

"The first step in allergy relief"

ImmuneTech Reference Laboratory 888 Oak Grove Avenue, Suite 4 Menlo Park, CA 94025 Phone 800 807 1968 Aaron D. Kromhout, MD Medical Director Thursday, October 25, 2007

Personal Information

Beau Gunderson 1838 172nd PL NE Bellevue WA 98008 **Blood Sample Information**

Date collected October 16, 2007 Date received October 22, 2007 Date tested October 25, 2007

21515 beau@beaugunderson.com

Test Results

	Allergen	IU/mL	Class	Allergic Response
101	Timothy Grass	15.43	3	Moderate / High
1	Bermuda Grass	0.62	1	Very Low
	Cedar	< 0.35	0	Negative
	Ragweed	< 0.35	0	Negative
	Alternaria (Mold)	< 0.35	0	Negative
1	Milk	0.43	1	Very Low
1	Egg White	0.37	1	Very Low
1	Wheat	0.55	1	Very Low
11	Cat	1.11	2	Moderate
10	Housedust Mite	1.31	2	Moderate

Allergen-Specific IgE Concentration IU/mL	Class	Test Result	Allergic Response			
< 0.35	0	Negative	Negative			
0.35 - 0.69	1	Borderline	Very Low			
0.70 - 3.49	2	Positive	Moderate			
3.50 - 17.49	3	Positive	Moderate / High			
17.50 - 49.99	4	Positive	High			
50.00 - 100	5	Positive	High			
> 100	6	Positive	High			
IU/mL = ImmuneTech Units per mL						

Note: This report should not be viewed as medical advice and is not meant to replace direct communication with your physician or health care practitioner.

PN 5009 Rev. 4

MyAllergyPlan for Beau Gunderson

Now that you know you have allergies you need a "plan of action" to help you avoid your symptoms and feel better! ImmuneTech is providing just that with a customized "MyAllergyPlan". Your MyAllergyTest results have shown you exactly what you are allergic to, now your MyAllergyPlan can help you learn how to clean up your environment, avoid the offending allergens, and add medications when you and your doctor decide they are needed. The MyAllergyPlan is based on the recommendations of the American College of Allergy, Asthma and Immunology (ACAAI). These guidelines are designed to help you practice allergen avoidance as a first step to feeling better, and use appropriate medications when necessary. ImmuneTech recommends that you share this information with your healthcare provider.

What are Allergies?

An allergy is a specific response from our immune system to a substance that normally doesn't cause our body harm. An allergic reaction occurs when an allergic person first comes into contact with the offending allergen. The immune system generates an antibody (disease fighting protein) called IgE specific to the allergen. IgE molecules are special because IgE is the only class of antibody that attaches tightly to the body's mast cells, which are tissue cells, and to basophils, which are blood cells. When the allergen next encounters its specific IgE, it attaches to the antibody like a key fitting into a lock, signaling the cell to which the IgE is attached to release powerful inflammatory chemicals like histamine, cytokines, and leukotrienes. These chemicals act on tissues in various parts of the body, such as the respiratory system, and cause the symptoms of allergies such as sneezing, watery eyes, wheezing and coughing to name a few. ¹

How will I feel?

If you have allergies you may experience one, many or all of the following symptoms: ²

- 1. Sneezing
- 2. Watery eyes
- 3. Itchy eyes and nose
- 4. Loss of smell or taste
- 5. Repeated sinus or ear infections
- 6. Dark circles under the eyes
- 7. Wheezing
- 8. Crease in the nose from the constant upward wiping of the nose

What can I do to reduce my allergy symptoms?

It is important to understand to which allergens you are sensitive. If we are allergic to numerous substances continued exposure to those substances has an additive effect referred to as allergen loading. If we overload our system then the response to even a slight amount of allergen exposure may trigger a severe response. Eliminating offending allergens from your environment is the first step in reducing the allergen load to which you have exposed yourself. Reducing your exposure to the allergens will reduce your symptoms.

My Specific Allergies

Beau Gunderson, you tested positive to:

Timothy Grass Bermuda Grass Milk Egg White Wheat Cat Housedust Mite

Below you will find helpful information on each of these allergens that will assist you in avoiding them and will help you to feel better.

Grasses are recognized as the most prolific producers of airborne pollen in the spring and early summer.

Timothy Grass sheds large amounts of pollen, and is thought to be one of the worst causes of spring-to-early-summer pollinosis. It primarily pollinates in the morning hours. Depending on the region (see pollination chart below), pollination is between May and October. ³

Bermuda Grass is a long-lived, warm season perennial often used for critical area planting (e.g. channels and pond banks), grassed waterways, and vegetated flumes and as a hardy, weed-resistant turf for lawns and public areas. It is also used for pasture and hay. ⁴

Pollination Chart

Region	Bermuda Grass Timothy Grass	Mountain Cedar/ Juniper	Ragweed			
Northeast	May � September	February � June	August � October			
South	Almost all year	N/A	Almost all year			
Desert	April • October	February � April	N/A			
Southwest	April • September	January � June	July � October			
Great Lakes	May � July	N/A	July � September			
Plains	May � July	March • May	July � October			
Mountain	April � July	June • November	June • November			
Pacific	March • November	February � June	April - November			

Milk allergic people are allergic to the proteins in milk, not the sugar (lactose). Many milk substitute products are available in grocery stores.

Egg White is an ingredient in cakes, cookies, sauces, souffles and many other good things to eat. In baking one can substitute two tablespoons of liquid gelatin solution for 1 egg white and one tablespoon of oil for one egg yolk.

A Wheat allergy is the immune system's response to one or more of the proteins in wheat. Wheat flour is commonly used to make breads, pasta, bagels, cakes, cereals, cookies and most all other baked goods. It is often used to thicken sauces and gravies.

Cats are well known for their ability to induce allergy symptoms in susceptible individuals. Cats are known as highly allergenic pets for two reasons. One reason is that they are the most common house pets. The other reason is that they continually groom themselves with saliva, which is heavily contaminated with cat allergen. This "conditioning" of the fur creates an invisible cloud of allergen around each cat.

House dust mites make up the major allergen component of house dust. They are tiny, spider-like insects that are difficult to see without special lighting and magnification. They feed on mold, especially the mold growing on food particles, skin scales, and chronically damp surfaces so cleanliness is important. They do not thrive in dry climates or at elevations above 5000 feet.

Now What?

Experts agree that the best treatment for any allergy is to **avoid the offending allergen**. If the allergen can be thoroughly eliminated from your environment, your reaction to it will eventually cease.

Bermuda Grass, Cedar, Ragweed and Timothy Grass all call for the same avoidance recommendations:

- Pollen levels are generally higher in the morning and on windy days so it is best to avoid going outside during these times, especially to exercise.
- Avoid mowing the lawn
- Keep the windows shut
- Use HEPA filter equipped air conditioners or other room air purifiers as much as possible
- Run the car air conditioner while driving to assist in keeping your air pollen free

Milk

- All milk products must be avoided. This includes eating or drinking milk, ice cream, yogurt, butter, cheeses, some creamy dressings and gravies and many sauces.
- Be aware, milk is an ingredient in many recipes including cakes, cookies, and other baked goods.
- Milk products are often "hidden" in many food items, so be sure to read the labels. Look for these ingredients and AVOID them:
 - Milk solids "curds"
 - Whey
 - Casein (most commonly listed as sodium caseinate)
 - Sodium lactate
 - Lactalbumin
 - The protein in "protein-enriched" or "high energy" foods may be milk based proteins

Eggs

- Avoid eating eggs in any form
- Review food labels and avoid baked goods and other products containing eggs
- In baking you can substitute two tablespoons of liquid gelatin solution for 1 egg white and one tablespoon of oil
 for one egg yolk.

Wheat

- Avoid eating breads, cereals, baked goods, and pasta, such as spaghetti, and many sauces and gravies.
- Wheat can be a hidden ingredient in protein-enriched foods read the label and avoid those products!

Cat

- Finding a new, good home for your cat is the best solution. If that's not an option:
- Bathe the cat weekly
- Prevent your cat from entering your bedroom
- Avoid holding and petting the cat as much as possible
- Vacuum the house with a HEPA filter equipped vacuum at least once every two to three days

House dust mites

- Stringent dust control in your bedroom is a vital first step
- Frequent vacuuming (at least every two to three days) with a HEPA-filtered vacuum is important.
- Use barrier-cloth encasings for the mattress and pillows
- Bedding should be easy to wash and washed once a week in hot water (130♦F)
- Avoid down comforters and plush fabrics that require dry cleaning
- Eliminate or limit stuffed animals to just a few, as they are big dust collectors. Any stuffed animals kept by a child should be tumbled in the dryer for at least 15 minutes weekly to reduce its dust contents.
- Use a <u>HEPA-grade filter</u> in all forced air heating systems
- Use Air purification units that employ HEPA filters in the rooms in which you spend the most time
- Remove carpeting from bedrooms and replace with hardwood, tile or linoleum
- Throw rugs should be washable and cleaned frequently.
- Use cleaning products specifically designed to remove dust mites.

Where can you find helpful products?

If you purchased your kit from one of the companies listed below please click on their link. If not, click on any link.

- Allergy Free (http://www.800allergy.com)
- HealthGoods (http://www.healthgoods.com)
- drugstore.com (http://www.drugstore.com)
- National Allergy Supply (http://www.nationalallergy.com)
- Shop Rite (http://www.shoprite.com)

Where can you find more information that will help you control your allergies?

Asthma and Allergy Foundation of America (AAFA) (http://www.aafa.org) is the premier patient organization

dedicated to improving the quality of life for people with asthma and allergies and their caregivers, through education, advocacy and research.

- Institute of Allergy and Infectious Disease (http://www.niaid.nih.gov/)
- National Institute of Environmental Health Sciences (http://www.niehs.nih.gov/)
- American Academy of Allergy Asthma and Immunology (http://www.aaaai.org/)
- American Lung Association (http://www.lungusa.org/)

Doctor Finder

In addition to avoiding allergens, it may be necessary to use an Over-The-Counter or prescription medicine for your allergies. A physician trained in allergy is the best resource to determine the proper medication that may be helpful for you. Also, Immunotherapy is another option in the fight to control your allergy symptoms. To find an allergist in your area please click on the link below to be sent to the American Academy of Allergy Asthma and Immunology website where you'll find a physician locator guide.

AAAAI Physician Referral Directory (http://www.aaaai.org/physref/)