JOHN F. COOMBS, M.D.

John F. Coombs Professional Medicine Corporation 152 WALTER'S LANE, FALLBROOK, ONTARIO CANADA, K0G 1A0

Telephone: (613) 267-2523 Fax: (613) 267-6216 College of Physicians and Surgeons Registration #25147

2015.6

DIETARY ELIMINATION AND CHALLENGES: TESTING FOR FOOD SENSITIVITY

FOOD SENSITIVITY TESTS

A number of methods are available to document sensitivity to particular foods. Elimination/Challenge testing involves elimination of certain foods from the diet for many days, or longer, followed by challenge with large amounts of the same food. This is the cheapest method of determining food sensitivities, and often the most reliable. This method can be used to confirm results obtained from other methods of testing (such as laboratory testing or skin testing). The elimination/challenge test may not be appropriate when a person has many different food sensitivities, very slow or delayed food reactions, and definitely not to be used if there is a risk of severe food reactions on challenge.

THE DIETARY ELIMINATION PERIOD:

The length of the elimination period will vary according to the person being tested. Since the length of elimination period depends on individual circumstances. Dr. Coombs can advise you as to the appropriate length of time to conduct the elimination period before beginning the series of food challenges.

Most often, the dietary elimination period is run for ten days, long enough to allow the immune system to 'forget' that it has been exposed to the food being tested. During this time, the food has to be avoided completely in order for the test to work: eating even the slightest amount of the test food can spoil the results by keeping the immune system 'adapted' —in a state of tolerance—to ongoing exposure to the food. In that case, the elimination period will need to be repeated.

For some people, especially children, the elimination period may have to be shorter (5 to 7 days) in order to get enough cooperation to do the test.

For people who are having very slow, delayed reactions (as often happens with gluten and sometimes dairy), the elimination period needs to be much longer -at least a month- before starting the sequential challenges. This is because it can take that long for the chronic immune reactions to settle down enough to notice improvement in clinical symptoms. A long elimination period of at least a month is also often needed for those who have been reacting to foods for years, or for those who have problems with a significant immune imbalance.

Schedule the elimination period for when you will have relatively good control over your diet. [A time when you are travelling or having to eat at friends' houses is not the best time to schedule this sort of experiment.] Plan ahead by doing some shopping and keep foods on hand that will satisfy your needs and make the process as enjoyable as possible.

Because of their harmful effect on general health, it is necessary to <u>avoid all refined sugars</u>, <u>caffeine</u>, <u>chocolate</u>, <u>and other junk foods</u> during the diet in order to get reliable results from the elimination/challenge test. Remember that you not only have to avoid the suspect foods in their whole form, but also those mixed in a variety of other recipes and food processing methods. This can makes their avoidance somewhat tricky, and you will have to <u>read labels and watch carefully for ingredients</u> that are shown on the food avoidance diet lists. It is best to <u>avoid all processed and pre-packaged foods for this reason</u>.

One you begin the elimination period, keep careful track of what you eat in a food diary. Be sure to record any unusual symptoms during this time. To make recording easier during a long

elimination period, you could mark this on a large calendar, using abbreviations. Sometimes people go through <u>withdrawal symptoms</u> for the first few days of a dietary elimination, and it may take several days before they actually start to feel better.

DOING THE FOOD CHALLENGE

If during the elimination period you become convinced that the test food has been responsible for troublesome symptoms and you do not wish to challenge by eating a lot of the food in question, that is okay. Moreover, if you have experienced a major change for the better in your health by avoiding a particular food, do not challenge it by pigging out in a **big** way because doing such a challenge may make you very sick.

If, on the other hand, you are not sure whether the dietary elimination has made much difference in how you feel, try going back to eating the food in question in a fairly big way by "pigging out" on it for **up to** three days. If during the challenge period you begin to notice that the food reintroduced is making you sick again, stop the challenge! [In such instances, it is not necessary to continue challenging with the food for the full 3 days; you have learned that you react to it.]

If you add many foods at once during your challenge, it will be impossible to know which foods you react to. Therefore, when challenging with a food, be sure to use it in its **pure** form, and introduce <u>one</u> food or type of food at once. <u>Do not re-introduce sugar, caffeine, or junk foods at this time</u>: doing so will make the test meaningless.

FOODS TO USE FOR THE DIETARY CHALLENGES:

1. Milk Elimination/Challenge:

Most people can challenge using **plain milk** or **plain yoghurt** (you may add your own fruit to make it more appetising). Most people can use at least three cups daily to give a good challenge. For this test, do <u>not challenge with cheese</u> if you suspect mould sensitivity, and <u>do not use sweetened yoghurt or ice cream</u> as a challenge food because the added sugar alone may cause a reaction which might be mistaken for a reaction to dairy.

Use lactose-free milk for the challenge if you suspect that you react to lactose (milk sugar), but also suspect a reaction to casein (milk protein). Some people react to milk sugar (lactose) in milk products, and not the milk protein (casein). These people will experience only bowel symptoms (gas, bloating, diarrhoea) from milk products, and note that milk is worse than cheese, and cheese is worse than yogurt. They do not experience any of the reactions that can occur with milk protein (mucus formation, headaches, eczema, asthma). People who are lactose-intolerant but do not react to casein will tolerate lactose-free milk.

2. Gluten Elimination/Challenge:

A reaction to gluten is more likely to be noticed with wheat than lower-gluten grains such as rye or barley. Challenge with a product containing wheat, but <u>no sugar or other foods being tested</u>. (For example: Shredded Wheat cereal, or whole wheat pasta).

3. Egg Elimination/Challenge:

Challenge with pure egg, or a product containing egg, but no sugar or other foods being tested.

4. Soy Elimination/Challenge:

Since soy milk is heavily sweetened, and many soy products are made with GMO soy, it is best to use organic non-GMO tofu for the challenge. If tofu is not to a person's liking, it is bland enough in taste that small amounts can be blended into other foods.

5. Yeast/Mould Elimination/Challenge:

Usually both <u>yeast and mold-containing foods are challenged at the same time</u> the first time one does this test, so as to see whether there is any reaction <u>at all</u> to this whole class of foods. If there is a response, the challenges can be repeated in a more careful sequence to determine more specifically which foods of this class are triggering the reaction.

Foods for a yeast challenge:

- Brewer's yeast tablets or nutritional yeast (Purchase from a health food store. Nutritional yeast can be mixed into foods allowed on the elimination diet.)
- Yeasted bread, fresh from the bakery -provided you do not suspect sensitivity to the grain used (e.g.-wheat or rye)
- <u>Do not use</u> beer or wine: the alcohol and additives may cause their own reactions.

Foods for a mould challenge:

- Pickles, olives, sauerkraut, mushrooms, vinegar
- Tamari soy sauce (additive free: from health food store)
- Over-ripe fruit (e.g., bananas or melon)
- Peanut butter ('natural' kind, with no added sugar)
- Cheese (old cheese preferred) provided you do not suspect sensitivity to milk products

Testing More than One Food at a Time

If more than one food sensitivity is suspected, it is more reliable to <u>test for all suspected foods at the same time</u>. The diet followed during the elimination period will take more care and effort, because of having to avoid so many foods at once, but the changes noted during the elimination & challenges will be more obvious.

When doing the challenges, return to eating the test foods in sequence, one at a time, each for up to three days, giving each food time to show its effects. At the end of each 3-day challenge period, stop the food being tested, and go on to the next one. If you do get a bad effect from one of the foods challenged, stop that food and wait for the effects to disappear before trying the next food challenge. If there is a severe reaction on challenging, it will be necessary to go back to the full elimination diet for a few days to have the reaction clear before going in to the next food challenge.

LONG TERM DIET AFTER THE DIETARY ELIMINATION/CHALLENGE

Determining how carefully to avoid foods that have triggered a noticeable reaction requires judgement based the severity of reactions seen, a person's overall health, especially whether they have ongoing symptoms or past history suggestive of immune activation. Some foods, especially gluten and dairy, are much more likely to trigger long-term reactions, even with incidental exposure, and these may have to be avoided carefully for the long-term. Other foods may be able to be tolerated with occasional exposure following several months of careful avoidance.

Bear in mind that just as there has been a dramatic increase in the incidence of anaphylactic reactions to foods, so there has been a dramatic increase in more subtle, delayed food sensitivities. Thirty years ago, I could tell people to go ahead and try occasional exposure to the forbidden foods after a few months of avoidance. Now I am much more cautious in doing so because of the dramatic increase in allergic and autoimmune conditions in the general population. Each individual has a different rate of recovery in healing from food sensitivities, and I therefore prefer to make my recommendations on an individual basis.