



INE | INSTITUTE OF
NUTRITIONAL
ENDOCRINOLOGY

Gluten-Free as an Antidote to Low Vitality

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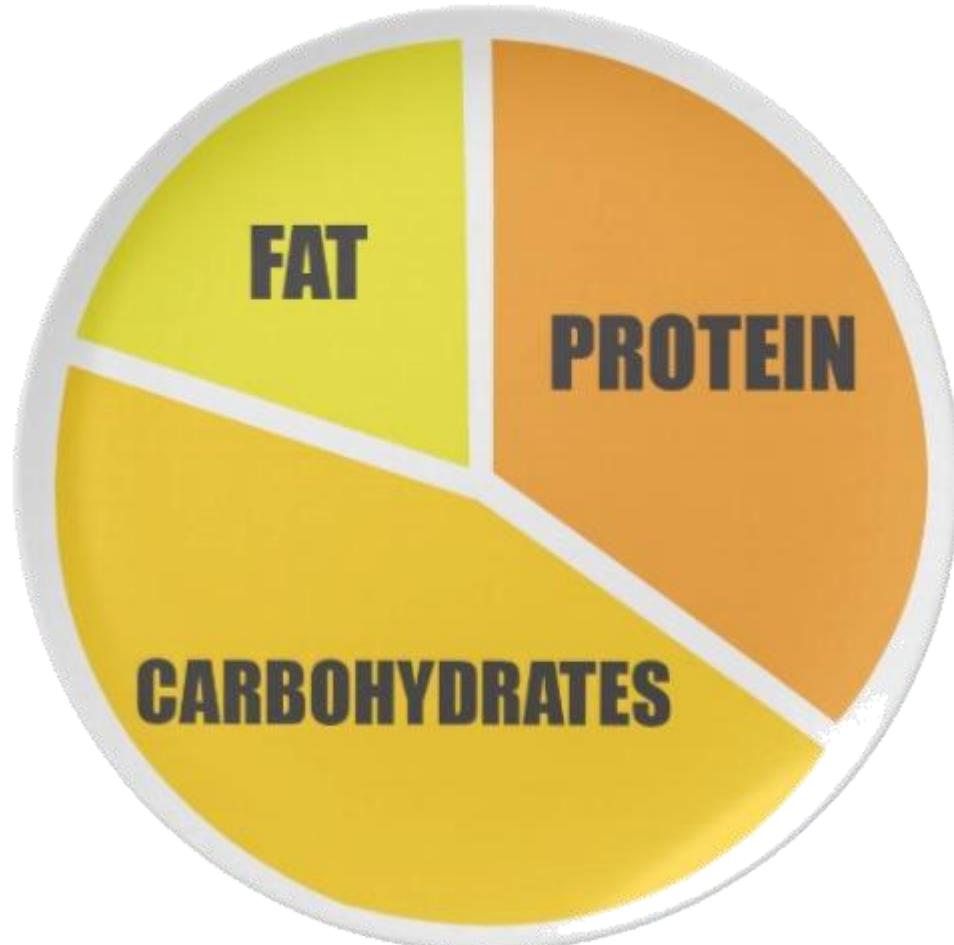


Medical Disclaimer: The information in this presentation is not intended to replace a one-on-one relationship with a qualified health care professional, and is not intended as medical advice. It is intended as a sharing of knowledge and information from the research and experience of Dr. Ritamarie Loscalzo, drritamarie.com, and the experts who have contributed. We encourage you to make your own health care decisions based upon your research and in partnership with a qualified health care professional.



Primary Macronutrients

- ✓ Water
- ✓ Fat
- ✓ Protein
- ✓ Carbohydrates



What You'll Learn:

- ✓ What gluten is and where it's found
- ✓ What gluten intolerance is and how it can silently destroy health
- ✓ The difference between celiac disease and non-celiac gluten intolerance
- ✓ Symptoms of gluten intolerance
- ✓ Testing for gluten intolerance
- ✓ How to manage clients with gluten intolerance



The Truth About Gluten and How It Can Silently Destroy Your Health



So...What Exactly is Gluten Anyway?

- ✓ A protein – or a group of proteins
- ✓ Found in common grains
 - Wheat
 - Barley
 - Rye
 - Triticale
 - Spelt
 - Kamut



Where Are Gluten Grains Found?

Wheat

- ✓ Breads & Tortillas
- ✓ Ezekiel Bread
- ✓ Essene Bread
- ✓ Baked Goods
- ✓ Couscous
- ✓ Soups
- ✓ Pasta
- ✓ Cereals
- ✓ Sauces & Gravies
- ✓ Salad Dressings

Barley

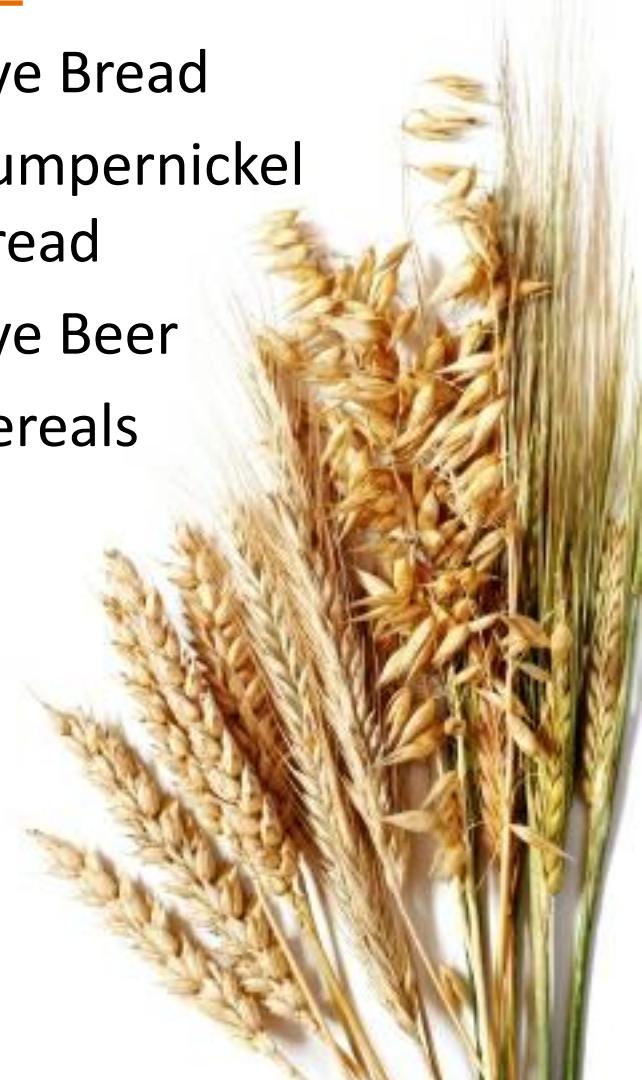
- ✓ Malt
- ✓ Food Coloring
- ✓ Soups
- ✓ Malt Vinegar
- ✓ Beer

Rye

- ✓ Rye Bread
- ✓ Pumpernickel Bread
- ✓ Rye Beer
- ✓ Cereals

Spelt, Kamut

- ✓ Bread
- ✓ Pasta
- ✓ Cereals
- ✓ Sprouted Raw Breads

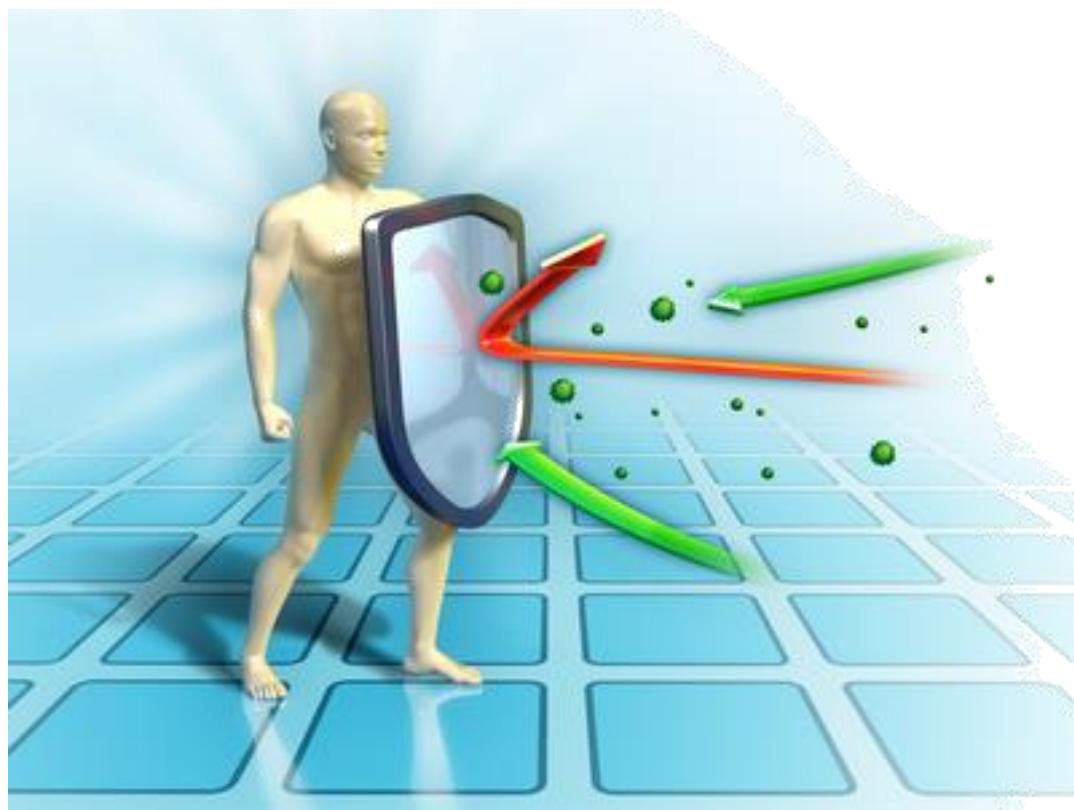


What Is Gluten Intolerance?



Immune System's Job

*Protect from foreign invaders called antigens
(the police department and army of the body)*



- Bacteria
- Viruses
- Fungi
- Yeast
- Molds
- Pollen
- Food particles
- Dirt
- Parasites
- Environmental toxins



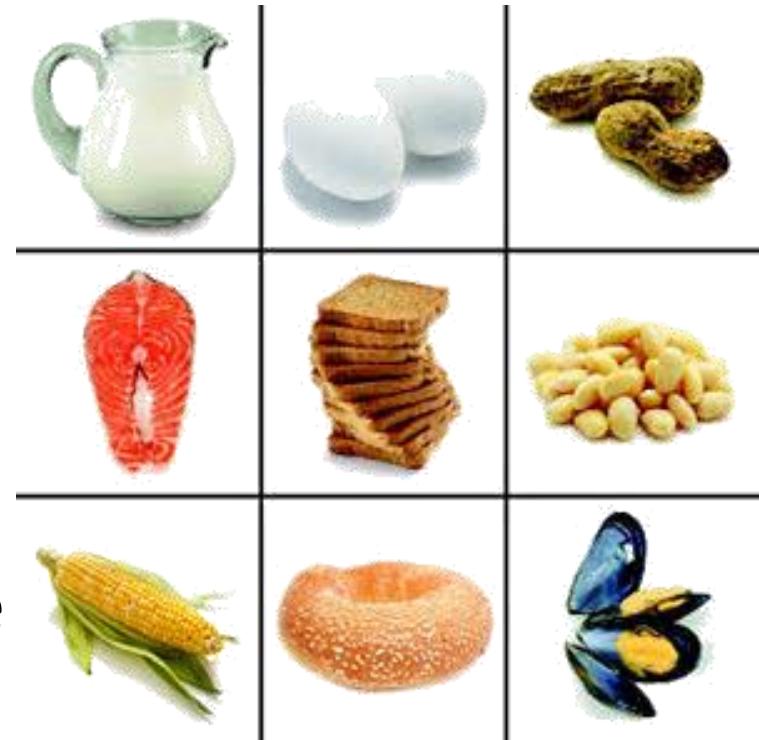
Antibodies - Immunoglobulins



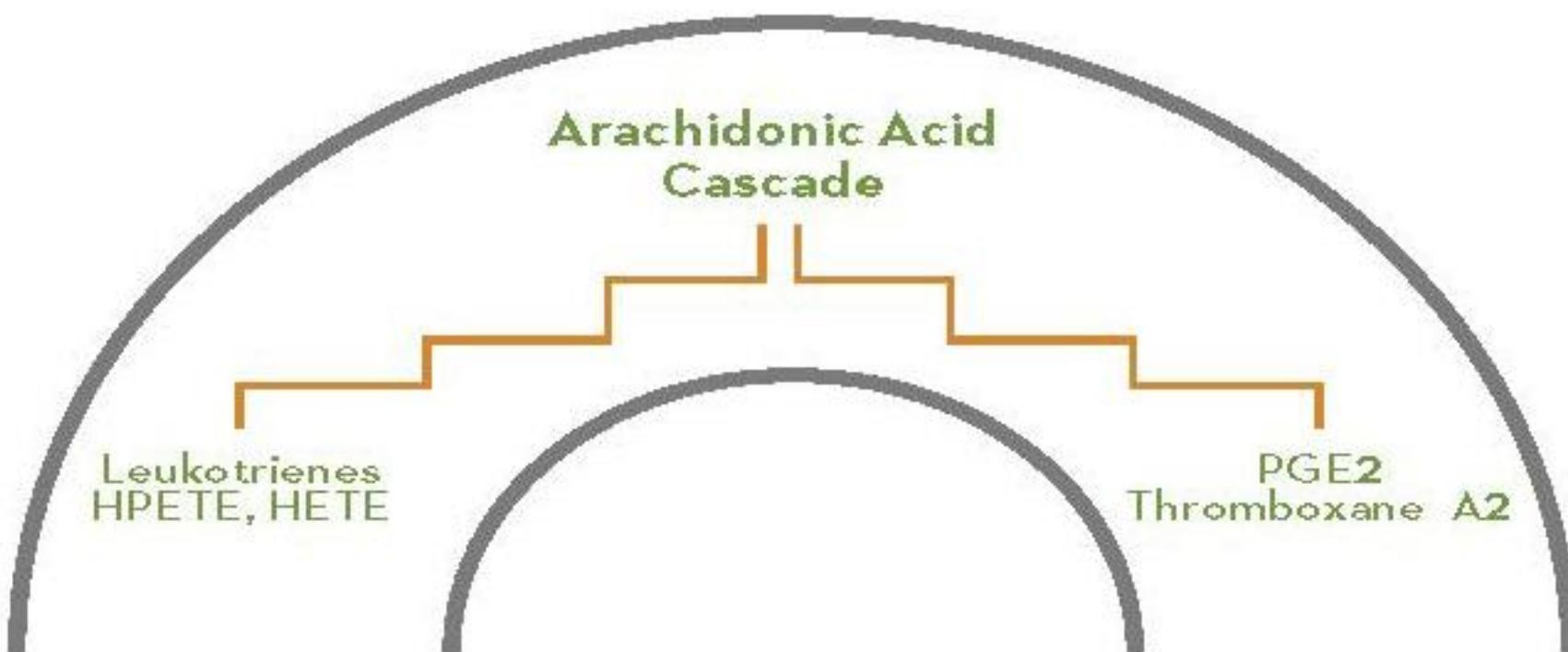
- ✓ **IgM and IgD:** First line.
- ✓ **IgG:** Most prevalent in blood.
- ✓ **IgA:** Mucosal surfaces, in serum, and in secretions. Secretory IgA - GI and respiratory tracts.
- ✓ **IgE:** Respiratory and GI mucous secretions – allergic asthma, hay fever, skin reactions, i.e., hives and parasitic infections.

Food Allergies

- ✓ Immediate or delayed
- ✓ Immunoglobulins involved:
 - IgA: mucous membranes
 - IgE: immediate, histamine
 - IgG: delayed
 - IgM: early in allergic response
- ✓ Food sensitivities
- ✓ Frequently caused by leaky gut



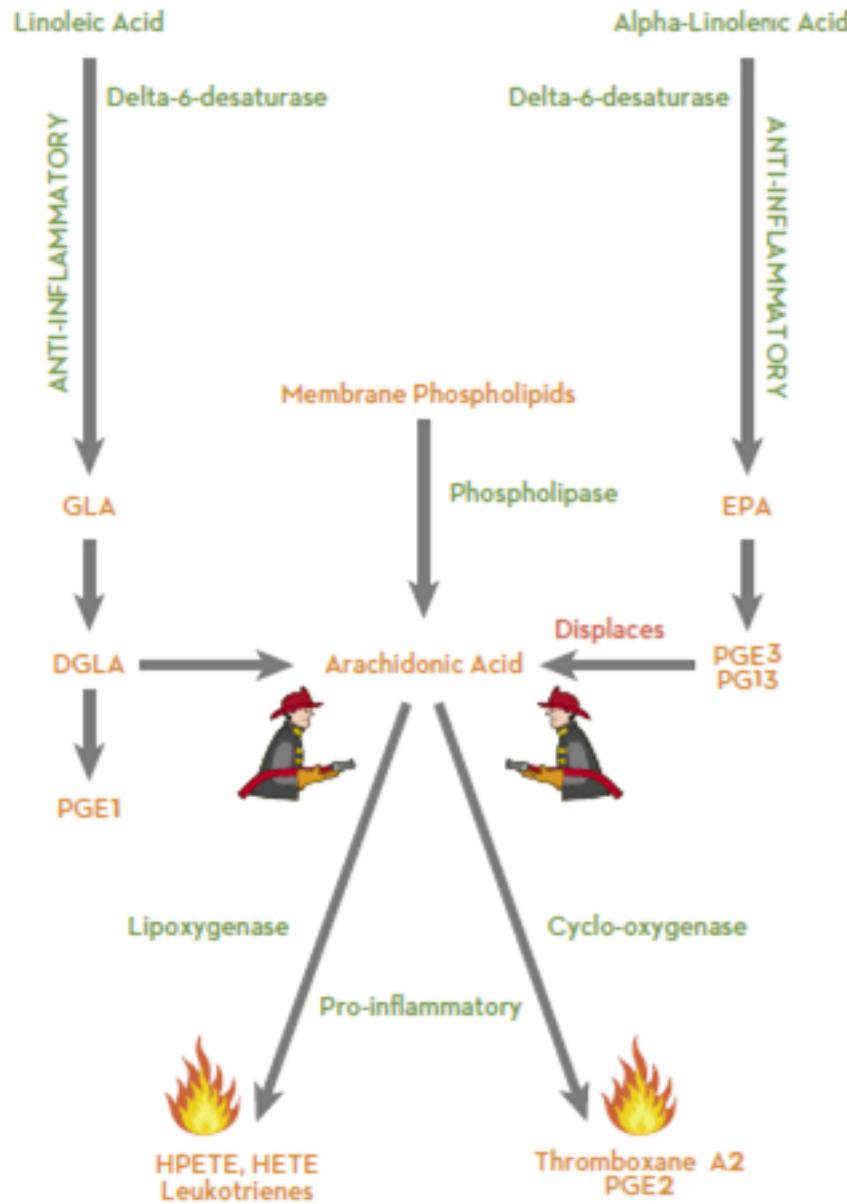
Mast Cell Membrane



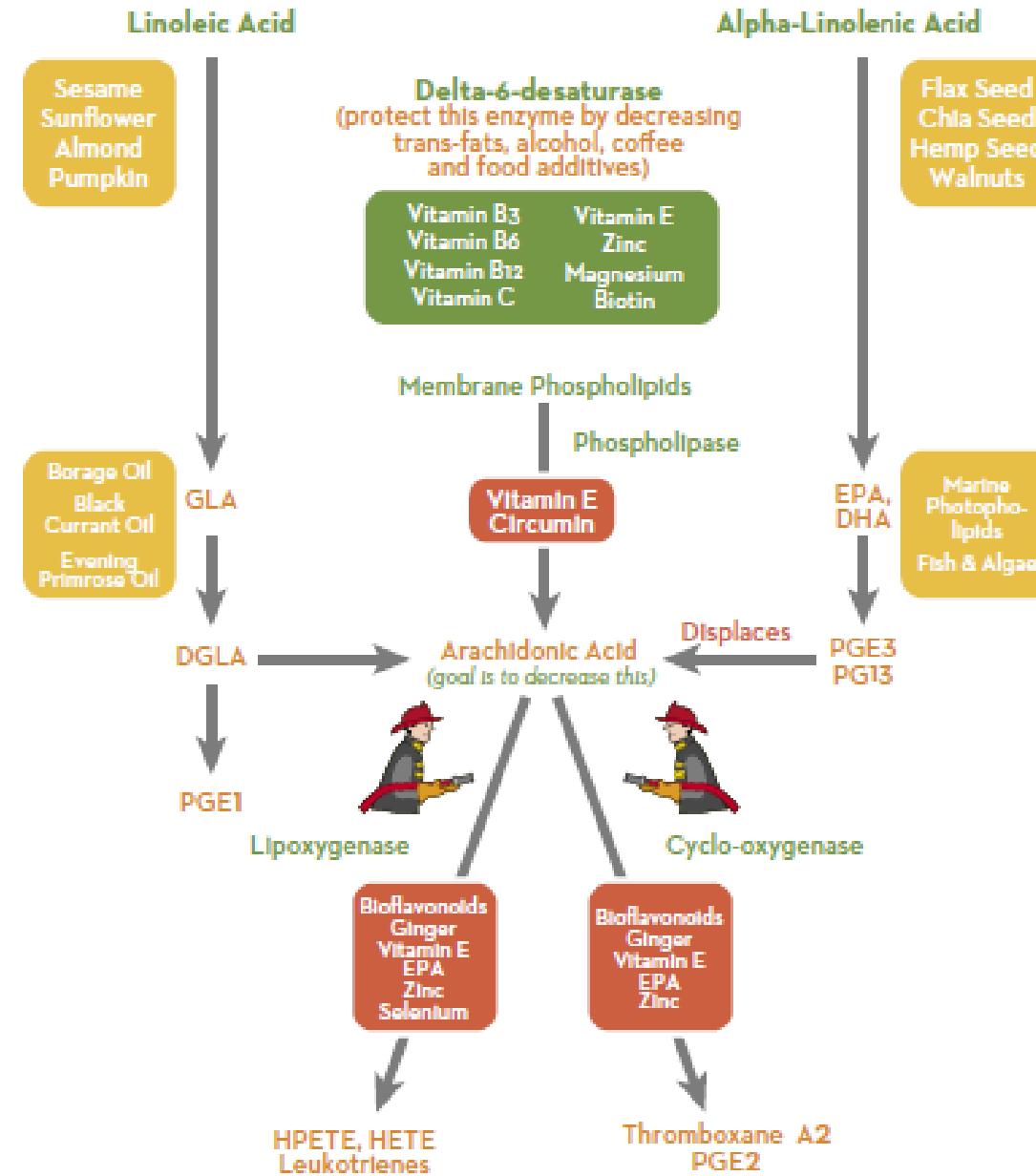
Producing Pro-inflammatory Agents



Inflammatory Cascade



Nutritional Modulation



Symptoms of Gluten Intolerance



Symptoms of Gluten Intolerance #1

- ✓ Weight loss or weight gain
- ✓ Nutritional deficiencies due to malabsorption, e.g., low iron levels
- ✓ Gastro-intestinal problems (bloating, pain, gas, constipation, diarrhea)
- ✓ Fat in the stools (due to poor digestion)



Symptoms of Gluten Intolerance #2

- ✓ Aching joints
- ✓ Depression
- ✓ Eczema or 'chicken skin'
- ✓ Head aches
- ✓ Exhaustion
- ✓ Brain fog



Symptoms of Gluten Intolerance #3

- ✓ Infertility, irregular menstrual cycle, and miscarriage
- ✓ Cramps, tingling, and numbness
- ✓ Slow infant and child growth
- ✓ Decline in dental health



Symptoms of Gluten Intolerance #4

- ✓ Irritability and behavioral changes
- ✓ Early onset Parkinson's
- ✓ Alzheimer's
- ✓ Autism
- ✓ ADHD



Symptoms of Gluten Intolerance #5

- ✓ Thyroid problems
- ✓ Insulin resistance
- ✓ Diabetes
- ✓ Autoimmune disease
- ✓ Crohn's disease
- ✓ Hormone imbalances



Testing for Gluten Intolerance



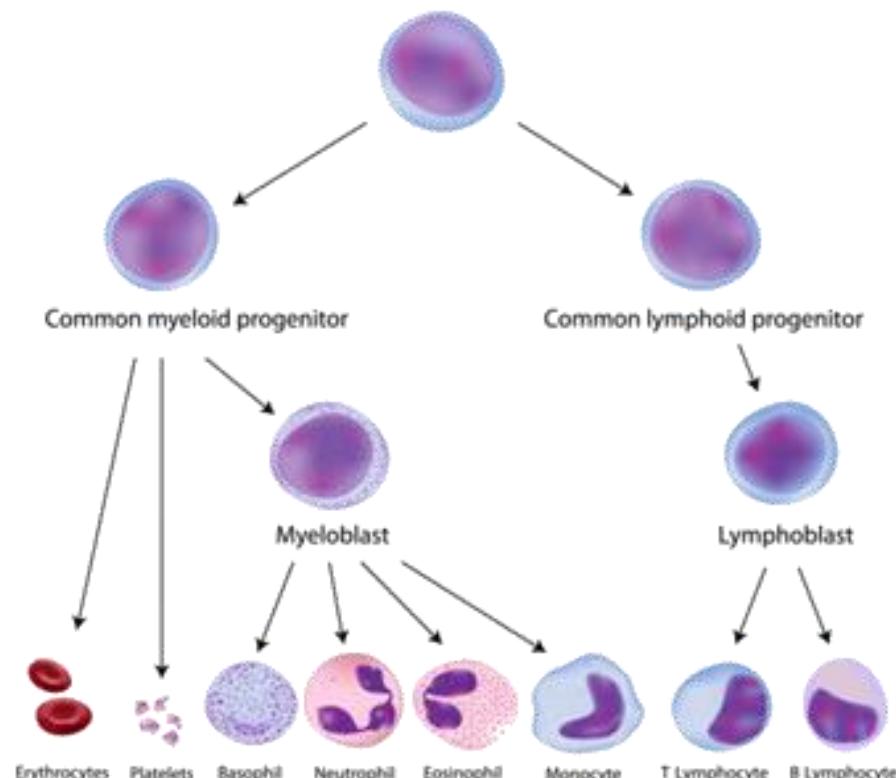
Elimination Diet

- ✓ Eliminate suspects for at least 4 days
 - Fast
 - Medical food
 - Rare foods diet
- ✓ Provocation protocol
 - 1 new food at a time
 - 3 day rule
 - Careful monitoring
- ✓ Food Allergy Spy Training (FAST):
materials provide all the guidelines



Blood Antibody Food Tests

- ✓ Measure antibody titers to a specific number of foods
- ✓ Usually IgG or IgG and IgE
- ✓ Some labs also offer IgM and IgA
- ✓ Mixed reliability
- ✓ Large number of positives related to leaky gut



ALCAT Food Intolerance Test

- ✓ Blood Test
- ✓ Antigen Leukocyte Antibody Test
- ✓ ALCAT Test identifies cellular reactions to over 350 foods, chemicals, and herbs
- ✓ A food allergen is added to whole blood or to leukocyte suspensions
- ✓ **Lots of controversy and skepticism**





Stool Antibody Gluten Tests

- ✓ Measures Anti-Gliadin Antibodies
- ✓ Cross-Reactive Stool Antigens
- ✓ IgA
- ✓ Inflammatory Markers
- ✓ Genetics



Gluten Subfractions Reactivity

- ✓ Cyrex Labs Array 3
- ✓ Blood Test
- ✓ Array 3 assesses gluten reactivity in 12 different fractions, not just gliadin
- ✓ Highly sensitive



Cyrex Labs Cross-Reactivity

ANTIBODY ARRAY 4	Normal	Equivocal*	Out of Range	Numeric Value	REFERENCE (ELISA Index)
Gluten-Associated Sensitivity & Cross-Reactive Foods**					
Rye, Barley, Spelt, Polish Wheat	X			<0.4	0.4-1.4
Cow's Milk	X			0.14	0.1-1.3
Casein (Alpha & Beta)	X			<0.1	0.1-1.2
Casomorphin	X			<0.2	0.2-1.6
Milk Butyrophilin	X			0.11	0.1-1.3
Whey Protein	X			<0.1	0.1-1.3
Chocolate (Milk)	X			0.12	0.1-1.4
Oats	X		X	0.20	0.2-1.0
Yeast		X		2.33	0.2-1.2
Coffee		X		1.08	0.2-1.2
Sesame			X	1.47	0.1-1.3
Buckwheat	X			<0.4	0.4-1.5
Sorghum	X			0.84	0.3-1.2
Millet	X			0.45	0.3-1.5
Hemp	X			<0.3	0.3-1.5
Amaranth	X			0.44	0.2-1.3
Quinoa	X			0.77	0.5-1.5
Tapioca	X			0.48	0.1-1.1
Teff	X			0.50	0.2-1.1
Soy	X			<0.5	0.5-1.5
Egg	X			0.35	0.2-1.7
Corn	X			0.78	0.3-1.4
Rice	X			0.41	0.4-1.6
Potato	X			<0.6	0.6-1.4



Why Do a Gluten Cross-Reactivity Test

- ✓ 30% of gluten sensitive people don't get results when just off gluten
- ✓ Measures foods that are known to cross-react with gluten
- ✓ Large percentage of people sensitive to gluten are sensitive to casein



Managing Gluten Intolerance



