaphylaxis. Parents of peanut-allergic children must be constantly be on guard against their kids coming into contact with the allergen. A recent report [1] in The Lancet, however, suggests that a desensitization protocol may allow such allergic individuals to consume small amounts of peanut protein without negative effects.

Led by Dr. Katherine Anagnostou, of St Thomas' Hospital Children's Allergy Service in London, UK, researchers investigated the efficacy of peanut oral immunotherapy (OIT) in diminishing allergic children’s sensitivity to peanuts. Participants in the study were between 7 and 16 years old, and were peanut-allergic, as demonstrated by both skin-prick tests and double-blind food challenges; 99 such children were included in the study. Half of the participants were randomly assigned to either a treatment or a control group. The treatment group consumed gradually increasing doses of peanut flour mixed with their food, ending with 800 mg by the end of 26 weeks. Subjects consumed the first installment of each increased dose under medical supervision. The control group simply continued with peanut avoidance.

At the end of Phase 1 (26 weeks), participants were given a double-blind, placebo-controlled food challenge (DBPCFC). During the second phase, the control group was given the opportunity of OIT, with another DBPCFC at the end. The primary outcome of the study was the proportion of desensitized individuals in each group at the end of the first phase. Desensitization was defined as no reaction during peanut DBPCFC.
The results were impressive: Both the active group after phase 1, and the control group after phase 2 demonstrated a significant increase in their tolerance of peanut protein: 84 percent of the test group and 91 percent of the control group demonstrated this increased tolerance after phase 1 and phase 2 respectively. The amount of peanut protein tolerated was 800 mg equivalent to about 6 peanuts.

The authors noted, It is probable that long-term peanut protein ingestion will be needed to provide continued protection from accidental exposure, perhaps for several years.

ACSH’s Dr. Gilbert Ross commented: This is a very important study, since peanut allergy can have life-threatening effects on children and cause great anxiety in parents, especially because peanut allergy is among the most common serious allergic conditions. Replication of these results would be very important in determining this system’s utility. It is important to note that such desensitization procedures should be performed only under medical supervision.