



Food Reaction Report

Provider:

Client:

Age: 47

Calgary, AB

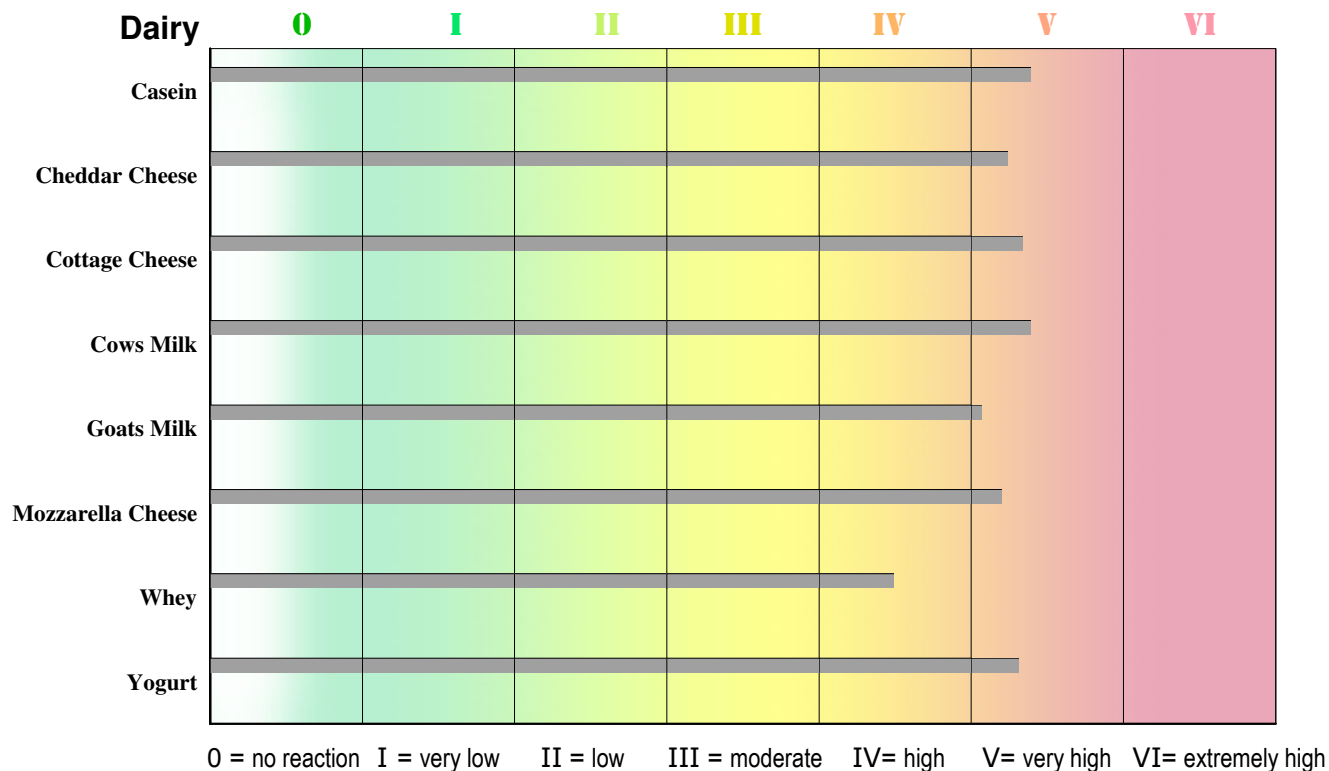
DOB:

Gender: F

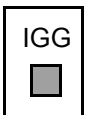
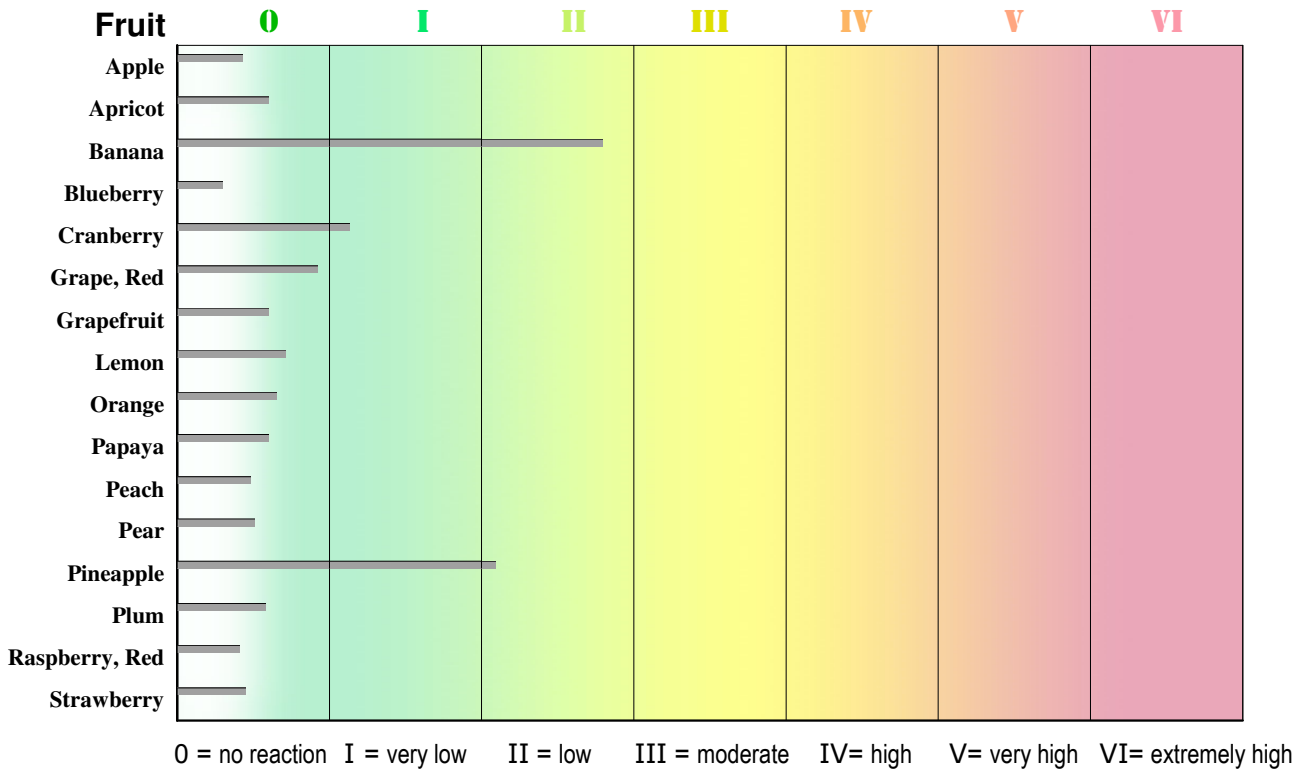
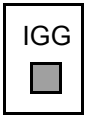
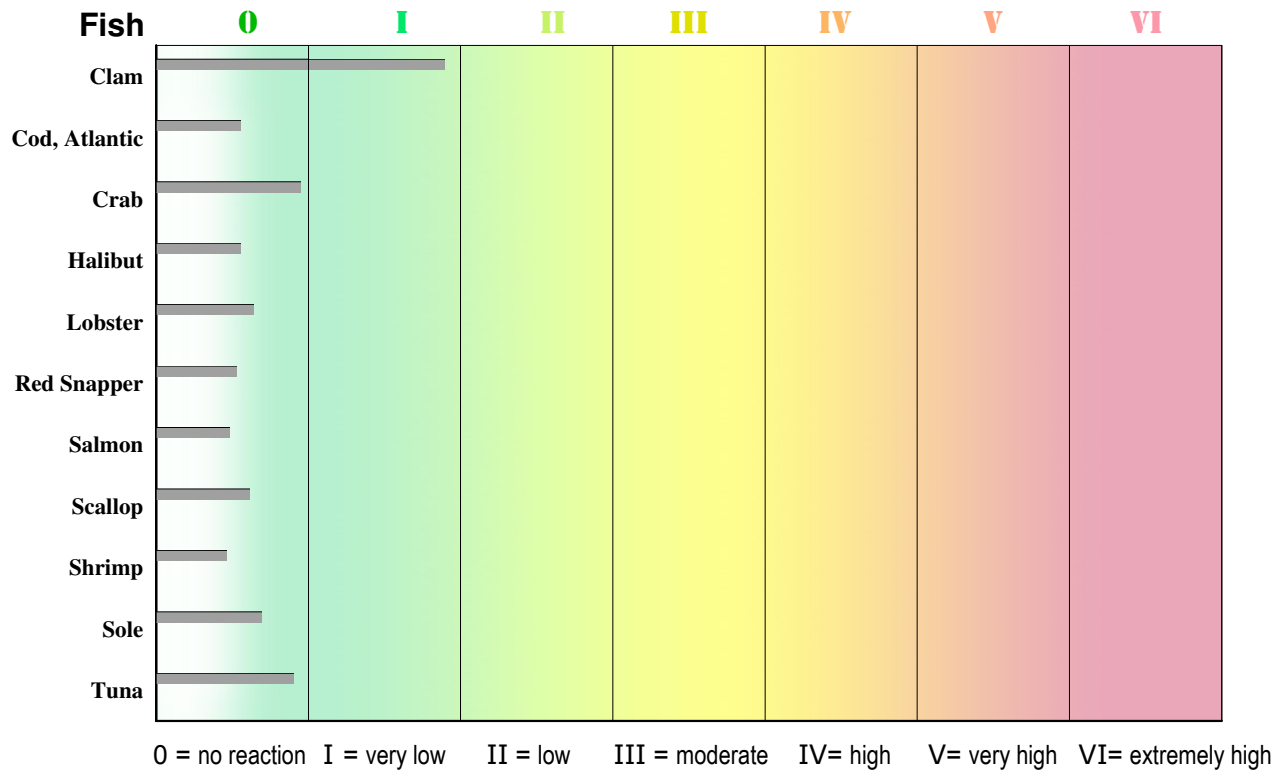
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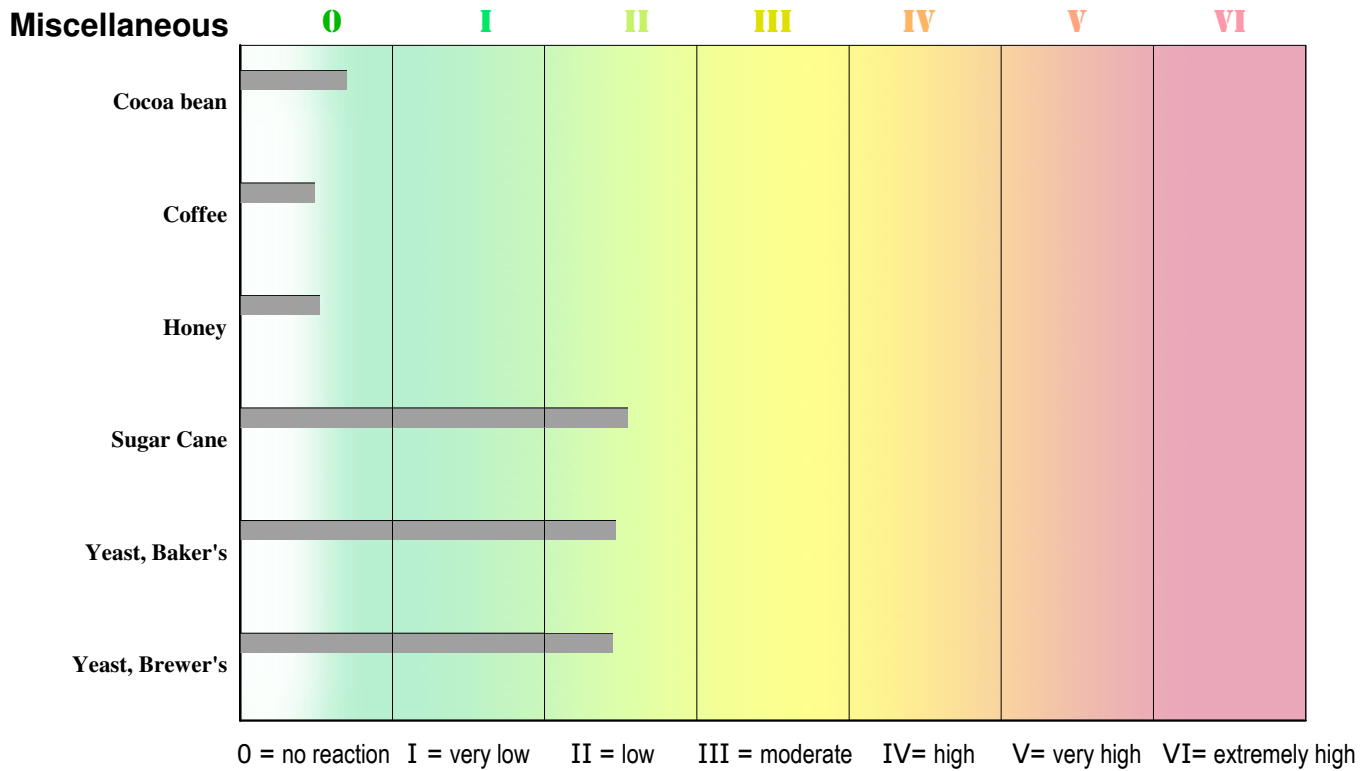
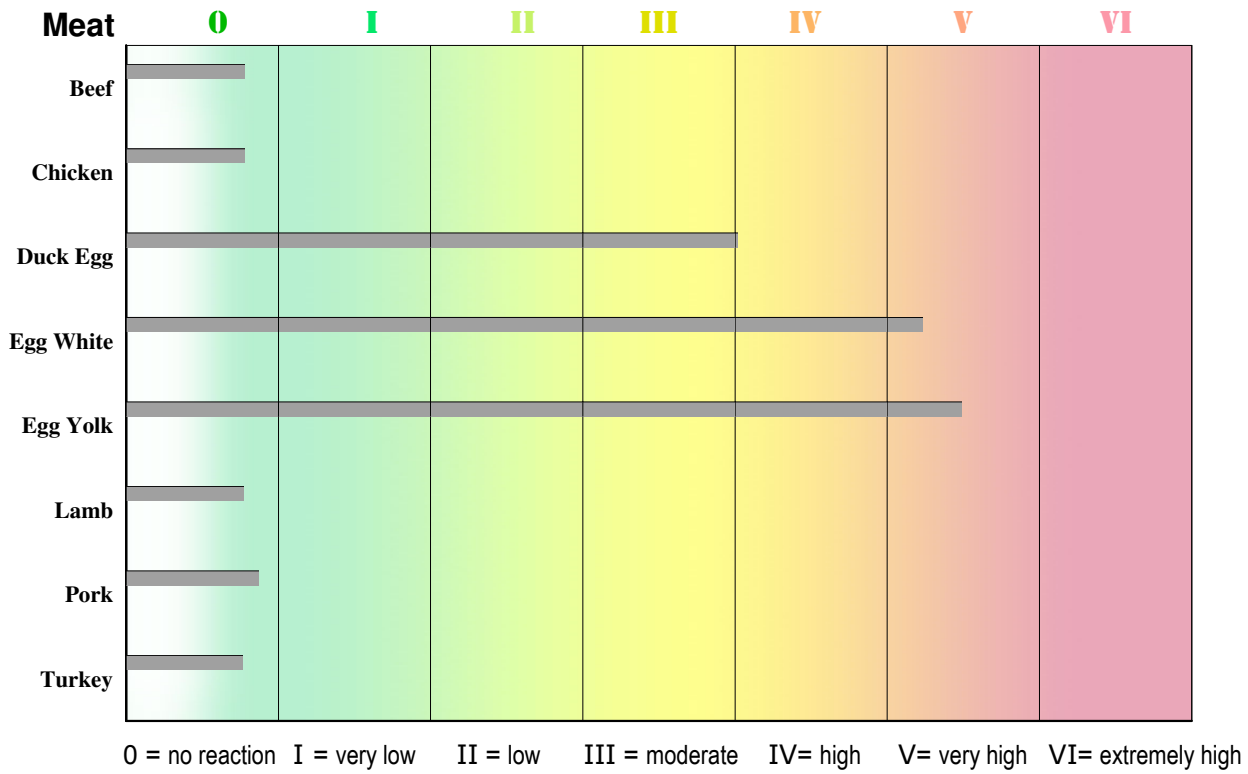
Fax:



Food Reaction Report

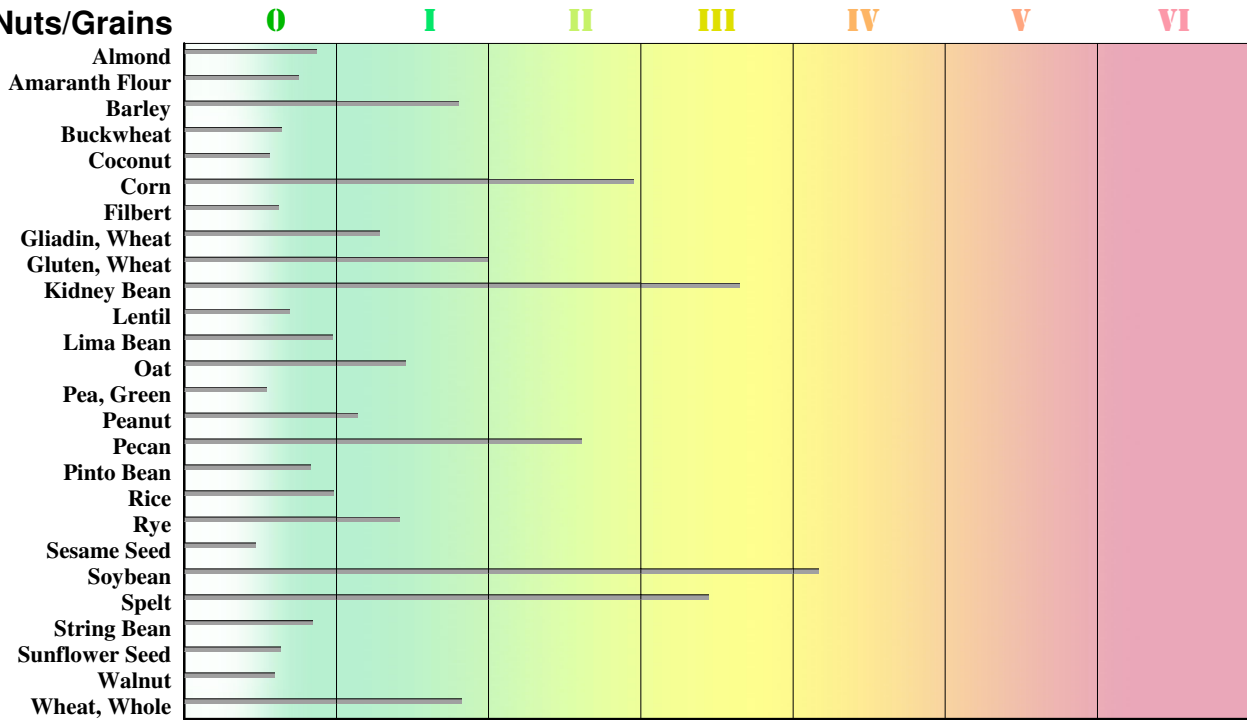


Food Reaction Report

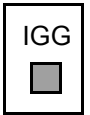


Food Reaction Report

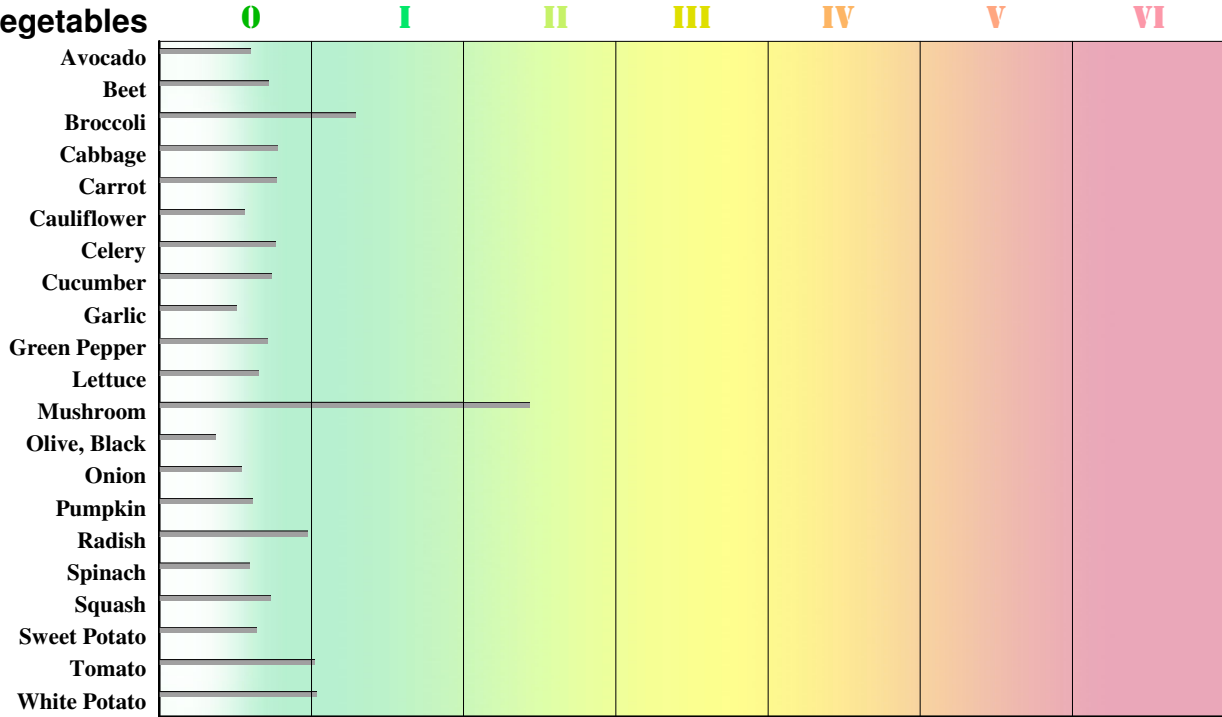
Nuts/Grains



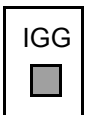
0 = no reaction I = very low II = low III = moderate IV = high V = very high VI = extremely high



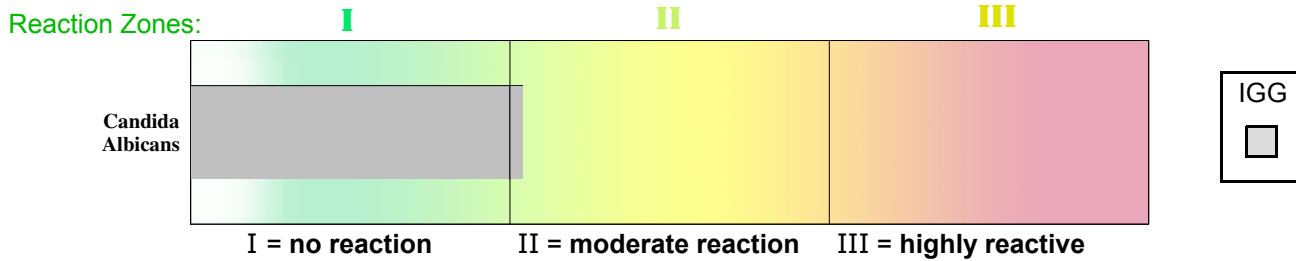
Vegetables



0 = no reaction I = very low II = low III = moderate IV = high V = very high VI = extremely high



IgG to Candida



CANDIDA IgG: According to research by Lewith et al., elevated IgG antibodies to Candida are suggestive of fungal-related illness. [J Alt Comp Med. 2007;13(10):1129-33] Although the degree of reactivity does not necessarily correlate with Candida burden, it does suggest that the individual is experiencing an immunological response to Candida. Reducing the burden of Candida in the gut may help to reduce the immunologic response.

MODERATELY OR HIGHLY REACTIVE TO CANDIDA: According to research by Lewith et al., elevated IgG antibodies to Candida are suggestive of fungal-related illness. [J Alt Comp Med. 2007;13(10):1129-33] For individuals who are highly reactive to Candida, the antibody-antigen complexes formed may deposit in tissue and release inflammatory cytokines. The degree of reactivity does not necessarily correlate with Candida burden, but it does suggest that the individual is experiencing an immunological response to Candida that is present. Reducing the burden of Candida in the gut may help to reduce the immunologic response. Elevated IgG antibodies to Candida is associated with poorer survival time in end stage renal cancer patients. [Cancer Immunol Immunother. 2010 Aug;59(8):1141-1150]

IgG FOOD REACTIONS are food sensitivities, rather than true IgE food allergies. IgE food allergies are immediate reactions, usually occurring within minutes or hours of consuming a food, and may include serious reactions like hives, difficulty breathing and anaphylaxis. In contrast, an IgG food sensitivity is a delayed reaction that occurs hours to days after the food is consumed. When a reactive food is consumed, the IgG antibody forms a complex with the food antigen. Normally, the body is able to eliminate these antibody-antigen complexes, but with excess antigen, small complexes tend to deposit in blood vessel walls where they can cause tissue injury via the release of inflammatory mediators. [Immunobiology 5th ed Janeway CA Jr et al. New York: Garland Science: 2001] Over time, this tissue injury may contribute to the development of a variety of health conditions. Research has shown that elimination of IgG reactive foods from the diet improves both irritable bowel syndrome and migraine headaches. [Gut 2004;53, Cephalalgia 2010;30, Revista Alergia Mexico. 2007;54(5)]. Eliminating IgG reactive foods has also been reported to help with eczema, mood disturbances, weight gain, and other digestive disturbances [Nutr Clin Pract. 2010; 25(2)].

GENERAL COMMENT, LOW TO MODERATE REACTIONS: One or more foods is low to moderately reactive. Depending on how frequently a low or moderately reactive food is consumed, elimination from the diet may result in clinical improvement. The treating clinician must consider patient history and diet when deciding which foods to eliminate.

GENERAL COMMENT, HIGH TO EXTREMELY HIGH REACTIONS: One or more foods is highly reactive. Continued consumption of highly reactive food(s) may result in deposition of circulating immune complexes in tissue and release of inflammatory cytokines. Elimination of highly reactive foods from the diet may result in clinical improvement.

REACTION TO MORE THAN ONE DAIRY FOOD: a moderate or high reaction to more than one Dairy food is present. Dairy foods come from animals in the Bovidae family and include: alpha-lactalbumin, beta-lactoglobulin, caseins, cheeses, cottage cheese, cow's milk, goat milk, whey proteins, and yogurt. Because a reaction to more than one food in this family occurred, cross-sensitivity seems likely. It may be advisable to avoid other foods in the Dairy or Bovidae families.

Food Reaction Report

CASEIN IS MODERATELY or HIGHLY REACTIVE.

Sources of casein include: some canned tuna, caseinates (calcium, potassium, or sodium caseinate), caramel colouring, some flavourings (Bavarian cream, brown sugar, natural chocolate, coconut cream), chicken broths, non dairy products (the term non-dairy signifies there is less than 1/2% milk by weight, not that product is milk-free), powdered coconut milk, rennet casein. Casein may be used to clarify fruit juices and wine.

CHEDDAR CHEESE IS MODERATELY or HIGHLY REACTIVE.

Food sources of cheddar cheese include: cheese buns and biscuits, cheese burgers, cheese fondue, macaroni and cheese, perogies, pizza, quesadilla, tacos, tuna melt.

COTTAGE CHEESE IS MODERATELY or HIGHLY REACTIVE.

Sources of cottage cheese include: blintzes, cheese cake, cottage cheese pie, lasagna, perogies.

COW'S MILK & GOAT'S MILK BOTH MODERATELY OR HIGHLY REACTIVE.

The alpha-S-1 subtype of casein in cow's milk is believed to be responsible for many cow's milk allergies. Goat milk without the alpha-S-1 subtype of casein (so called "null" type) can still produce an allergic response in up to 40% of patients with cow's milk allergies. In other words, goat's milk is less likely to cause a reaction in patients who react to cow's milk, but a significant proportion of people (2/5) may have reactions to both cow and goat's milk. [Small Ruminant Res.2004; 51:155-63.]

COW'S MILK IS MODERATELY or HIGHLY REACTIVE.

Sources of cow's milk include: artificial butter flavor, au gratin foods, butter, butter fat, buttermilk, cheese, cheese powder or cheese sauce, chocolate and cream candy, coffee creamers, cottage cheese, cream, cream cheese, creamed or scalloped foods, custard, evaporated milk, curds, ice cream, instant mashed potatoes, malted milk, margarines (some), milk and milk solids; non-fat, skim milk or powdered milk and milk solids; nougat, puddings, sour cream, whey and whey products, white sauces and yogurt. Foods containing lactalbumin or lactalbumin phosphate, lactoglobulin, casein, sodium caseinate or lactose contain cow's milk proteins. Some seasoning mixes contain lactose or dairy proteins, the wax coating on fruits and vegetables may contain casein.

GOAT MILK IS MODERATELY or HIGHLY REACTIVE.

Sources of goat milk include: chevre, feta, Montrachet, and Rocamadour cheese; goat butter, kefir, yogurt.

MOZZARELLA CHEESE IS MODERATELY or HIGHLY REACTIVE.

Sources of mozzarella include: lasagna, pizza, shredded mozzarella, deep fried cheese sticks.

WHEY IS MODERATELY or HIGHLY REACTIVE.

Sources of whey include: lactalbumin, lactalbumin phosphate, whey protein, whey powder, whey isolates, protein bars, imitation dairy products (the term non-dairy signifies there is less than 1/2% milk by weight, not that product is milk-free), soup mixes, cream soups, most margarines, packaged baked goods, and processed foods (added to improve nutritional content). Lactalbumin is a major whey protein that forms a film on the surface of heated cow's milk. Continued heating facilitates easy removal of the lactalbumin film, which makes boiled milk tolerable for some. The lack of whey proteins like lactalbumin in hard cheeses like cheddar may also make these dairy products more tolerable to individuals sensitive to other Dairy products.

YOGURT IS MODERATELY or HIGHLY REACTIVE.

Sources of yogurt include: dahi, delal, frozen yogurt, raita, smoothies, tzatziki sauce, yogurt soup.

BANANA belongs to the Banana (Musaceae) Family, which includes banana and plantain. Cross-sensitivity with latex, avocado, kiwi and birch pollen has been observed in some subjects with IgE reactions to banana.

BANANA IS MODERATELY or HIGHLY REACTIVE.

Food sources of banana include: banana (fresh), banana bread, banana pudding, fruit salad. Note: 30 to 50% of individuals with latex hypersensitivity show an associated hypersensitivity reaction to certain fruits including banana (plus avocado, bell pepper, chestnut, kiwi, peach, potato, tomato).

DUCK EGG belongs to the Anatidae family. Duck egg is frequently recommended as an alternative to chicken egg, but proteins found in chicken egg white are also found in duck egg whites. Therefore, cross-reactivity between chicken and duck egg is not uncommon. Cross-reacting proteins are also found in turkey, goose and seagull egg whites. [Langeland T. Allergy. 1983;38(6):399-412]

DUCK EGG IS MODERATELY or HIGHLY REACTIVE.

Food sources of duck egg include: duck egg.

REACTION TO MORE THAN ONE PHEASANT FAMILY FOOD: a moderate or high reaction to more than one food from the Pheasant (Phasianidae) family is present. Foods in this Family include: eggs and meat of the following: chicken, cornish hen, partridge, peafowl, pheasant, quail, and turkey. Because a reaction to more than one food in this family occurred, cross-sensitivity seems likely. It may be advisable to avoid other foods in the Pheasant family.

EGG WHITE (CHICKEN) IS MODERATELY or HIGHLY REACTIVE.

Food sources of egg white include: angel food cake, baked Alaska, egg (boiled, fried, poached, scrambled), egg noodles, egg powder, egg solids, macarons, meringue, pavlova, souffle.

EGG YOLK (CHICKEN) IS MODERATELY or HIGHLY REACTIVE.

Food sources of egg yolk include: Bavarian cream, baked goods, Caesar salad, custard, egg (boiled, fried, poached, scrambled), egg noodles, egg powder, egg solids, eggnog, frosting, Hollandaise sauce, ice cream, mayonnaise, marshmallows, meat or fish batter, tartar sauce, pudding, souffle.

PECAN belongs to the Walnut Family, which includes pecans and walnuts. Butter nut and hickory nut are related plants.

PECAN IS MODERATELY or HIGHLY REACTIVE.

REACTION TO MORE THAN ONE LEGUME/PEA FAMILY FOOD: a moderate or high reaction to one or more foods from the Legume/Pea (Fabaceae) family occurred. Food groups in this family include: beans, carob, lentils, peas, soybeans and peanuts. Because a reaction to more than one food in this family occurred, cross-sensitivity seems likely. It may be advisable to avoid other foods within a specific group. For example, within the bean group are: anasazi, Barloti (cranberry) beans, common, kidney, lima, mung, navy, pink, pinto, shell, string (green), white, and yellow beans. Fava beans (broadbeans) are part of the bean group, but are less closely related to common garden beans. Within the pea group are: astragalus, black-eyed peas, chickpeas, Crowder peas, green peas, split yellow peas, and purple-hull peas. Medicinal plants in this family include: acacia, alfalfa, astragalus, fenugreek, licorice, scotch broom, senna, sweet clover and tolu balsam. A reaction to one food in the pea group may increase the likelihood of a reaction to other peas. If reactions occur in multiple groups, it may be advisable to avoid other foods in the Legume/Pea family.

KIDNEY BEAN IS MODERATELY or HIGHLY REACTIVE.

Food sources of kidney bean include: baked beans (some), bean burgers, bean dip, bean salad, chili con carne, red beans, turkey chili.

SOYBEAN IS MODERATELY or HIGHLY REACTIVE.

Food sources of soybean include: breads and baked goods, butter substitutes, canned meat or fish (ie tuna) in broth, cheeses (some), cooking oils, edamame, an emulsifier, filler in burger patties, ice cream, processed meats (e.g. hot dogs), hydrolyzed vegetable protein (HVP), miso, monosodium glutamate (MSG), peanut butter, sauces (e.g. HP, worcestershire, sweet/sour, teriyaki), seasoning salt, soup stock cubes, soy nuts, soy lecithin, soy milk, soy panthenol, soy protein powders, soy pasta, soy sauce, soy sprouts, tempeh, tofu, Tofutti, textured vegetable protein (TVP), as a thickening agent, soy protein may be used to thicken the coating sprayed on fruits and vegetables (lac-resin, shellac, confectioners glaze, food grade resin), and in vegetable broth. Because soy is widely used in processed foods and may not be labeled as soy, avoidance of processed foods may be advisable. Any of the following ingredients on a label may indicate the presence of soy: hydrolyzed plant protein, hydrolyzed soy protein, hydrolyzed vegetable protein, natural and artificial flavoring (may be soy based), soy protein, textured vegetable protein (TPV), vegetable gum, vegetable starch.

REACTION TO MORE THAN ONE ANDROPOGONEAE FOOD: a moderate or high reaction to more than one food of the Andropogoneae tribe of the Grass family is present. Foods in the Andropogoneae tribe include: corn, job's tears, lemongrass, sorghum and sugarcane. Because a reaction to more than one food in this family occurred, cross-sensitivity seems likely. It may be advisable to avoid other foods in the Andropogoneae tribe, particularly if the reaction is clinically significant. The Andropogoneae tribe is part of the subfamily Panicoideae, which also includes the Paniceae tribe (millet). Having a reaction to foods in the Paniceae Tribe does not appear to predispose someone to react to foods in the Andropogoneae Tribe.

IF WHEAT LOW OR NO REACTION BUT SYMPTOMS PRESENT with wheat ingestion. This may be a result of wheat intolerance. Even when wheat, gluten and gliadin are low or no reaction, digestive issues related to wheat may be lessened or eliminated if kamut and spelt are substituted for wheat. Modern wheat has been bred for hardiness and gluten-content rather than digestibility, whereas kamut and spelt are considered 'ancient' grains with potentially better digestibility.

CORN IS MODERATELY or HIGHLY REACTIVE.

Food sources of corn include: artificial colours and flavours, baking powder, bleached white flour, cake mixes, caramel colour/flavouring, confectioners sugar, corn alcohol, corn chips, corn extract, corn flour, corn oil, corn pone, corn starch, corn syrup, gravy, grits, hominy, maize, modified corn starch, modified food starch, polenta, popcorn, tortillas. Corn may also be present in various sugars including: dextrose, fructose, glucose, maltose, sorbitol, saccharin, sucrose, sucralose, and xylitol. Note: corn may be present in small amounts in many products, but not appear on a list of ingredients.

SPELT IS MODERATELY or HIGHLY REACTIVE.

Food sources of spelt include: spelt bread, spelt cookies, spelt flour, spelt pasta.

SUGAR CANE IS MODERATELY or HIGHLY REACTIVE.

Food sources of sugar cane include: candy, cane sugar, cane syrup, condiments (usually organic products) evaporated cane juice, organic sugar (unrefined sugar), soft drinks.

SYMPTOMATIC, BUT FEW OR NO SIGNIFICANT REACTIONS: For individuals who are markedly symptomatic but have few or no significant IgG food reactions, it is important to explain that not all food reactions are immune-mediated. Examples of non-immune reactions include: enzyme deficiencies (e.g. lactose intolerance can result in gas and bloating from dairy products), reactions to food additives (e.g. headaches from monosodium glutamate), and presence of inflammatory mediators in food (e.g. histamine is naturally present in wine, cheese, sauerkraut, spinach, tomato, fish).

GENERAL COMMENT. LOW or NO REACTION to a food may mean that there has not been recent exposure to that food. For example, if a patient has meticulously avoided wheat for years; it is probable that wheat will show LOW or NO reaction. Therefore, under circumstances of complete avoidance, it is impossible to determine whether the food(s) avoided would elicit a reaction if they had been consumed recently. Note also that low or no IgG reaction to a specific food does not mean it can be safely consumed by someone who has previously had a serious reaction to that specific food. Serious reactions to foods (anaphylactic reactions, hives) are mediated by IgE antibodies, therefore the absence of an IgG reaction is not an indication of safety.

GENERAL COMMENT. MODERATELY OR HIGHLY REACTIVE FOODS: The half life of an IgG antibody is 23 to 96 days, [Nutr Clin Pract. 2010;25(2):192-98] and it takes five to seven half-lives to completely eliminate. It could therefore take more than a year for food-specific antibodies to completely disappear after the food is no longer consumed. A trial elimination of reactive foods should be a minimum of three months, and preferably 4 to 6 months. The list of moderate to highly reactive foods appears on the Patient Summary of this report.

FOOD SOURCE information is provided as a starting point, but is not warranted to be a comprehensive list of all sources of potential exposure. Patients with reactions to specific foods will need to pay attention to food labels and ingredient lists in order to avoid reactive foods.

Note: The College of Physicians and Surgeons of Alberta considers some forms of testing for food reactions to be complementary medicine. Specific IgG quantification has been utilized in research settings to assess and investigate Type I and Type III allergies respectively. However, the assessment of human IgG antibodies specific for individual food antigens is not a recognized diagnostic indicator of allergy. Rocky Mountain Analytical does not diagnose or make treatment recommendations. Data is provided for research and educational purposes only