IgG Food Antibodies

IMMUNOLOGY



46-50 Coombe Road New Malden Surrev KT3 4QF

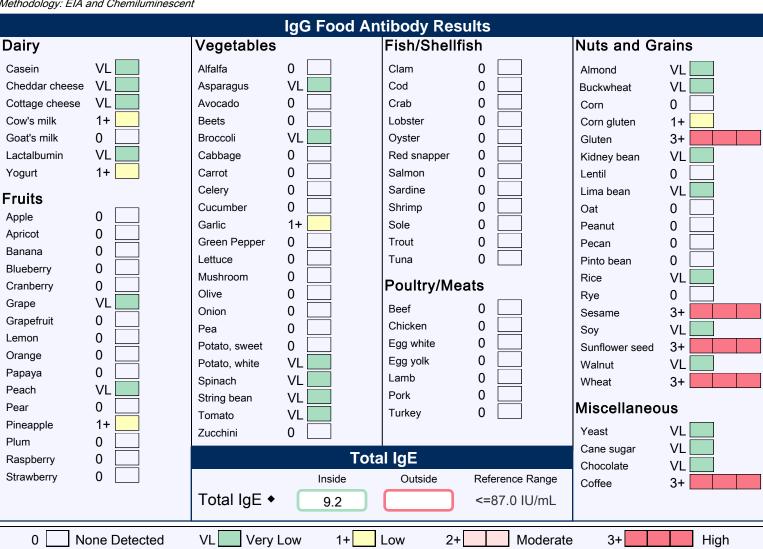
63 Zillicoa Street Asheville, NC 28801 © Genova Diagnostics

Patient: SAMPLE **PATIENT**

DOB: Sex: MRN:

1001 IgG Food Antibodies Profile - Serum

Methodology: EIA and Chemiluminescent



- The performance characterisitcs of all assays have been verified by Genova Diagnostics, Inc. Unless otherwise noted with •, the assay has not been cleared by the U.S. Food and Drug Administration.
- Total IgE level may have clinical significance regardless of specific antibody levels.
- Increasing levels of antibody detected suggest an increasing probability of clinical reactivity to specific foods.
- The Elimination Diet commentary is specific to IgG results only. Allergens inducing an IgE response should be completely avoided.

Laboratory Comments

Patient: SAMPLE PATIENT ID: Page 2

Summary of IgG Test Results

	Reactive / Non-Reactive Foods						
3+ High							
Coffee Wheat	Gluten	Sesame	Sunflower seed				
	1	+ Low					
Corn gluten Yogurt	Cow's milk	Garlic	Pineapple				
	V	L Very Low					
Almond Cane sugar Cottage cheese Lima bean Soy Walnut	Asparagus Casein Grape Peach Spinach Yeast	Broccoli Cheddar cheese Kidney bean Potato, white String bean	Buckwheat Chocolate Lactalbumin Rice Tomato				
	0	None Detected					
Alfalfa Banana Cabbage Clam Cranberry Goat's milk Lemon Mushroom Orange Peanut Plum Red Snapper Shrimp Tuna	Apple Beef Carrot Cod Cucumber Grapefruit Lentil Oat Oyster Pear Pork Rye Sole Turkey	Apricot Beets Celery Corn Egg white Green pepper Lettuce Olive Papaya Pecan Potato, sweet Salmon Strawberry Zucchini	Avocado Blueberry Chicken Crab Egg yolk Lamb Lobster Onion Pea Pinto bean Raspberry Sardine Trout				

Commentary

Overview

Immunoglobulin G (IgG) antibodies that elicit an immune response to food are in a class distinct from Immunoglobulin E (IgE) food allergy reactions. IgG-mediated food responses are described as delayed hypersensitivity reactions and have been associated in the peer-reviewed literature with an array of common clinical conditions including migraine, obesity, asthma, autoimmune diseases, and irritable bowel syndrome.

IgG Testing: Factors to Consider

IgG testing can be very useful in screening foods that a person is eating on a regular basis and which may be causing adverse reactions. However, it is possible to have adverse reactions to foods with low or non-detected levels of IgG. Because the IgG profile measures exposure of the immune system to food antigens, performing this test on a patient who is not consuming a particular food or who is taking a drug with known ability to suppress immune function (i.e. steroids) may result in the test not showing a positive reaction, potentially leading to a false negative result for the particular food. Be advised that if the patient is already on an elimination diet due to known food reactions, a negative result on an IgG food antibody profile does not necessarily mean that they can freely eat the food without experiencing symptoms.

IgG Results Interpretation

The amount of IgG antibodies is measured using a semi-quantitative ELISA assay procedure. The relative degrees of IgG present for each food are reported using a semi-quantitative level; None Detected (0), VL (very low), Low (1+), Moderate (2+) or High (3+). The degree of reactivity may not correlate with the severity of patient's response, therefore clinical correlation is advised as it can help direct treatment.

Clinical Management of Reactive IgG Foods: Elimination Diet

The purpose of an elimination diet is to pinpoint symptom-triggering foods that may be the root cause of and/or perpetuating chronic health issues. This diet is specific to food sensitivities that elicit an Immunoglobulin G (IgG) response and not those defined as classic (IgE-mediated) food allergy reactions. An elimination diet is a strategic process which depends on the oversight of the healthcare provider to ensure that a patient's nutritional requirements - macronutrient, micronutrient, and caloric needs - are adequate.

Four-Phases of an Elimination Diet



PHASE 1 – PREPARATION

A patient's clinical presentation and the IgG Food Antibody Assessment results typically determine which food(s) to temporarily remove from the diet. The average time frame for an elimination diet is 1 to 3 months. It is optimal to work with the patient to determine a start and end date for the elimination diet. Patient guidance around preparation ahead of the start date is important to ensure success. These include: (1) encouraging the patient to remove offending foods from the home and adjust grocery shopping accordingly; (2) providing the patient with resources that advance meal preparation, such as recipe books or reputable websites. Directing the patient to record foods consumed, date of consumption/elimination, and any notable changes in symptoms in a food journal can help track the progress of the diet.

Commentary



PHASE 2 – ELIMINATION

It is important to ensure the patient avoids those foods which resulted in a demonstrable reaction, either in whole food forms or as ingredients in other prepared foods to gain the greatest benefit. For patients unable to eliminate all reactive foods from their diet, focusing on the foods that elicited a stronger reaction (i.e.: 2+ and 3+) may be considered for an elimination diet. Practitioners may also encourage elimination of a complete food group when the patient shows reactivity to all foods tested within that group.



PHASE 3 - REINTRODUCTION

The reintroduction of eliminated foods is done one food at a time while monitoring for any adverse reaction. The patient should consume the test food several times throughout the day for several days. If symptoms occur with reintroduction, the patient should be instructed to remove that food once again and to evaluate whether the symptoms diminish over the next few days following elimination. Signs which may indicate an IgG food reaction include the following: headache, itching, bloating, fatigue, diarrhea or constipation, and indigestion. If the food does not cause symptoms during the reintroduction phase, it can be added back into the diet. The patient should continue this process with each food eliminated.

CAUTION: All patients warrant counseling related to signs and management of immediate hypersensitivity reactions prior to food reintroduction following an elimination diet. If reintroduction of a food causes an immediate allergic reaction (i.e. swelling of face, mouth, tongue, etc.; wheezing, rash/hives, or other allergic symptoms), it is imperative that the patient be treated as soon as possible. Following resolution of the immediate hypersensitivity reaction, the patient should be instructed to completely avoid consumption of that food.



PHASE 4 - LONG TERM MANAGEMENT

An elimination diet based on food sensitivity testing is part of a comprehensive approach to overall gastrointestinal health. Based on the test results and the complete clinical presentation of the patient, a long-term plan is usually developed utilizing the results of the reintroduction phase. Clinicians may also consider assessing and treating intestinal permeability, as gut barrier integrity is important for proper immune responses to foods. Nutrients that have been found to support intestinal barrier and decrease potential inflammation are glutamine, vitamin A, vitamin D, essential fatty acids (Omega-3), probiotics, and butyrate. Botanicals that can also be considered to assist with intestinal health are slippery elm, deglycyrrhizinated licorice (DGL), Aloe vera extract, and marshmallow root.

For additional information on the elimination diet and how to better understand your results, please download the "Elimination Diet Handout" from our website at https://www.gdx.net/elimination-diet-handout.pdf.

IgE Food Antibodies

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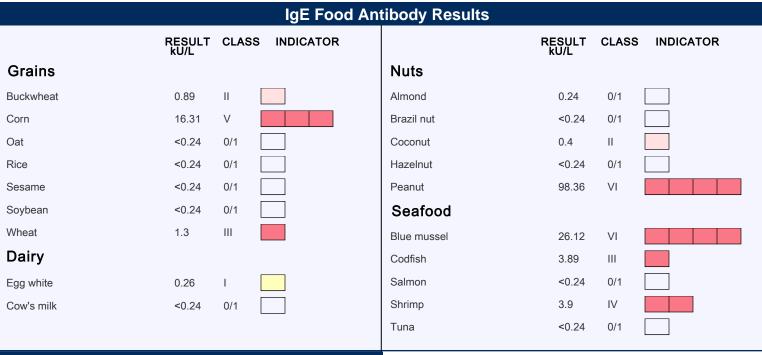
Patient: SAMPLE

PATIENT

DOB: Sex: MRN:

1000 IgE Food Antibodies Profile - Serum

Methodology: Chemiluminescent



Total IgE						
	Inside	Outside	Reference Range			
Total IgE		139.1	<=87.0 IU/mL			

- IgE levels must be used in conjunction with the clinical picture and are not intended to be independently diagnostic.
- The performance characteristics of all assays have been verified by Genova Diagnostics, Inc.
- All assays are cleared by the U.S. Food and Drug Administration.
- Total IgE level may have clinical significance regardless of specific antibody levels.
- Increasing levels of antibody detected suggest an increasing clinical reactivity to specific foods.

		Key	
Class	kU/L	Levels of Specific IgE Undetectable	Indicator
0/1	<=0.24	or Equivocal	
I	0.25 - 0.39	Low	
П	0.4 - 1.29	Moderate	
Ш	1.3 - 3.89	High	
IV	3.9 - 14.99	Very High	
V	15 - 24.99	Very High	
VI	>=25	Very High	

Laboratory Comments

IgE Inhalants

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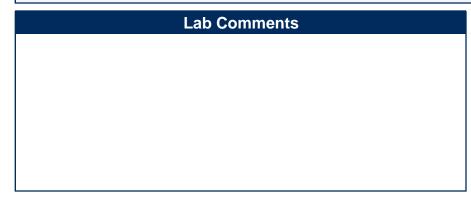
Patient: SAMPLE PATIENT

DOB: Sex: MRN:

1014 IgE Inhalant Profile - Serum

Methodology: Chemiluminescent

IgE Antibody Levels							
INHALANT		CLASS	INDICATOR	INHALANT		CLASS	INDICATOR
Trees	kU/L			Weeds	kU/L		
Alder	<0.24	0/1		Common Ragweed	4.56	IV	
Birch	<0.24	0/1		Dandelion	<0.24	0/1	
Elm	0.24	0/1		English Plantain	<0.24	0/1	
Maple	<0.24	0/1		Lamb's quarters	<0.24	0/1	
Oak	1.0	П		Nettle	<0.24	0/1	
Olive	<0.24	0/1		Russian Thistle	<0.24	0/1	
Walnut	<0.24	0/1		Moulds			
Grasses				Mould Generic	2.0	III	
June Grass (Kentucky Blue)	<0.24	0/1		Misc.			
Orchard Grass	1.45	III		Cat dander	100.0	VI	
Perennial Rye Grass	<0.24	0/1		Cockroach	<0.24	0/1	
Timothy Grass	<0.24	0/1			8.83	IV	
Sweet Vernal Grass	<0.24	0/1		Dog dander Mite - D. farinae	0.24	0/1	
				Mite - D. microceras	0.24	0/1	
				Mite - D. pteronyssinus	0.56	II	



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- Total IgE level may have clinical significance regardless of specific antibody levels.
- IgE levels must be used in conjunction with the clinical picture and are not intended to be independently diagnostic.

		Total IgE	
	Inside	Outside	Reference Range
Total Igi	E	140.2	<=87.0 IU/mL
		Key	
		Levels of	
Class	kU/L	Specific IgE	Indicator
0/1		Undetectable	
0/ 1	<=0.24	or Equivocal	
'	0.25 - 0.39	Low	
II	0.4 - 1.29	Moderate	
Ш	1.3 - 3.89	High	
IV	3.9 - 14.99	Very High	
V	15 - 24.99	Very High	
VI	>=25	Very High	





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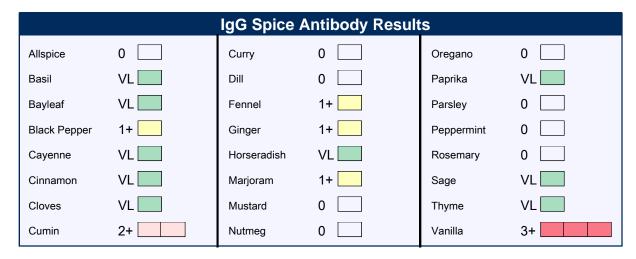
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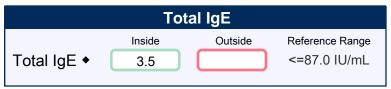
Patient: SAMPLE **PATIENT**

DOB: Sex: MRN: © Genova Diagnostics

1005 IgG Spice Profile - Serum

Methodology: EIA and Chemiluminescent





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- Increasing levels of antibody detected suggest an increasing probability of clinical reactivity to specific foods.
- Total IgE level may have clinical significance regardless of specific antibody levels.

0 None Detected	VL Very Low	1+ Low	2+ Moderate	3+ High
		Lab Commen	ts	

IgE Moulds IMMUNOLOGY



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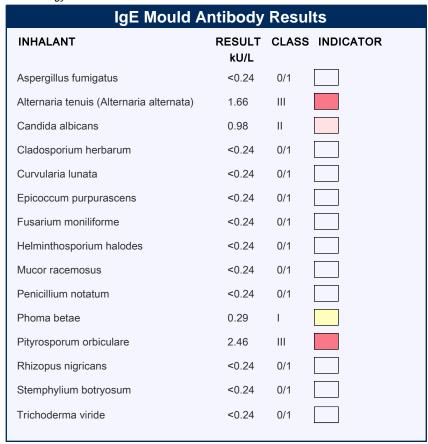
63 Zillicoa Street Asheville, NC 28801

Patient: SAMPLE **PATIENT**

DOB: Sex: MRN: © Genova Diagnostics

1004 IgE Moulds Profile - Serum

Methodology: Chemiluminescent



		Key	
Class	kU/L	Levels of Specific IgE Undetectable	Indicator
0/1	<=0.24	or Equivocal	
I	0.25 - 0.39	Low	
П	0.4 - 1.29	Moderate	
Ш	1.3 - 3.89	High	
IV	3.9 - 14.99	Very High	
V	15 - 24.99	Very High	
VI	>=25	Very High	

- The performance characteristics of all assays have been verified by Genova Diagnostics, Inc. All assays are cleared by the U.S. Food and Drug Administration.
- Total IgE load may have clinical significance regardless of specific antibody levels.
- IgE levels must be used in conjunction with the clinical picture and are not intended to be independently diagnostic.

Total IgE								
	Inside	Outside	Reference Range					
Total IgE		197.0	<=87.0 IU/mL					

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IgG Vegetarian

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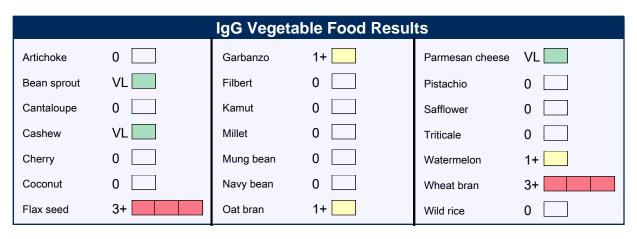
Patient: SAMPLE PATIENT

DOB: Sex: MRN:

1002 IgG Vegetarian Food Profile - Serum

Methodology: EIA and Chemiluminescent





Total IgE								
	Inside	Outside	Reference Range					
Total IgE ◆		176.0	<=87.0 IU/mL					

- The performance characteristics of all assays have been verified by Genova Diagnostics, Inc. Unless otherwise noted with ◆, the assays have not been cleared by the U.S. Food and Drug Administration.
- Increasing levels of antibody detected suggest an increasing probability of clinical reactivity to specific foods.
- Total IgE level may have clinical significance regardless of specific antibody levels.

0 None Detected	VL Very Low	1+ Low	2+ Moderate	3+ High
	La	boratory Comi	ments	





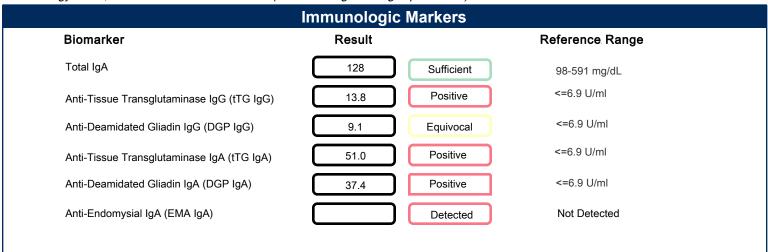
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Patient: SAMPLE PATIENT

DOB: Sex: MRN:

Coeliac Profile - Serum

Methodology: FEIA, Immunoturbidometric and IFA (when EMA IgA testing is performed)



Interpretation Total IgA SUFFICIENT INSUFFICIENT tTG IgA tTG lgG & DGP lgG **NEGATIVE** or POSITIVE **EQUIVOCAL** DGP IgA and/or Celiac Likely **POSITIVE** EMA IgA **NEGATIVE POSITIVE** or **HLA POSITIVE NEGATIVE** Celiac Unlikely Consider Biopsy **EQUIVOCAL HLA Testing** Celiac Unlikely **POSITIVE** NEGATIVE