Role of Food Allergies in Eczema

Q&A

1. **What laundry detergents do you recommend?**
    - We recommend the following laundry detergent/cleaner and dryer sheets: All® free and clear.
2. **Why do some people in remission from their eczema find that they are no longer sensitive or allergic to certain foods anymore?**
    - Some patients naturally outgrow their food allergies/sensitivities. In others, healing of the inflammation caused by eczema allows the skin to respond in a less reactive fashion to foods and substances that previously may have exacerbated their eczema. Healing of one issue can, in some instances, promote healing in others. This is not a 1:1 correlation though. Some patients will continue to have significant food allergies despite having control of their eczema.
3. **Is topical steroid withdrawal real?**
    - Topical steroid withdrawal (TSW) is a poorly understood potential medical problem. At this time, it is unknown if this represents a true medical problem or not. Better controlled studies are needed to validate this possible issue and understand its cause and further its potential treatment.
    - TSW is typically described as a worsening of one's eczema after days or weeks of having clear skin and the recent discontinuation of high dose topical steroid use. It has not been reported in pediatric patients and typically is reported in adult female patients. Some report that the rash that develops may be worse than the initial eczema one was experiencing before the use of topical steroids.
    - Many dermatological experts do not believe TSW is a real medical condition, but instead a worsening of one's eczema from improper control. With that proper understanding, this condition typically requires chronic treatment for most patients. It is also important to realize that patients with atopic dermatitis may experience periods of clear skin and then suddenly a worsening of their skin for a number of reasons. It is much more common to see a worsening of one's eczema as a secondary to exposure to common triggers than to

attribute one's worsening eczema to a steroid withdrawal. Many of the common reasons to see a worsening of eczema include an improper reduction of topical steroid use, improper overuse of topical steroids, or exposure to other external/internal factors (stress, allergens, irritants, infection, hormonal influences, chemical allergy, and or food allergy exposure, etc).

4. **What is your perspective on what is causing the food allergy and eczema epidemic?**
    - This issue has not been fully explained. Some believe that our diets including more processed foods and/or the movement away from a more rural/farming lifestyle to one that is urban/industrialized have shifted our immune systems from an infectious oriented response (TH1) to a more allergic based response (TH2). Less infection and/or exposure to microbes in our more sanitized communities perhaps is allowing our immune systems to react to our environment in different immunologic ways that are highlighted by more food and/or allergic-type conditions.
5. **My daughter withdrew from many foods based on an allergist's recommendations at 1 year. She is now 5 years old. What can be done to reintroduce those foods now?**
    - In general, many children with atopic dermatitis (AD) may show sensitivities to a multiple array of foods that may not all be clinically relevant. Every case is different, and some foods could in fact be dangerous to reintroduce without the assistance of an allergy expert. Repeat testing may be warranted and/or consideration of in-office food challenges and/or careful reintroduction of the putative foods could and should be entertained.
6. **Does chlorine in a pool cause eczema?**
    - Many different environmental irritants can trigger eczema, and swimming pool water is no exception. Some people with eczema may experience irritation or drying of their skin; others experience no negative effects (especially if they wash well with emollients and apply moisturizers before and after swimming).
    - Some people with eczema may experience irritant dermatitis after swimming. This can be due to the skin reacting to chlorine or to any of the other chemicals added to sanitize or alter the chemical balance of the swimming pool water. If this happens to you, it may be worth changing where you swim as different pools may use different chemical treatment systems. Alternatively, try to find a salt-water pool, or swim in fresh or seawater (especially in the summer months)."
7. **If cutting/handling foods like tomato and zucchini cause my hands to itch, is it safe to assume that I am allergic?**
    - Some foods like tomato (nightshade family of fruit), contain a chemical called alkaloids that can either be an irritant (less harmful and probably would not cause a serious allergic reaction) or, on rare occasions, be a true allergen (more harmful which could cause more serious allergic symptoms like hives, trouble breathing, vomiting). Skin testing and/or blood allergy IgE-mediated testing would be recommended to rule out the allergic cause to the suspected nightshade.
8. **Will introducing allergens via IgE skin tests on eczema patients cause future food sensitivities?**
    - Many patients with AD have evidence of IgE-mediated sensitivities to food:

- If the patient has previously consumed and tolerated the named food without issue, avoiding it would not be recommended and reintroduction in these situations would not increase the risk of future allergy to the food.
- Be careful about introducing foods that are positive on a food skin test or a specific IgE blood allergy test if one has never eaten the food that is positive.
- Introduction of foods that are found to be negative on skin and/or blood allergy tests are generally tolerated without issue.
- Rarely, patients are allergic to a food in a non-IgE-mediated fashion. In these situations, eating the food causes eczema but skin and blood allergy testing are negative to confirm this allergy. Avoiding these types of food allergens would also be helpful. It would be rare to have multiple non-IgE mediated food allergens that are clinically relevant.

9. **Can you tell us more about how food allergies impact smaller children ages 1-3?**
    - Food allergies are more likely to affect younger children than older children. The more severe the eczema, the more likely that a food allergy may be contributing to one's eczema. Most children with severe eczema have multiple triggers for their eczema and it is not always driven by food allergy. Increasingly restrictive food diets are not recommended in patients with atopic dermatitis (AD). Assistance by a board-certified allergist could help in these cases of severe AD in infants and young children.
10. **Could eczema or allergies be caused by a vitamin deficiency?**
    - Vitamin D deficiency has been seen in some children with difficult to treat eczema, and vitamin D supplementation has been shown to help in some cases to improve severe eczema.
    - A zinc deficiency can lead to an eczema-like rash called acrodermatitis enteropathica.
    - Vitamin A deficiency could also lead to eczema.
11. **Can vaseline be used to keep the compound on longer?**
    - Vaseline is a great barrier ointment used to prevent evaporation and can be used in some patients over the Aron compound or other single agent medications to promote more long-lasting and/or effective results.
12. **Do antihistamines work against food intolerances/allergies?**
    - Oral antihistamines may prevent hives and other histamine-related effects seen with aeroallergen and/or food allergies, common issues seen in combination with atopic dermatitis (AD). I think the risk of their use is low and the potential benefit is helpful, especially in patients with recurrent hives/flushing that is seen with AD. I do not routinely suggest the use of oral antihistamines to mitigate the negative effects of a known food allergen. I would avoid the food allergen instead of trying to mask it with an antihistamine.
13. **Are food sensitivities the same as food allergies?**
    - These issues are very different. A “sensitivity” refers to a presence of a positive result seen on blood or skin allergy testing. False positives are routinely seen, but false negatives are rarely seen. "Allergy" is reserved to describe patients that are truly clinically allergic to the

food, thus they have an adverse clinical reaction (experience symptoms) with exposure to the food, and the blood/skin allergy test objectifies the allergy.

14. **Can atopic dermatitis be totally healed?**
    - Yes, with the correct treatment, healing of one's skin can be found. Typically, most patients may need controller therapy to maintain healing and prevent remission. It is important to remember that atopic dermatitis is a chronic condition for which there is no cure, but there are ways of maintaining and managing this condition to prevent recurrent flares and achieve remission.
15. **Is it possible for one to have a reaction to cooking oils?**
    - I am not familiar with this issue. In contradistinction, a common cooking oil touted as an aid in healing eczema is coconut oil. Coconut oil is rich in lauric acid, a healthful fatty acid that is also in breast milk. Lauric acid is an ingredient in natural remedies for all kinds of health issues, including eczema. While coconut oil cannot cure eczema, it can soothe the skin, reduce irritation and itching, and lower the risk of infection.
16. **Can the impaired skin barrier in infantile eczema before the introduction of solid foods lead to food allergies?**
    - There is ongoing research into this question. Currently, it is believed that altered skin barrier function increases the exposure of the body's immune system to potential topically exposed food and/or environmental allergens, which ultimately leads to the development of food and/or other environmental allergies. Controlling and/or healing the skin barrier defect early in life could lead to a reduction in the incidence and/or prevalence of food and/or other environmental allergies. More studies are needed to look at this great question.
17. **What kind of testing do you recommend for food sensitivities? Do you recommend IgG or IgA blood tests?**
    - IgE testing is the only recognized form of testing that has been shown to be clinically relevant. IgG and/or IgA food intolerance testing is considered experimental and has not been proven to provide clinically relevant results that can be trusted and/or instructive.
18. **What is the role of glutamates in food allergies and eczema?**
    - The role of glutamates in eczema is not well defined and currently not widely accepted. Soy sauce, fish sauce, and oyster sauce all have very high levels of glutamate. Soy is naturally high in glutamate, and soy-based sauces will have concentrated levels of the compound. Another common chemical that contains glutamate is MSG. Monosodium glutamate (MSG) is a nonessential dicarboxylic amino acid that is a normal constituent of food protein. Additional MSG is added to food as a flavor enhancer, particularly in Asian foods. A variety of nonallergic symptoms have been attributed to MSG, while allergic and asthmatic reactions are only RARELY reported and generally not well-substantiated.
    - MSG symptom complex: Perhaps the best known adverse reaction to a food additive is the MSG symptom complex. This is not an allergic reaction.
    - The MSG symptom complex typically appears 1 to 14 hours after ingestion. Reported symptoms include headache, myalgia (body aches), backache, neck pain, nausea, diaphoresis (sweating), tingling, flushing, palpitations, and chest heaviness. Children have been reported with shivering, chills, irritability, screaming, and delirium. The mechanism of

these reactions has been proposed to involve an exaggerated sensitivity to this compound, which is metabolized after ingestion to glutamate, a major excitatory amino acid neurotransmitter.
    - I routinely do not tell patients and/or parents of patients with atopic dermatitis to avoid glutamates in food.

19. **Will avoiding dairy and wheat clear up my eczema?**
    - Dairy and wheat are common allergens patients can be allergic to, but not all patients with atopic dermatitis (AD) have food allergies. Short trials of avoidance of dairy, wheat, egg, or peanut could be advised in select patients; avoiding one of these foods for a two-week period of time and looking for clinical improvement. More formal testing through an allergist is a quicker way to possibly evaluate for a specific food allergy.
20. **What can you do to reduce the itch at night time?**
    - Controlling one's underlying eczema would be the first line of treatment. In addition, the liberal use of moisturizers before bed is recommended. Use of sedative antihistamines may also be needed in the short term to help with nighttime itching, but these are not recommended for long-term use.
21. **Do you believe that instead of food allergies playing a role in AD, that it's actually the AD making it more likely to have allergic reactions to foods?**
    - There is ongoing research into this question. Currently, it is believed that altered skin barrier function increases the exposure of the body's immune system to potential food and/or environmental allergens that ultimately leads to the development of food and/or other allergen allergies. Controlling and/or healing the skin barrier defect early in life could lead to a reduction in the incidence and/or prevalence of food allergy. More studies are needed to look at this great question.
22. **Can latex allergy and cross-reactive foods exacerbate atopic dermatitis?**
    - Latex allergy is a rare but identified allergen in patients with AD. Having a latex allergy does put one at risk of an allergy to the following foods:
        - Avocado
        - Banana
        - Chestnut
        - Kiwi
        - Apple
        - Carrot
        - Celery
        - Papaya
23. **Do certain fabrics, like wool, and others cause itching to get worse?**
    - Yes, these fabrics would exert an irritant effect on already inflamed and damaged skin and could worsen and/or delay healing. These fabrics should be avoided if possible.
24. **Is atopic dermatitis the same as dyshidrotic eczema?**
    - Dyshidrotic eczema (DE) is a form of eczema. Atopic dermatitis (AD) is another form of eczema and the most common type of eczema. AD is commonly seen in patients with DE, but not necessarily the other way around.

25. **I am taking Tofacitinib (11 mg) 1 tab/night. Now my atopic dermatitis condition is better. Can I take it long? Will there be any issues?**
    - I would have your dermatologist or rheumatologist help monitor your underlying condition. This medication is currently authorized for ulcerative colitis, rheumatoid arthritis, and psoriatic arthritis. While this drug is not FDA-approved for the treatment of atopic dermatitis, studies have shown it can be helpful for this condition. A topical JAK-STAT medication just received FDA approval called Opzelura, which has a similar mode of action as the oral form of Tofacitinib.
26. **Can pollen or seasonal changes cause atopic dermatitis?**
    - Yes, aeroallergen (cat, dog, dust mite, tree pollen, grass pollen, weed pollen, or other animal) allergies are a very common trigger for AD. Avoidance would be indicated if testing suggested one is sensitive. Allergy shots have shown to be helpful in some studies in children with atopic dermatitis.
27. **What is the content in strawberries that makes dermatitis severe?**
    - There are many different types of allergic reactions that have been seen with strawberries. One is an immediate IgE mediated response where ingestion may cause hives, trouble breathing, and/or GI disturbances; skin or blood allergy testing would be positive. Some patients are susceptible to chemicals in strawberries that can cause the release of histamines and in a (pseudoallergic mechanism) non-IgE mediated fashion experience similar immediate-type reactions, but formal IgE type testing would be negative; strawberries are histamine liberating foods. Some patients experience local reactions in the mouth when ingesting fresh strawberries, this may be part of an Oral Allergy Syndrome like reaction when patients have a concurrent severe allergy to tree, grass, and/or weak pollen.
28. **What are the common root causes of eczema and how do you treat those root causes?**
    - Most cases of eczema are genetic in origin and are the result of abnormal skin protein number and/or function, thus curing eczema is not that simple in these cases. Using topical and/or oral agents that lessen the inflammatory reaction on the skin can counter these genetic factors in many patients. Avoidance of common allergic triggers (food, environment, psychosocial stress, and/or chemical allergens) is also helpful in many patients. Thus, the management of each case is different and requires a thorough knowledge of potential causes and available treatments.
29. **Can oral immunotherapy help the skin? Can getting skin under control help with food allergies?**
    - I have recognized that oral immunotherapy (OIT) for food allergy can initially worsen one's atopic dermatitis. I have not seen that OIT is especially effective in the treatment of one's eczema, while it is helpful in reducing the chance of food allergy-related symptoms associated with accidental ingestion.
30. **Should children with eczema be tested for chemical allergies? How valid are IgE tests for children?**
    - Delayed type hypersensitivity chemical allergy testing or chemical allergy patch testing is helpful in some cases of difficult to manage eczema, especially in patients with hand, face, or eyelid eczema, and more commonly relevant in adult patients that have occupational exposure to specific chemicals. This type of testing is different than allergy skin prick

testing that looks for immediate-type reactions to allergens. IgE testing is a high sensitivity but not a very good specificity. Patch testing looks for T-cell-mediated allergy which is different than looking at IgE mediated allergy. Both processes have been shown to promote AD in patients.

31. **If you tested negative for actual food allergies, what role do foods have on flare-ups, such as processed foods or food dye?**
    - Some patients have a non-IgE mediated food allergy which may cause a delayed worsening of one's eczema. Thus, a negative skin or blood allergy test does not help in the identification of this type of delayed-type reaction. But please understand that this diagnosis requires a consistent history of if the ingestion of this particular food worsens one's eczema while avoiding it improves the eczema. This type of allergy is rare. Typically these types of delayed reactions to food are not life-threatening.
32. **Milk protein causes inflammation and triggers eczema in babies under 1. If I just cut out the milk and treat the skin, will the eczema be cured?**
    - It is rare to find an infant's eczema cured by the avoidance of cow milk protein solely. Most cases of infantile eczema are not linked to a specific food allergy. Milk allergy is a common food allergen in general and could be a major trigger for infantile eczema, but rarely is it the only factor.
33. **Why won't conventional physicians test for food allergies in babies?**
    - Skin testing in infants is sometimes not reliable. Blood allergy testing can also give false-positive and false-negative results. Under the direction of a board-certified allergist, food testing of an infant could be helpful as they would understand these limitations and could recommend and/or interpret the testing carefully.
34. **What is your opinion on breastfeeding and the prevention of eczema? What is your opinion on elimination diets of the breastfeeding mother and the development of food allergies? Should a breastfeeding mother take food out of her diet due to her baby's eczema/food sensitivities?**
    - Many observational studies have examined associations between breastfeeding and atopic dermatitis (AD). Some have suggested a protective effect, with weak evidence of a protective effect seen in children ≤2 years of age in one systematic review and meta-analysis of seven studies, most of which were cross-sectional and of low methodologic quality. Other studies have shown either no association or even a detrimental effect. Modification by family history of atopy is also variable. Overall, the literature suggests that exclusive breastfeeding for at least three to four months is NOT strongly associated with a lower incidence of eczema in either low-risk or high-risk infants. BUT THERE ARE OTHER POSITIVE REASONS TO BREASTFED. The best studies and the majority of publications support the conclusion that maternal avoidance diets during pregnancy, lactation, or both are NOT effective in preventing allergic disease. A 2012 systematic review including five randomized trials and over 900 patients also reached this conclusion.
    - The more difficult question is should a breastfeeding mother avoid foods in her diet that the infant is allergic to. I typically support this approach but could allow some exceptions if it may lead to malnutrition of the mother if it is too restricted. Data is not definitive about this clinical approach I suggest here.

35. **My nephew has been on many steroid medications, but his eczema doesn't seem to go away. What can he do?**
    - He should be seen by an eczema specialist to determine the best treatment to control the skin problem.
36. **Should allergy testing be done on toddlers? How do we overcome food allergies when eczema is severe?**
    - I do recommend allergy testing for toddlers with moderate to severe eczema. Determining and avoiding relevant allergens could prove helpful in managing their eczema.
37. **What is the difference between food allergies and food intolerance?**
    - An allergy would be a more severe type of adverse reaction to a food, while an intolerance would be associated with less concerning issues. There is no standardized testing for food intolerances. IgG testing is not clinically helpful and IgE testing is a test to look for food allergy/sensitivity.
38. **Can you provide information on infantile eczema and how to safely introduce solids?**
    - While any food has the potential to cause allergy, certain foods are more common triggers of significant acute allergic reactions due to various factors. The most common food allergens in children in the United States and many other countries include cow's milk (CM), hen's egg, soy, wheat, peanut, tree nuts, and seafood (shellfish and fish).

      INTRODUCTION IN A HIGH-RISK POPULATION:
    - Infants and young children with a family history of atopy are at high risk for developing allergic disease, and those with a personal history of atopy, particularly those with moderate-to-severe eczema, are also at increased risk of developing other atopic diseases, including food allergies. The American Academy of Pediatrics (AAP) had previously suggested in 2000 that the introduction of certain highly allergenic foods be delayed further in high-risk children: cow's milk (CM) until age one year; eggs until age two years; and peanuts, tree nuts, and fish until age three years. This recommendation was based upon early studies that suggested that delayed introduction of solid foods might help prevent some allergic diseases, particularly atopic dermatitis (AD).
    - However, this advice was modified in 2008 with the consensus that there was insufficient evidence to recommend any specific practices concerning the introduction of these foods after four to six months for the prevention of allergic disease in high-risk infants. On the contrary, delayed introduction of solid foods may increase the risk of allergy and early introduction of certain foods (eg, egg, peanut) between four to six months of age may decrease the risk of allergy to that specific food. These findings suggest that the increased risk of peanut allergy seen in younger siblings of a child with peanut allergy, for example, is partly due to delayed introduction, in addition to an underlying genetic susceptibility. Other risk factors, such as moderate-to-severe eczema, may also play a role in increasing this risk. Thus, we recommend not delaying the introduction of complementary foods into the diet of high-risk infants beyond what is generally recommended for all infants. We counsel parents to introduce highly allergenic foods (eg, cow's milk [CM], hen's egg, peanut, tree nuts, fish, and shellfish) in the following manner in infants who are at risk based upon

family history but who have not had any significant prior allergic reactions to a food or difficult-to-control, moderate-to-severe atopic dermatitis (AD):
    - First, the child should be at least four months of age and have shown developmental readiness to consume complementary foods.
    - In addition, the child should have tolerated a few of the more typical, initial complementary foods (such as cereals, fruits, and vegetables).
    - If these two criteria are met, then the child can be given an initial taste of one of these foods at home (rather than at daycare or at a restaurant), with an oral antihistamine available.
    - If there is no apparent reaction, the food can be introduced in gradually increasing amounts.
  - However, an allergy evaluation, including a detailed history and possible testing, before the introduction of highly allergenic foods is a reasonable option to consider in patients with the following histories:
    - Recalcitrant, moderate-to-severe AD despite optimal management.
    - Signs or symptoms of an immediate allergic reaction while breastfeeding or with the introduction of any food, especially one of the highly allergenic foods.

39. **What are the best ways to increase immune response during a reaction?**
    - If a patient is having an immediate reaction to a food or allergen, typically utilized medications to counter such reactions would include but notwithstanding, antihistamines, beta-agonists, epinephrine, leukotriene modifiers, and/or oral/topical steroids. During a reaction, the goal is to lessen the inflammatory response and not increase the response. Allergic responses are typically inflammatory and so the goal is to reduce or reverse the inflammatory response by using medications that counter/reduce/eliminate/prevent the inflammatory response.
40. **I have lab results from US BioTek labs. The IgG were high to very high antibody levels for foods such as Baker's yeast, Brewer's yeast, etc.**
    - IgG testing is not an FDA validated method to determine clinically relevant food allergies. I do not consider these types of tests as valid and/or helpful.
41. **I had to go on oral antibiotics for 10 days after surgery and the eczema on my hands went away. It came back after I stopped taking the medication, why?**
    - Staph aureus and other bacterial infections on the skin can contribute to uncontrolled eczema. recolonization with pathogenic bacteria is not uncommon after the completion of oral antibiotics. Further, the presence of an unbalanced microbiome on the skin caused by an overgrowth of some unhealthy bacteria can contribute to uncontrolled AD. The Aron Regimen recognizes this very common finding and uses a topical antibiotic in concert with other medications to reestablish a healthy microbiome balance and eliminate pathogenic bacteria that may be contributing to uncontrolled eczema.
42. **What are the treatment options if I am located in Maine?**
    - I am licensed in Maine. Please visit our Pricing Page and select your state to get started: https://www.eczemaspecialist.com/pricing/

43. **Can children grow out of food allergies that manifest in atopic dermatitis? If so, how, and why?**
    - Milk, egg, wheat, and soy are typically outgrown while peanut, tree nut, fish, and/or shellfish are more long-lasting. The mechanism by which patients outgrow a food allergy is complex but would involve a reduction in the IgE-mediated reaction against the food. But other immune cells and cytokines are involved in this process and are not fully understood how this process is turned off and/or outgrown over time.
44. **How can we reduce the picking and itching my child has for severe eczema?**
    - Proper management would entail finding a treatment program that not only provides immediate relief but would maintain control of the skin condition. Finding an eczema care specialist that is experienced in the short and long-term management of AD would increase the odds of finding the right solution for your child.
45. **What is the relationship between Eosinophilic Esophagitis (EoE) and eczema and FLG related ichthyosis Vulgaris?**
    - In general, it is possible that foods implicated in the development and elicitation of EoE may also be causing or triggering one's atopic dermatitis (AD). Filaggrin is a key protein involved in skin barrier function. Mutations in the gene encoding filaggrin (FLG) have been identified as the cause of ichthyosis Vulgaris (IV) and have been shown to be major predisposing factors for atopic eczema (AE). Genetic testing demonstrating pathogenic variants in the FLG gene provides the definitive diagnosis of IV, although this is not routinely done in clinical practice. Common population associations may be useful for screening, although variants vary among populations, and identification of "private" variants is difficult and may be missed unless Sanger sequencing or an equivalently comprehensive analysis of the entire gene is conducted. In the United States, Clinical Laboratory Improvement Amendments (CLIA)-certified genetic testing is available from multiple commercial laboratories.
46. **How do I find out if my eczema is flaring due to weather, food, clothes, etc.?**
    - These types of exposures have been implicated in AD but are hard to test against.
47. **Is it true that healing the skin barrier can help children 'outgrow' life-threatening (anaphylactic) food allergies?**
    - More data is needed in this area. While it appears that such an approach of controlling one's eczema could and should lead to the development of tolerance to food allergens, I am not aware of any good studies that have proven this intervention as definitively instrumental in the induction of tolerance. Many factors are important in the development of food tolerance.
48. **How often do food allergies in very young children fade with age? We had a recent ER visit for a peanut allergy.**
    - I am sorry you recently had to deal with this food allergy. Please seek the guidance of an allergist regarding this peanut allergy. Unfortunately, most children do not outgrow peanut allergies. Most other food allergens are outgrown over time- especially to milk, egg, wheat, and/or soy.

49. **As a Grad Student, studying Dermatology I would like to know if you have any internships/volunteering I can be a part of.**
    - At this time, I am not providing this type of opportunity, but applaud your study of dermatology and your willingness to learn.
50. **How long do flare-ups last? Why do they seem to pop up in random places on my skin?**
    - Every case is unique. Some flares can last hours while others could last weeks depending on the source and/or type of exposure and/or the severity of one's eczema. It is not uncommon for patients to see new areas of eczema appear if they already have persistent eczema.
51. **What are the effects of food coloring and food preservatives on eczema?**
    - The list of additives used in the food industry is extensive and includes thousands of natural and synthetic substances used as flavorings, coloring substances, preservatives, sweeteners, antioxidants, thickeners, etc. However, only a small number of additives have been implicated in immunoglobulin E (IgE)-mediated or other (immunologic or nonimmunologic) adverse reactions.
    - Allergic reactions to nutritive foods (eg, tree nuts or seafood) are far more prevalent than reactions to food additives, and food allergy must always be considered first in the differential diagnosis. The role of food coloring and preservatives in AD is controversial and has not been verified in well-controlled trials. I recognize that every case is different and that this type of allergic reaction is true in some individuals. Unfortunately, reliable testing is not available other than the use of double-blinded placebo-controlled challenges with the coloring and/or additive in question.
52. **When can one outgrow atopic dermatitis?**
    - Every case is different, but most children do outgrow their eczema.
53. **What is the most common food allergen that causes eczema to worsen?**
    - Milk, egg, wheat, peanut, and tree nuts are common allergens.
54. **If you might have over-eliminated foods, do you recommend just reintroducing them all at once or separately?**
    - I would seek the guidance of an allergist before attempting to reintroduce foods into one's diet. While it could be safe to reintroduce a food, it could prove harmful if one is still allergic to the food.
55. **A skin test indicated a gold allergy. I've had gold crowns for over 30 years without worsening my eczema. Could this suddenly occur after all these years?**
    - Not all allergens that one is found to be sensitive to on a chemical patch test are clinically relevant. Some are, but even if it is relevant, the odds of gold leaching from your gold crown and being systemically circulated to cause or worsen AD would be very rare and unlikely to be the cause of your AD.
56. **Should eczema, EoE, or allergies be tackled in any particular order, or try to resolve them concurrently with multiple specialists?**
    - A board-certified allergist could help with most of these issues. A diagnosis of EoE is typically proven by a biopsy by a GI specialist but could be co-managed with an allergist.

57. **Can a neoprene wetsuit cause an outbreak?**
    - Allergic reaction to neoprene is generally ascribed to the accelerants used to manufacture the man-made rubber, specifically thiourea compounds and mercaptobenzothiazole (MBT). Symptoms of neoprene-related ACD include itching, skin eruptions, swelling, and hemorrhages into the skin. Although neoprene hypersensitivity is rare, its incidence may grow as neoprene becomes a more commonly used material. Diethylthiourea is part of the allergen group referred to as mixed dialkyl thioureas. The other thiourea included in this group is dibutylthiourea. Thiourea derivatives are added to neoprene rubber products such as wet suits for diving, rubber weatherstripping, neoprene rubber gloves, orthopedic knee and elbow sleeves, swim goggles, waders for fishing, insoles of athletic shoes, and keyboard wrist supports. Adding diethylthiourea speeds up the vulcanization of neoprene rubber which makes the rubber more stable, tougher, and more pliable so it can be shaped and formed into different products. Industrial uses of diethylthiourea are found in anticorrosive compounds, detergents, fungicides and insecticides, some polyvinyl chloride adhesives, and in diazo copy paper which is used for industrial textile patterns and architectural plans.
58. **My doctor recommends avoiding shrimp, pork, strawberries, etc during treatment. Do these foods exacerbate eczema in everyone? Would that increase the possibility of developing food allergies to those foods in the future?**
    - It is a generalized recommendation. These allergens do not always provoke eczema in all patients with AD. Avoiding these foods probably does not increase or decrease the risk of developing a true allergy to these foods in the future.
59. **I heard you mention something about people who are very sensitive or allergic to poison oak/ivy. Is there a treatment protocol for someone to lessen or eliminate the sensitivity to poison oak/ivy?**
    - Unfortunately, there are no proven treatments for allergic contact dermatitis related to poison ivy, sumac, or oak. Avoiding the plant is the best and only way to avoid this reaction. There is no way to do allergy immunotherapy to this allergen nor are there medications or other treatments to eliminate or reduce this allergy.