KBMO Diagnostics

The FIT Test (Food Inflammation Test)

13 May 2016

Joel M. Evans, M.D.

info@kbmodiagnostics.com

Overview of Food Sensitivity

- Food Sensitivity and related diseases affect at least 100 million people worldwide.
- The prevalence of Food Sensitivities has increased > 50% in adults and children in the past few years.
- Symptoms include a variety of illnesses from skin rashes and headaches to chronic intestinal diseases.
- 90% of sensitivities are in eight food groups: Milk, Soy, Eggs, Wheat, Peanuts, Tree Nuts, Fish, Shellfish.
- One or all of the foods in a specific group may cause Food Sensitivity.
- Delayed Food sensitivities occur hours or days after food ingestion.

Delayed Food sensitivities are caused by IgG 1-4 and Immune Complexes that activate Complement

The FIT Test: When I Use It

- If my patient doesn't feel well.
- If my patient has Thyroid Problems (Primarily Hashimoto's).
- If my patient has arthritis.
- If my patient has brain fog.
- If my patient has fatigue.
- If my patient as digestive/gut issues.
- If my patient has infertility or first trimester loss
- If my patient has fibroids, endometriosis or breast cancer
- If my patient has any other cancer.

The FIT Test: Why I Use It

The Immune Complex Issues and Inflammation that can be associated with foods are an underlying problem for all of the conditions I see on a daily basis.

Why Focus on the Gut and Food Reactions?

- What organ of the body produces 3/4 of its neurotransmitters?
- What organ of the body contains 2/3 + of the immune tissue?
- What organ of the body contains 10 times more cells than the rest of the body combined?
- What organ of the body houses a genome 100 times larger than the human genome?
- What organ of the body has a metabolic activity greater than the liver?

The Gut

The First Gut Issue to Understand:

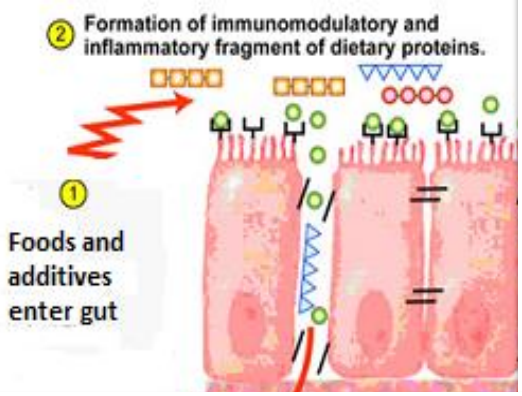
Increased Intestinal Permeability

Why is this important?

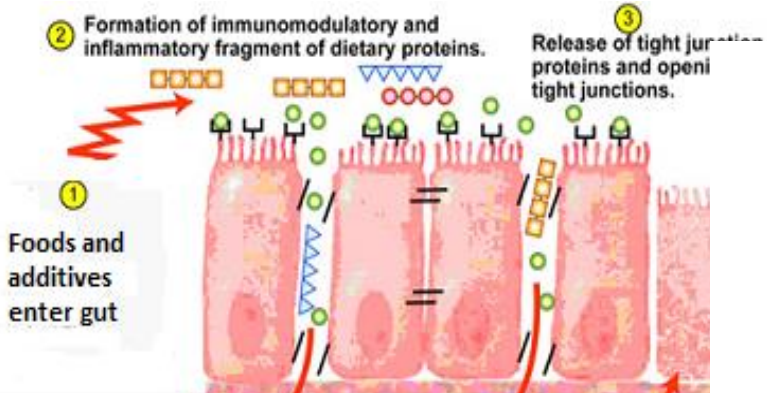
"the mucosa is directly exposed to the external environment and taxed with antigenic loads consisting of commensal bacteria, dietary antigens, and viruses *at far greater quantities on a daily basis than the systemic immune system sees in a lifetime*".

Mayer L. Mucosal immunity. Pediatrics. 2003 Jun;111(6 Pt 3):1595-600.

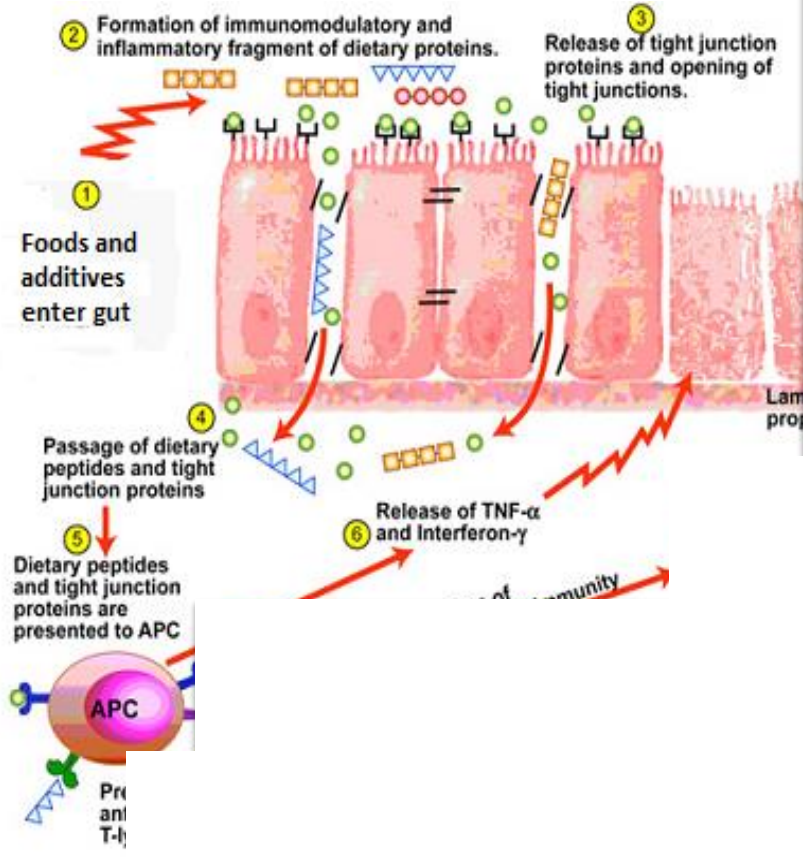
The FIT Test: In



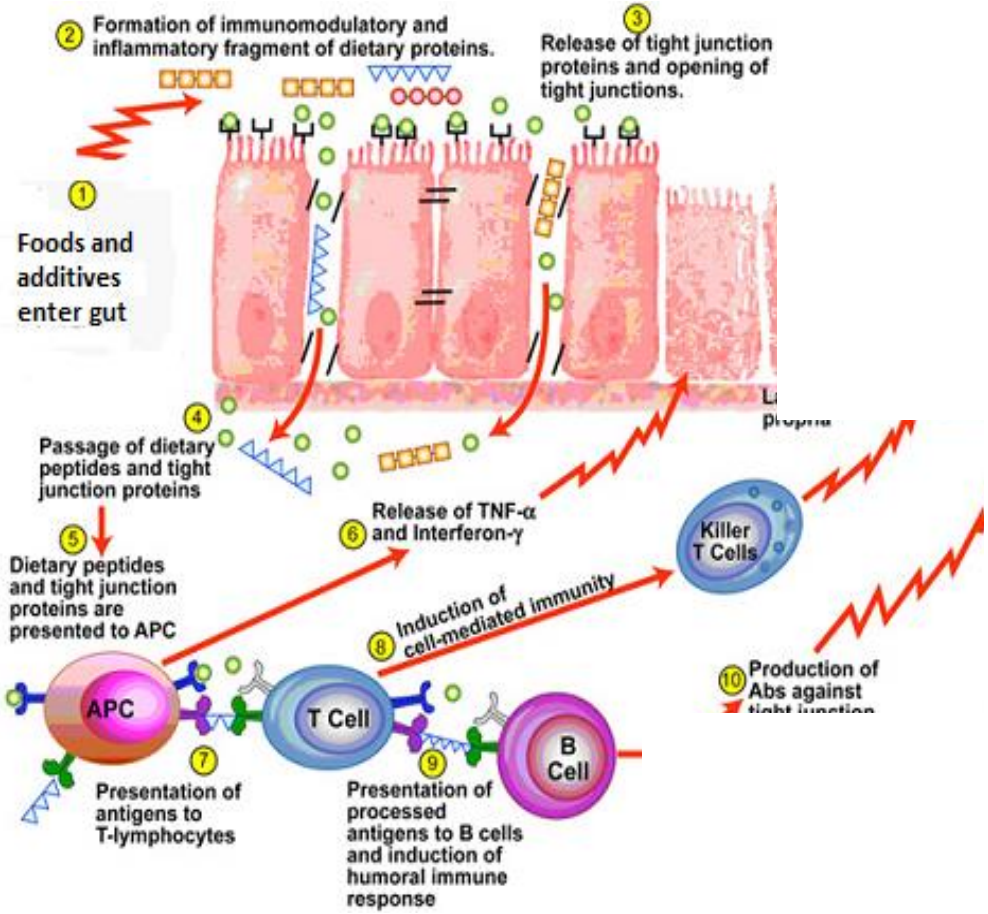
The FIT Test: Immune Complex



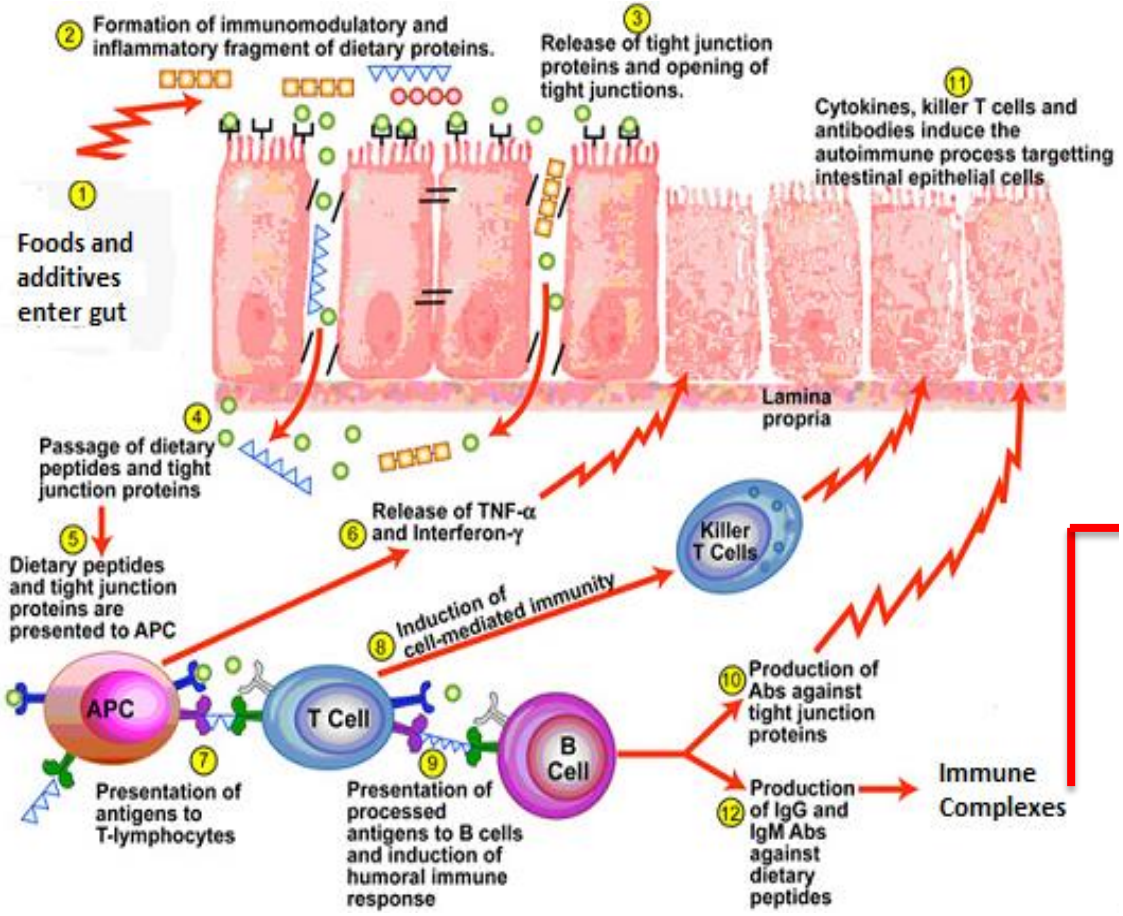
The FIT Test: Immune Com



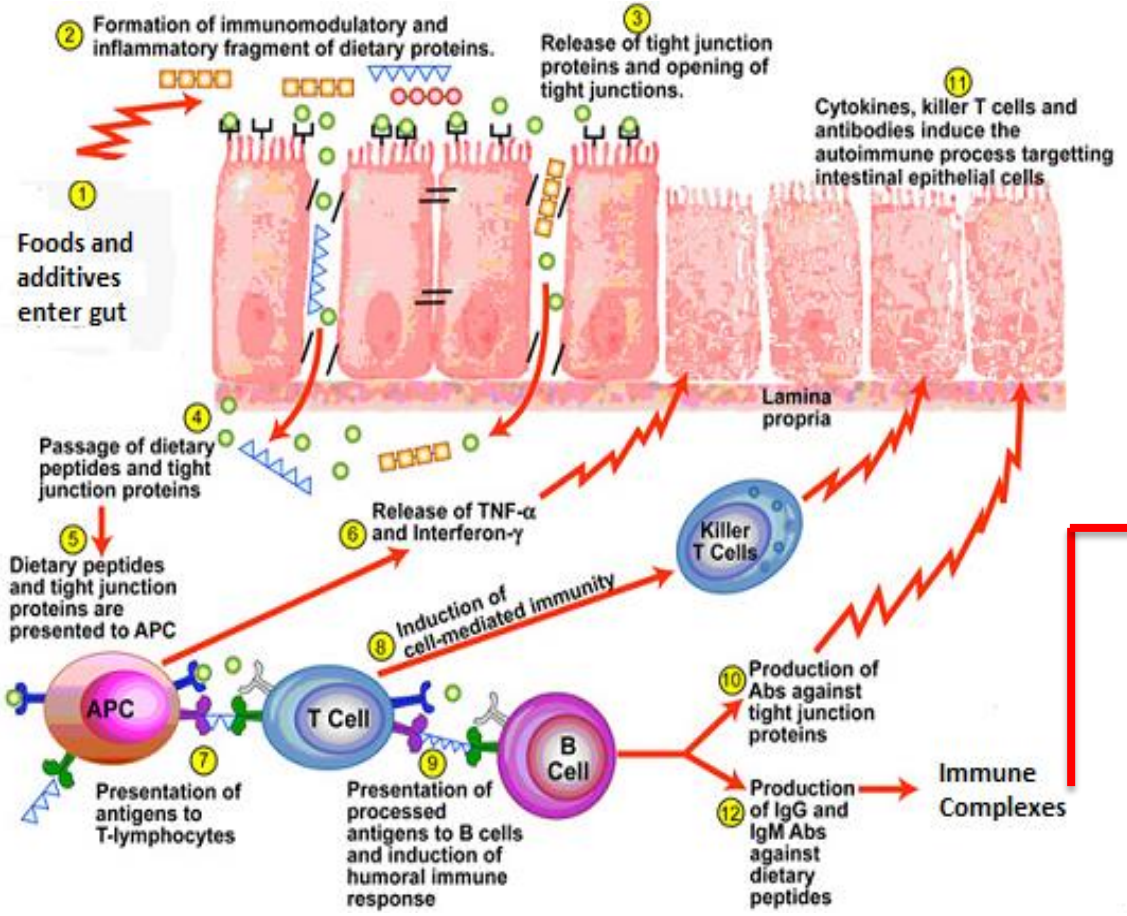
The FIT Test: Immune Complex Formation



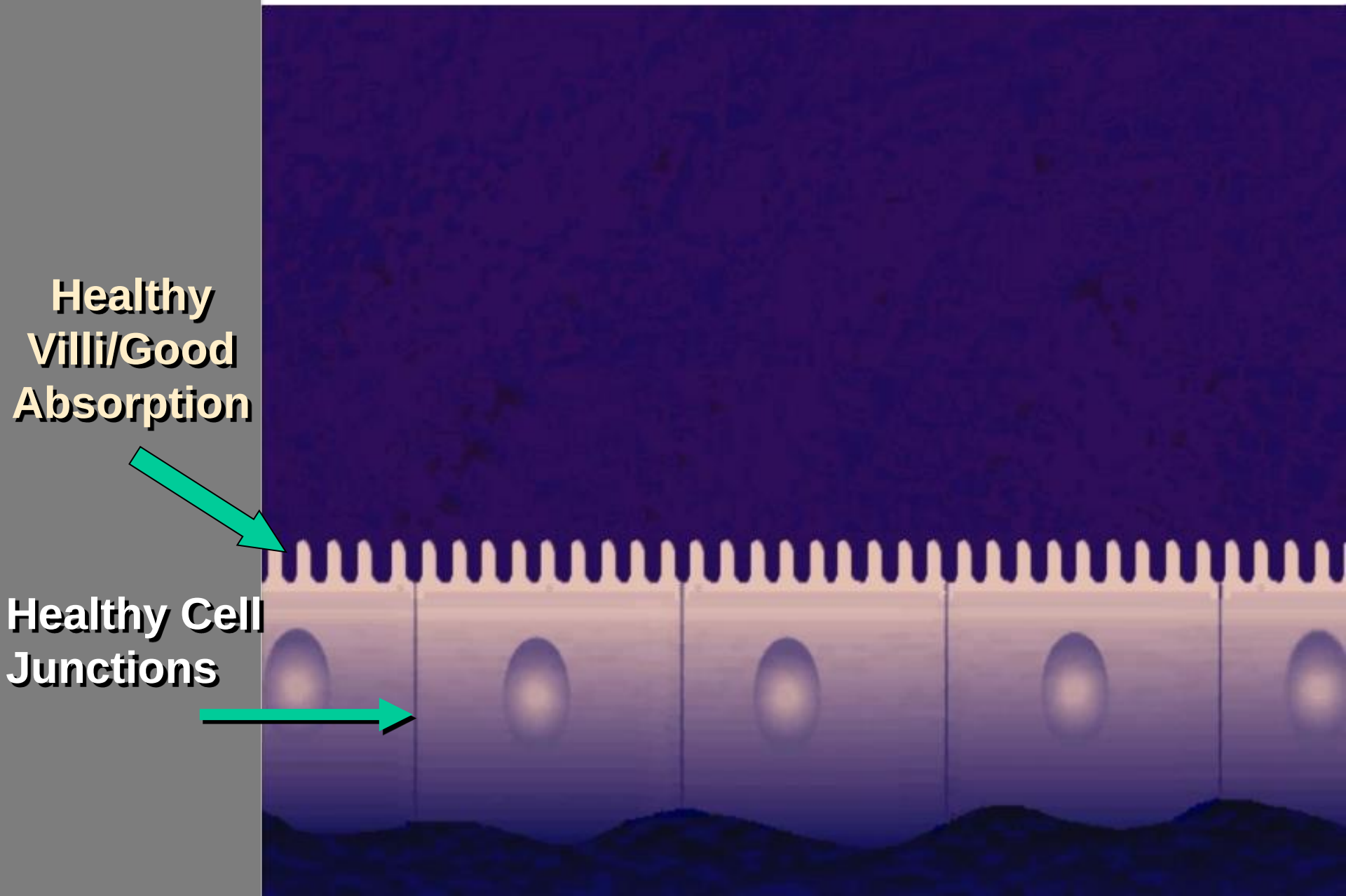
The FIT Test: Immune Complex Formation



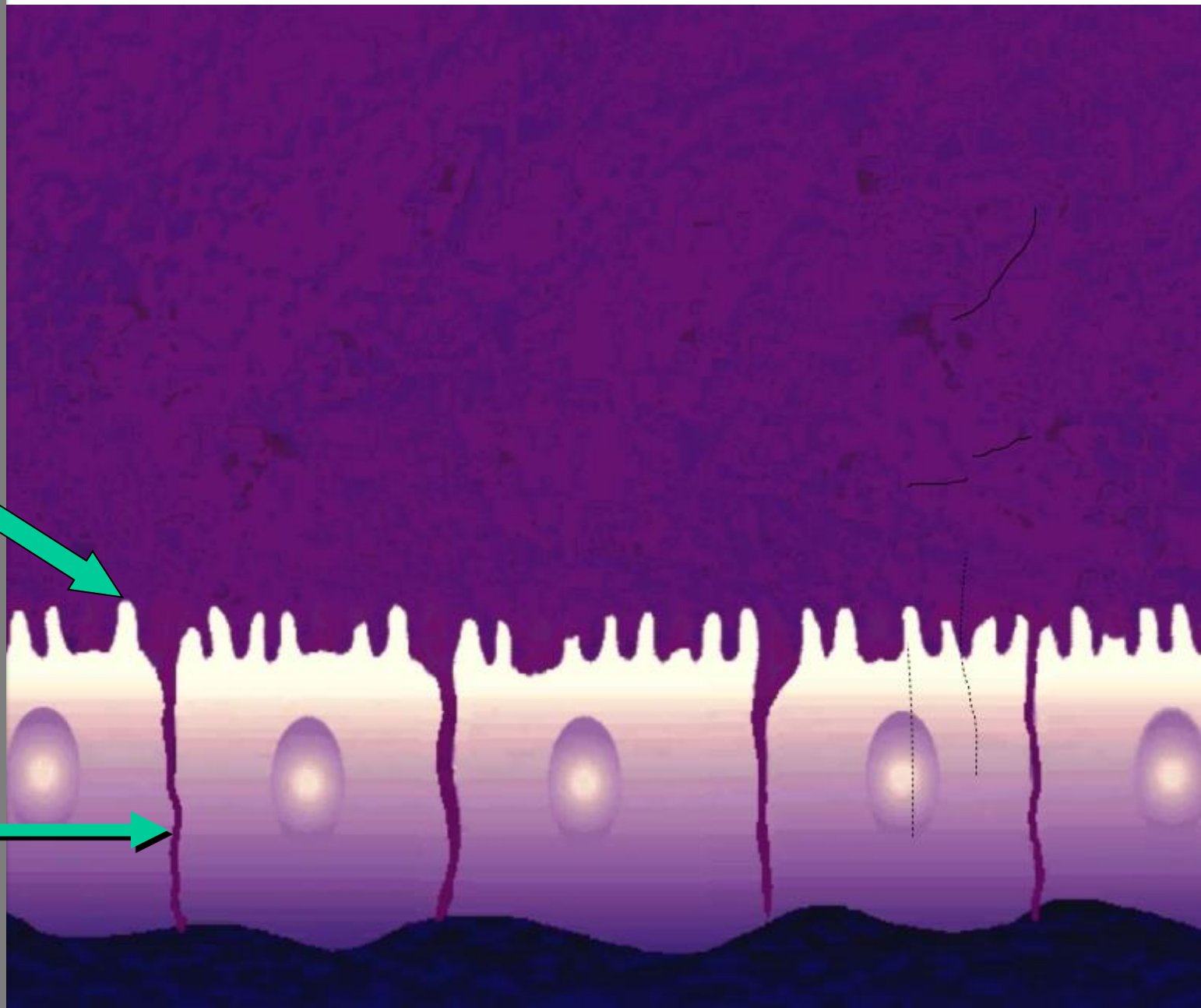
The FIT Test: Immune Complex Formation



Healthy Gut



Leaky Gut



The American Journal of Pathology, Vol. 169, No. 6, December 2006
Copyright © American Society for Investigative Pathology
DOI: 10.2353/ajpath.2006.060681

ASIP Journal CME Program

Amgen Award Lecture

Molecular Basis of Epithelial Barrier Regulation

From Basic Mechanisms to Clinical Application

Amer Jour of Path, Vol. 169, No. 6, Dec 2006

Jerrold R. Turner

From the Department of Pathology, The University of Chicago, Chicago, Illinois

The intestinal mucosa…must balance the needs for a barrier against a hostile environment, like the skin, with the necessity of active and passive transport, like the renal tubule. *An intact intestinal barrier is, therefore, critical to normal physiological function and prevention of disease.*

factor (TNF)-induced dysregulation of the intestinal barrier may be a critical pathogenic component of these diseases. The goals of this article are to review current understanding of mechanisms of barrier regulation, con-

volve multiple mechanisms of injury, including immune dysregulation, epithelial apoptosis, and signal transduction events. Many diseases, particularly inflammatory bowel disease, celiac disease, ischemic disease, and graft-versus-host disease, are also associated with loss of intestinal barrier function.[2–15] Although incompletely explored, significant data suggest that tumor necrosis

Amgen Outstanding Investigator Award, delivered a lecture entitled "Molecular Basis of Epithelial Barrier Regulation: From Basic Science to Clinical Application" on April 2, 2006 at the annual meeting of the American Society for Investigative Pathology in San Francisco, CA.

Address reprint requests to Jerrold R. Turner, Department of Pathology, The University of Chicago, 5841 South Maryland Ave., MC 1089, Chicago, IL 60637. E-mail: jturner@bsd.uchicago.edu.

What are the Causes of increased IP and how does it relate to illness?

I’ve just explained what’s wrong with having increased intestinal permeability?

It leads to disease!

Conditions associated with Increased intestinal permeability

Bacteraemia, infected necrosis, organ failure, and mortality were all associated with intestinal barrier dysfunction early in the course of acute pancreatitis

Migraines

Choleliathiasis

Chronic Fatigue Syndrome

A variety of *auto-immune diseases* including:

- **Type 1 Diabetes**[5]
- **Coeliac Disease**
- **Rheumatoid Arthritis**
- **Psoriasis**
- **Hashimoto's Thyroiditis**[1]

1. Besselink, MG, et.al.Intestinal barrier dysfunction in a randomized trial of a specific probiotic composition in acute pancreatitis. Ann Surg. 2009 Nov;250(5):712-9.
2. The role of the gut in migraine: the oral 51-Cr EDTA test in recurrent abdominal pain.Amery WK, Forget PP. Cephalalgia. 1989 Sep;9(3):227-9.
3. J Gastroenterol Hepatol. 2009 Aug;24(8):1451-6. Epub 2009 Apr 13. The preliminary experimental and clinical study of the relationship between the pigment gallstone and intestinal mucosal barrier. Su Y
6. Diabetologia. 2010 Apr;53(4):741-8. Epub 2009 Dec 13.Gut barrier disruption by an enteric bacterial pathogen accelerates insulitis in NOD mice.Lee AS
7. Nat Rev Gastroenterol Hepatol. 2010 Apr;7(4):204-13. The spectrum of celiac disease: epidemiology, clinical aspects and treatment. Tack GJ
8. Clin Exp Rheumatol. 2003 Sep-Oct;21(5):657-62. Gastrointestinal symptoms and permeability in patients with juvenile idiopathic arthritis. Weber P
9. Intestinal permeability in patients with psoriasis. Humbert P, Bidet A, Treffel P, Drobacheff C, Agache P. J Dermatol Sci. 1991 Jul;2(4):324-6
10. Intestinal permeability in patients with psoriasis. Humbert P, Bidet A, Treffel P, Drobacheff C, Agache P. J Dermatol Sci. 1991 Jul;2(4):324-6

Reproductive Issues

Infertility and First Trimester Loss

AJRI 2002; 47: 275–282

American Journal of Reproductive Immunology
ISSN 8755-8920

INTRODUCTION

Proinflammatory Th1 cytokines such as interleukin (IL)-1, tumor necrosis factor (TNF)-α, and interferon (IFN)-γ have been implicated in causation of infertility, implantation failure, recurrent miscarriage (abortion), preeclampsia and/or fetal growth restriction, and in precipitation of premature labor.[1–7]

Clark DA, Chaouat G, Gorczynski RM. Thinking outside the box: mechanisms of environmental selective pressures on the outcome of the materno-fetal relationship. AJRI 2002; 47:275–282 © Blackwell Munksgaard, 2002

PROBLEM: Study of mechanisms causing spontaneous abortion of the vascularized

Key words:
Natural selection, pregnancy immunology, spontaneous abortion

AJRI 2002; 47: 275–282

American Journal of Reproductive Immunology
ISSN 8755-8920

Presidential Address

Thinking Outside the Box: Mechanisms of Environmental Selective Pressures on the Outcome of the Materno-fetal Relationship*

Figure 1 summarizes data relating intestinal flora, intestinal permeability, and abortion rates.

Clark DA, Chaouat G, Gorczynski RM. Thinking outside the box: mechanisms of environmental selective pressures on the outcome of the materno-fetal relationship. AJRI 2002; 47:275–282 © Blackwell Munksgaard, 2002

PROBLEM: Study of mechanisms causing spontaneous abortion of the vascularized

Key words:
Natural selection, pregnancy immunology, spontaneous abortion

AJRI 2002; 47: 275–282

American Journal of Reproductive Immunology
ISSN 8755-8920

Presidential Ad

Thinkin
Environ
of the M

f
Outcome

DAVID A. CLARK,

	$CB17^{+/+}$	$CB17^{SCID/+}$
Schaedler flora	18 %	41 %
" + Staph. sp.	39 %*	55 %*
CBA x DBA/2 matings		
Control	26 %	19 %
Tetracycline po	13 %*	
Indomethacin po		31 %*

Fig. 1. Some effects of 'intestinal' flora on abortion rates. Staph., sp. ¼ Staphylococcus species. *Denotes a statistically significant effect.

Clark DA, Chaouat environmental selecti ction, pregnancy 2002; 47:275–282 © Blackwell Munksgaard, 2002 immunology, spontaneous abortion

PROBLEM: Study of mechanisms causing spontaneous abortion of the vascularized

Cancer

Causation

Science News from research organizations

Stronger intestinal barrier may prevent cancer in the rest of the body, new study suggests

Date: February 21, 2012

A leaky gut may be the root of some cancers forming in the rest of the body, a new study published online Feb. 21 in *PLoS ONE* by Thomas Jefferson University researchers suggests.

Cancer

Causation of Breast and Colon

ANNALS of THE NEW YORK ACADEMY OF SCIENCES

Ann. N.Y. Acad. Sci. ISSN 0077-8923

ANNALS OF THE NEW YORK ACADEMY OF SCIENCES
Issue: Nutrition and Physical Activity in Aging, Obesity, and Cancer

Obesity-induced metabolic stresses in breast and colon cancer

Epidemiological studies have suggested that excess body weight gain may be a major risk factor for colon and breast cancer. A positive energy balance creates metabolic stresses, including the excess production of reactive oxygen species (ROS), hyperinsulinemia, the elevated adipokine secretion, and increased gut permeability.

Hyochangwon-gil, Yongsan-gu, Seoul 140-742, Korea. mksung@sm.ac.kr

Cancer

Issues After Cancer Treatment

Curr Opin Support Palliat Care. 2011 Mar;5(1):47-54. doi: 10.1097/SPC.0b013e328343a043.

The significance of altered gastrointestinal permeability in cancer patients.

Melichar B[1], Zezulová M.

Author information

Summary: Intestinal permeability testing...may represent a tool for noninvasive objective assessment of intestinal toxicity of anticancer therapy.

disaccharide/monosaccharide ratio and decreased xylose absorption have been described in patients treated by radiotherapy as well as different cytotoxic or targeted agents across a spectrum of malignant disorders. Intestinal permeability changes correlated with clinical manifestations, including diarrhea, mucositis, neutropenic enterocolitis and systemic infections. The measurement of intestinal permeability has also been used as a surrogate end-point in interventional studies.

SUMMARY: Intestinal permeability testing using nonmetabolized sugars may represent a tool for noninvasive objective assessment of intestinal toxicity of anticancer therapy.

Increased Intestinal Permeability is Obviously Quite Important

Did you know?

Intestinal Permeability and Food Intolerance

50-100% of Food Intolerant patients have increased intestinal permeability.

1. **Bjarnason I, MacPherson A, Hollander D. Intestinal permeability: an overview. Gastroenterology. 1995;108:1566-81.**
2. **Ventura MT, Polimeno L, Amoruso AC, Gatti F, Annoscia E, Marinaro M, et al. Intestinal permeability in patients with adverse reactions to food. Dig Liver Dis. 2006 ;38:732-6.**

So understanding and testing for food sensitivities and food induced inflammation is critical for your practice!

National Institute of Allergy and Infectious Disease

Definition of Food Allergy

Adverse health effect arising from a specific immune response that occurs reproducibly on exposure to a given food

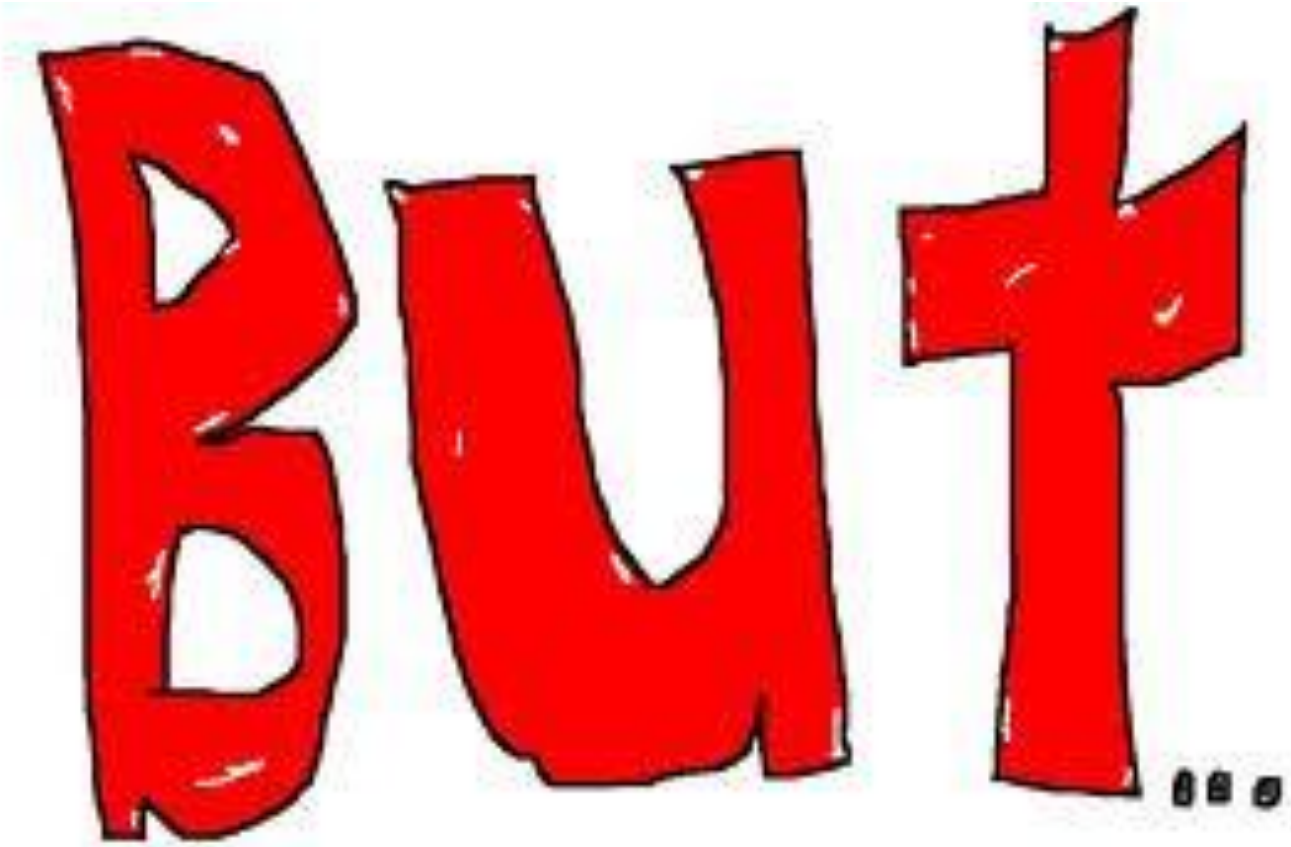
Type 1 hypersensitivity (IgE)

NIAID 2010 Guidelines J Allergy Clin Immunol. 2010 Dec;126(6 Suppl):S1-58

4-8% US population have allergies that fit within the NIAID definition

According to the NIAID, there are additional groups of patients with food reactions

Approximately 12% of the US population can be diagnosed with reactions to food (IgE food allergies, Food intolerances,Celiac disease, Non-IgE FA such as eosinophilic oesophagitis/gastroenteritis)


But...

National Institute of Allergy and Infectious Diseases says..

Up to 90% of presumed food allergies are NOT allergies

NIAID 2010 Guidelines J Allergy Clin Immunol. 2010 Dec;126(6 Suppl):S1-58.

Conservative estimates suggest that a third of the US population believe they have a reaction to some food

Chafen, S. *The Journal of the American Medical Association*. May 12, 2010; vol 303: pp 1848-1856.

IFM Definitions

Food allergy: Immunologic IgE-mediated type 1 hypersensitivity

Food sensitivity: Immunologic reaction to food (IgA or IgG-mediated delayed hypersensitivity)

Food intolerance: Non-immunologic reaction to food (e.g. lactose intolerance)

Immunoglobulin G (IgG)

- **IgG makes up 75% of total immunoglobulins**
- **Half life of ~21-23 days**
  - **therefore, IgG elimination diets should be at least 3 weeks to decrease IgG by half**

Symptoms Associated with IgG Delayed Hypersensitivity Reactions

Systemic:
- Fever
- Fatigue
- Sweating
- Chills
- Weakness
- Reduced exertional tolerance

Digestive tract:
- Abdominal pain
- Bloating
- Nausea
- Vomiting
- Diarrhoea

Lungs:
Food-induced bronchitis and asthma

Joints, muscles, connective tissue:
- Food-allergic arthritis
- Pain
- Stiffness
- Swelling

Skin:
- Itching
- Rashes
- Hives
- Thickening
- Redness
- Swelling
- Scaling (as in eczema or psoriasis)

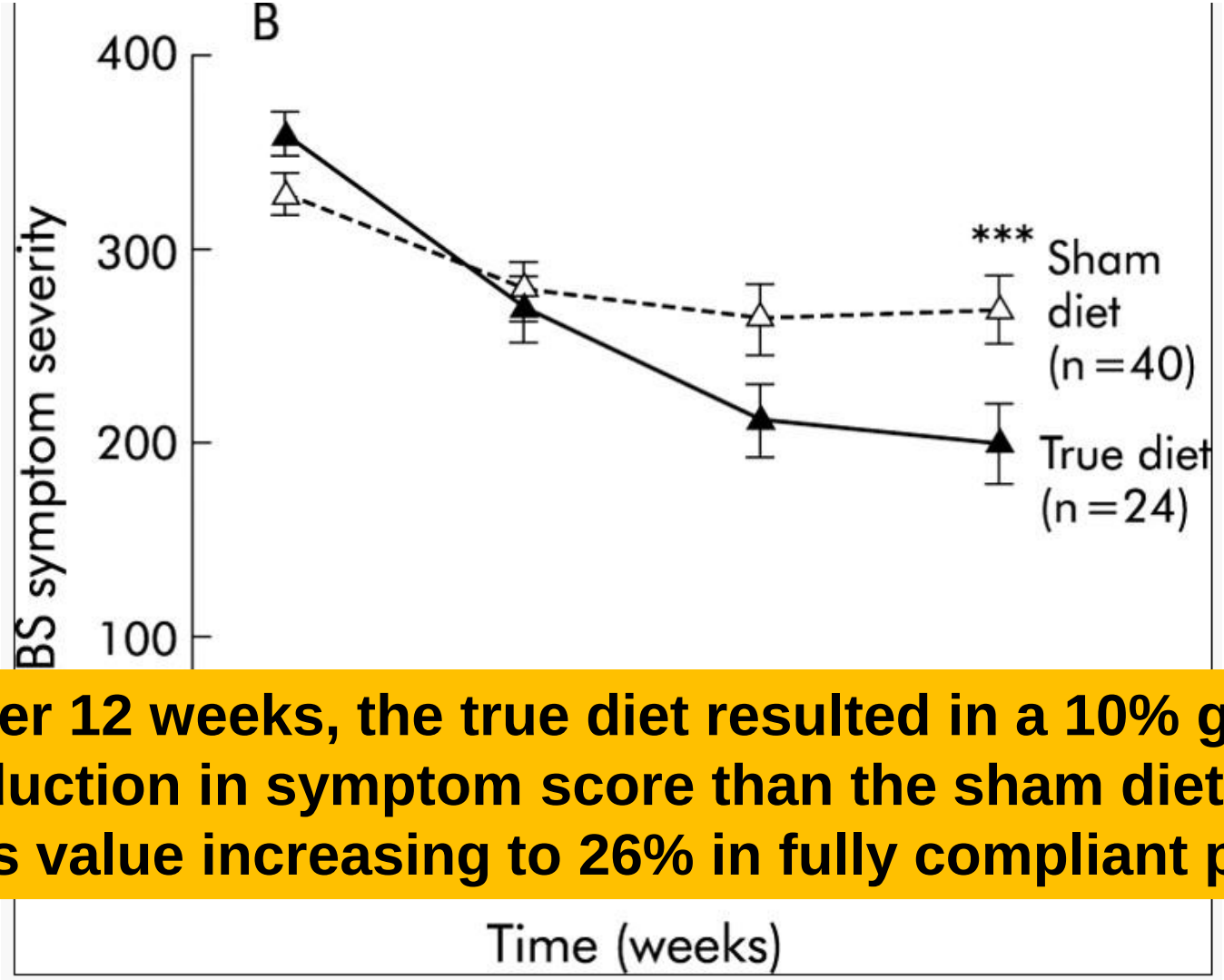
Brain:
- Disorganised or disturbed thinking and
- feeling
- Memory disturbances
- Behavioural problems

Nutr Clin Pract 2010 April 25(2): 192-8

Symptom Characteristics: IgE vs. IgG

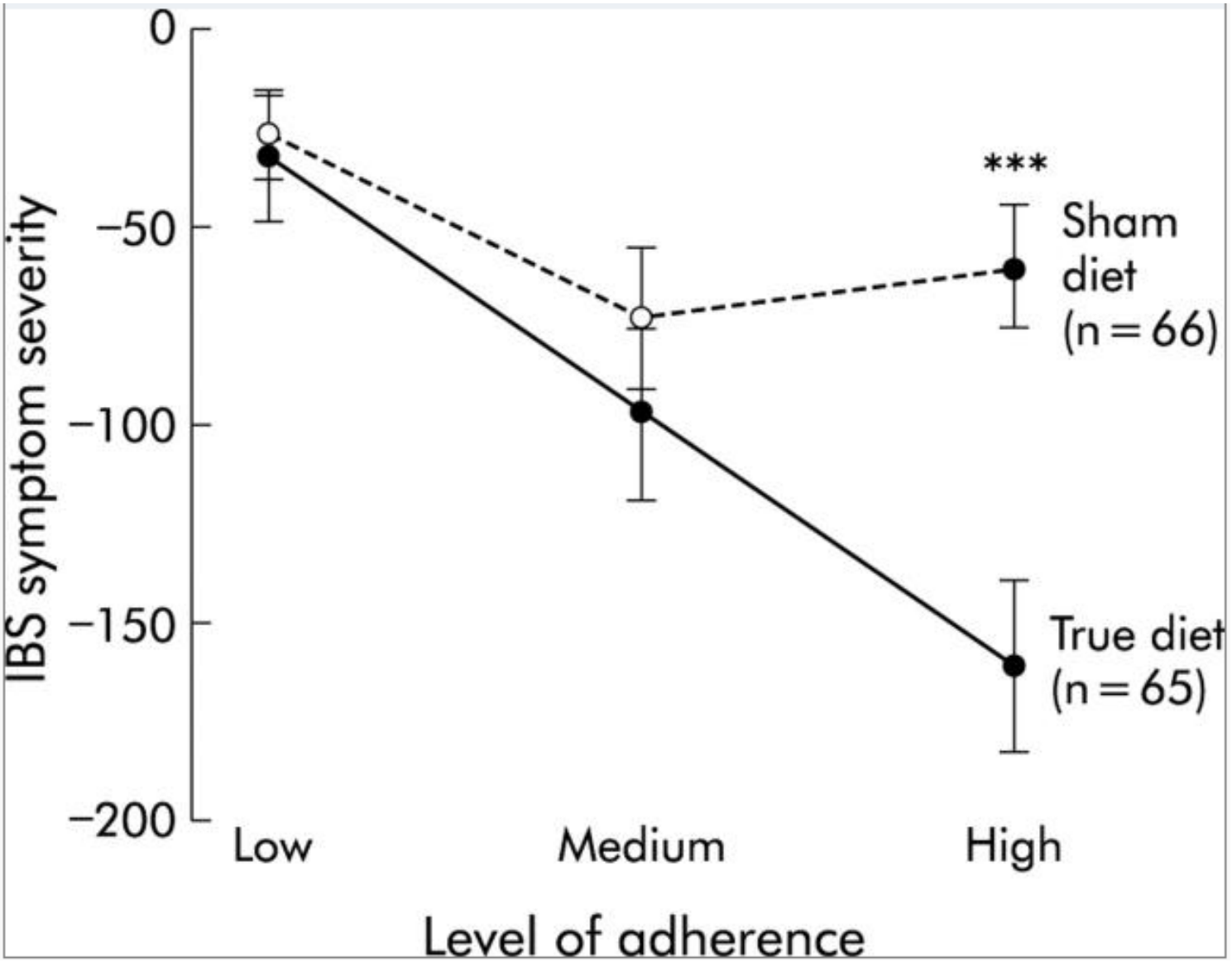
	IgE 'ALLERGY	IgG 'SENSITIVITY'
Onset	**Rapid (minutes)**	**Delayed (hours)**
Duration	**Brief (hours)**	**Prolonged (days)**
Mechanism	**Mast Cell**	**Circulating Complexes**
Quantity of Food	**Tiny**	**Dose Dependent**
Food	**Any (uncommon)**	**Common Foods**
Patient Awareness	**Often**	**Rarely**
Persistence of Antibody	**Lifelong**	**Months After Elimination**

IgG testing and IBS



After 12 weeks, the true diet resulted in a 10% greater reduction in symptom score than the sham diet with this value increasing to 26% in fully compliant patients

Atkinson W, Sheldon TA, Shaath N, Whorwell PJ. Food elimination based on IgG antibodies in irritable bowel syndrome: a randomised controlled trial. Gut 2004; 53: 1459–1464.


0
−50
−100
−150
−200
IBS symptom severity
***
Sham diet (n = 66)
True diet (n = 65)
Low
Medium
High
Level of adherence

Clin Chem Lab Med 2008;46(5):687–690 © 2008 by Walter de Gruyter • Berlin • New York. DOI 10.1515/CCLM.2008.131

Short Communication

Time to reconsider the clinical value of immunoglobulin G4 to foods?

Daniela Bernardi, Franco Borghesan, Diego Faggian, Fulvia Chieco Bianchi, Elisabetta Favero, Lucia Billeri and Mario Plebani*

Department of Laboratory Medicine, University Hospital of Padova, Padova, Italy

Abstract

Background: The usefulness of serum antibodies to common food antigens (immunoglobulin G4; IgG4) assay in management of patients suffering from food intolerance was assessed.

Methods: A total of 22 asymptomatic healthy subjects and 68 patients with symptoms referred for suspected food intolerance were studied. Serum IgG4 to 19 common foods was measured by an automated

alence is unknown, but it has been estimated to occur in approximately 5% of the general population (2–4). Moreover, our understanding of the pathophysiology of food intolerance is incomplete, and this drawback is paralleled by a paucity of options available for the diagnostic work-up. Elevated values of serum IgG4 (immunoglobulin G4 subclass) antibodies to specific food antigens, before dietary exclusion, may prove useful in targeted dietary exclusion, obviating the need to exclude a large number of foods from the diet. We therefore investigated the appropriateness of using in vitro diagnostics for food intolerance based on food IgG4 determination in order to evaluate the potential role of this measurement method in patient management.

Serum IgG4 concentrations were evaluated in sub-

78.5% of participants had resolution of symptoms after following IgG4-based exclusion diet, and follow-up IgG4 testing showed that values decreased after 2 months of diet in 89.5% of these patients.

Keywords: diagnostic accuracy; exclusion diet; food intolerance; food-specific IgG4 antibody.

about the absence of bowel symptoms, atopic dermatitis, bronchial asthma, headache related to food ingestion, pruritus without dermatitis, gastroenteritis

Exp Clin Endocrinol Diabetes. 2008 Apr;116(4):241-5. Epub 2007 Dec 10.

IgG antibodies against food antigens are correlated with inflammation and intima media thickness in obese juveniles.

Wilders-Truschnig M, Mangge H, Lieners C, Gruber H, Mayer C, März W.

Clinical Institute of Medical and Chemical Laboratory Diagnostics, Medical University Graz, Austria. martie.truschnig@klinikum-graz.at

Obese juveniles showed a highly significant increase in IMT, elevated CRP values and anti-food IgG antibody concentrations compared to normal weight juveniles. Anti-food [total] IgG showed tight correlations with CRP and IMT

components, low grade inflammation and early atherosclerotic lesions in obese and normal weight juveniles.

IgG testing and Migraines

Diet restriction in migraine, based on IgG against foods: A clinical double-blind, randomised, cross-over trial

30(7) 829–837

DOI: 10.1177/0333102410361404
cep.sagepub.com
SAGE

Kadriye Alpay[1], Mustafa Ertas[1], Elif Kocasoy Orhan[1], Didem Kanca Üstay[2], Camille Lieners[3] and Betül Baykan[1]

Abstract

Introduction: It is well-known that specific foods trigger migraine attacks in some patients. We aimed to investigate the

This is the first randomised, cross-over study in migraineurs, showing that diet restriction based on IgG antibodies is an effective strategy in reducing the frequency of migraine attacks

Results: The average count of reactions with abnormally high titre was 24 ± 11 against 266 foods. Compared to baseline, there was a statistically significant reduction in the number of headache days (from 10.5 ± 4.4 to 7.5 ± 3.7; $P < 0.001$) and number of migraine attacks (from 9.0 ± 4.4 to 6.2 ± 3.8; $P < 0.001$) in the elimination diet period.

Conclusion: This is the first randomised, cross-over study in migraineurs, showing that diet restriction based on IgG antibodies is an effective strategy in reducing the frequency of migraine attacks.

IgG testing and Crohn's

- **Clinical relevance of IgG antibodies against food antigens in Crohn's disease: a double-blind cross-over diet intervention study**
- **In 84% and 83% of the CD patients (n=79), IgG antibodies against processed cheese and yeast were detected.**
- **Significant reduction in stool frequency and abdominal pain on IgG diet as compared to controls on sham diet.**

- **Digestion. 2010;81(4):252-64.**

Commonly Reported Symptoms in Patients with IgG Food Reactions

Nasal congestion
Nasal drainage
Sinus headaches
Fatigue after meals
Throat clearing
Chronic fatigue
Dry cough
Sneezing
Hoarseness
Migraine headaches
Itchy eyes
Nausea

Watery eyes
Itchy skin
Cramps

IgG Testing and Treatment:

- **Eliminate reactive foods for at least 4 weeks to assess improvement.**
- **Response may show an exacerbation before improvement.**
- **If test shows reaction to many foods, or yeast, consider underlying intestinal permeability.**

IgG Testing Summary

- **Testing has demonstrated clinical utility**
- **Testing may improve adherence**
- **Elevation of IgG may be evidence of underlying inflammation- symptoms or not**
- **Use consistent and trusted laboratory like KMBO**

Why KMBO is my trusted lab:

The FIT Test: KBMO

- Founded in 2004

12,000sq ft facility with manufacturing and CLIA High Complexity lab

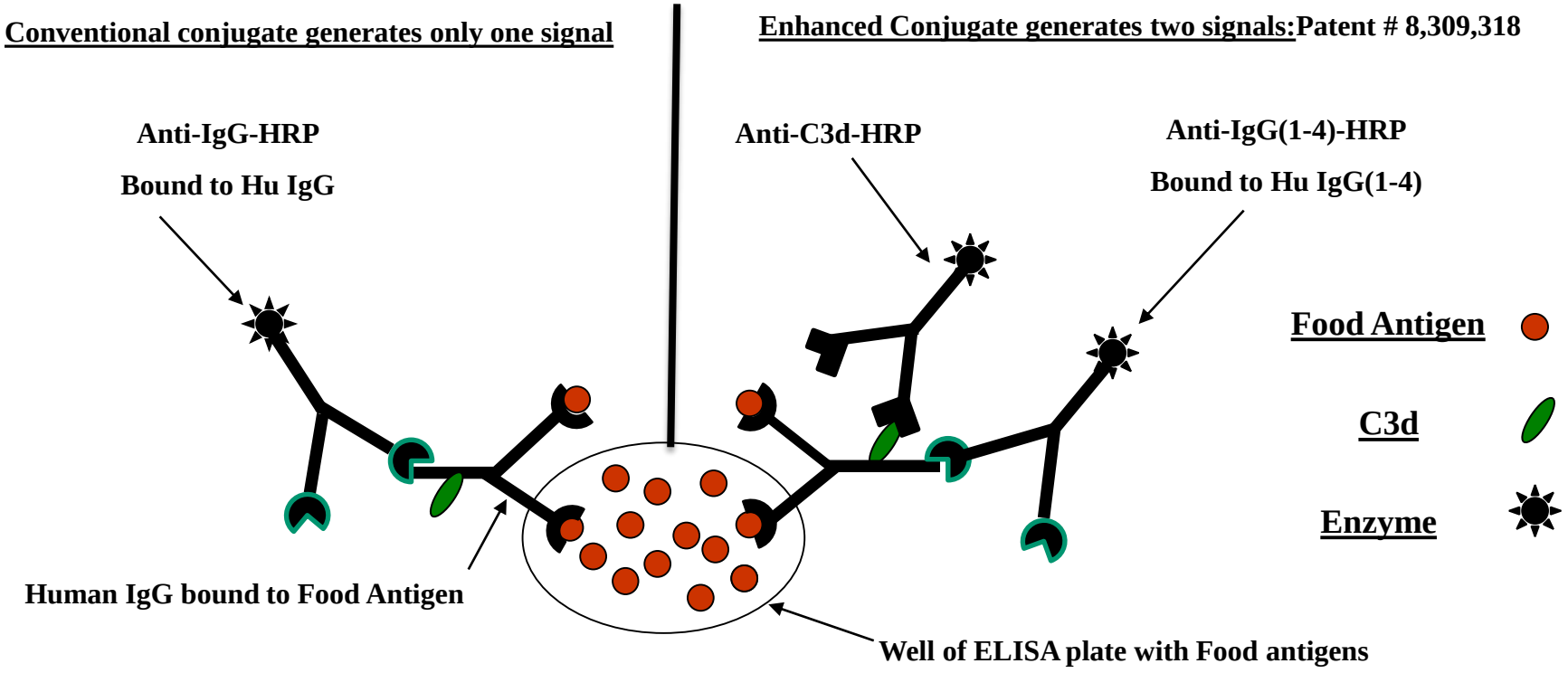
- ISO 13485 certified quality and FDA registered Manufacturing Facility

- Patent Granted October 2012: Detection of Antigen Specific Immune Complexes: #8,309,318

- Over 100,000 tests manufactured and growing

The FIT Test: Format and Technology showing Enhanced Sensitivity

Comparison of conventional conjugate: anti-IgG with enhanced conjugate: anti-IgG(1-4)and anti-C3d



The FIT Test: Overview

- The FIT Test measures 132 Foods and Additives
- Finger stick enables is a quick and easy way to obtain a sample
- The Patient Report is easy to understand
- A check list of common food-related symptoms is provided

The FIT Test: Foods and Additives Tested

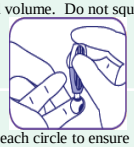
The 132 Foods and Additives we test on the FIT Test

Additives	Plant Foods: Beans	Plant Foods: Berries
Aspartame	Cocao	Avocado
Benzoic Acid	Coffee	Blueberry
BHA	Green,string	Cranberry
MSG	Kidney	Grape, White seedless
Polysorbate 80	Lima	Raspberry
Red #2	Navy	Strawberry
Red #3	Pinto	Extracts/Misc.
Red #40	Soy	Canola Oil
Saccharin	Wax	Gelatin
Yellow #6	Plant Foods: Fruits	Sugar,cane
Dairy	Apple	Tea
Casein	Apricot	Mushroom
Milk, Cow	Banana	Microbial
Egg,white,chick.	Cantaloupe	Yeast,baker's
Fish	Cherry	Yeast,brewer's
Catfish	Grapefruit	Poultry
Codfish	Honeydew Melon	Chicken
Flounder	Lemon	Duck
Grouper	Lime	Turkey
Halibut	Olive,green	Seeds
Orange Roughy	Onion,white	Cotton
Salmon	Orange	Dill
Snapper	Peach	Safflower
Sole	Pear	Sesame
Swordfish	Pineapple	Sunflower
Trout	Plum	Shellfish
Tuna	Watermelon	Clam
Grains	Plant Foods: Vegetable	Crab
Barley	Artichoke	Lobster
Buckwheat	Asparagus	Scallops
Millet	Broccoli	Shrimp
Oat	Beets	Spice
Rice	Cabbage	Basil
Rye	Carob	Cinnamon
Wheat,gulten	Lettuce	Garlic
Wheat,whole	Carrot	Ginger
Meats	Cauliflower	Hops
Beef	Celery	Mustard
Lamb	Corn,sweet	Oregano
Pork	Cucumber	Paprika
Nuts	Pea,green	Pepper,Black
Almond	Potato,sweet	Pepper,Chili
Cashew	Potato,white	Pepper,Green
Coconut	Pumpkin	Pepper,Red Cayenne
Colanut	Spinach	Peppermint
Walnut,English	Squash Mix	Rosemary
Hazelnut	Tomato	Tumeric
Peanut	Zucchini	Vanilla
Pecan		

The FIT(Food Inflammation Test) Fingerstick Shipping and Reporting:

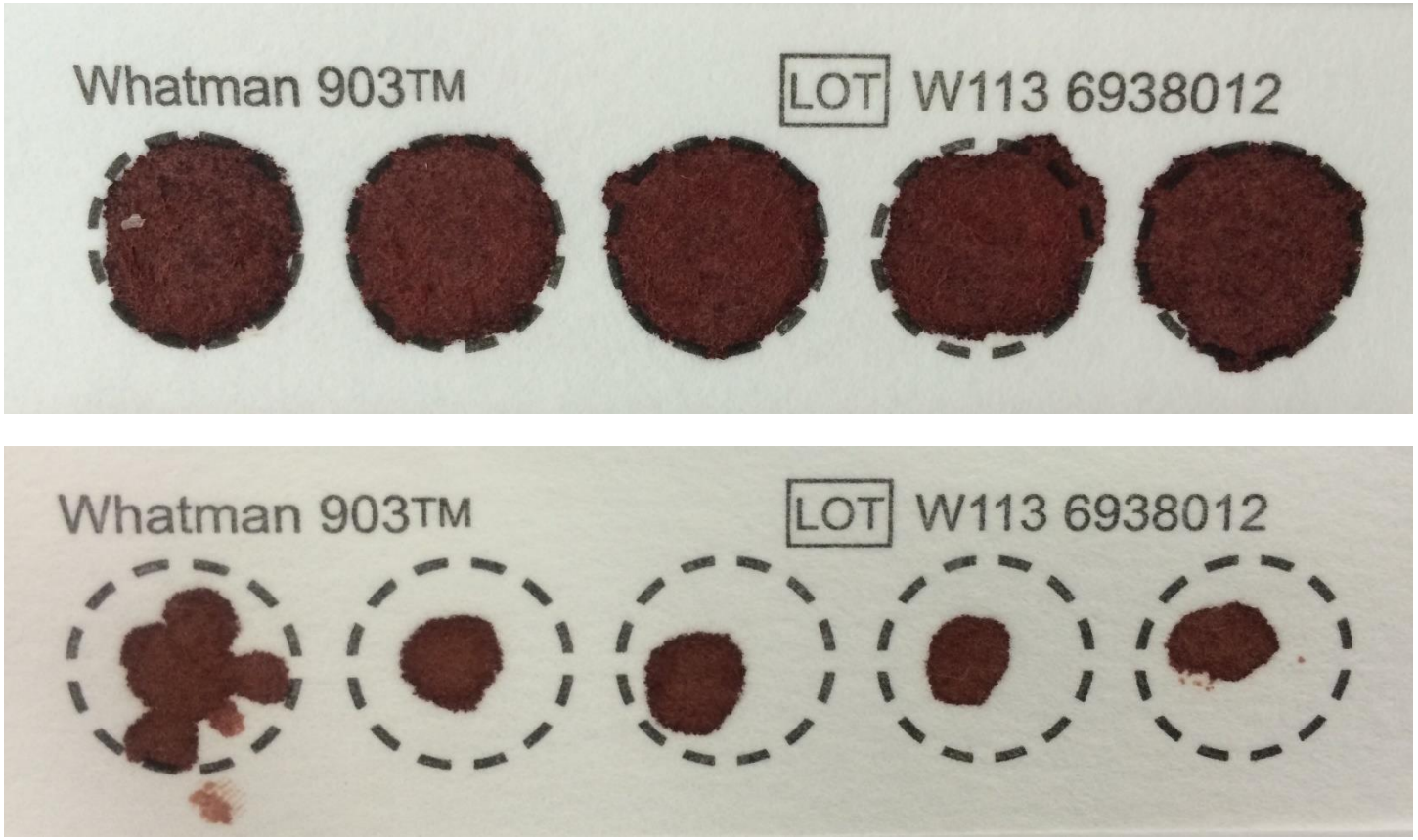
KBMO DIAGNOSTICS

Fingerstick, Shipping and Reporting

Instructions:	
1	Use the side of the fingertip on either the middle or ring finger for the finger stick. Do not use the center pad of the finger it is the most sensitive area. 
2	Warming your finger may be necessary to acquire the correct amount of blood. Simply run warm to hot water over it for a few minutes and dry it well before gently massaging the finger from the base to the tip until the finger turns red. 
3	Clean the site you will use the finger stick with the provided alcohol swab and allow to air dry.
4	Position the lancet provided over the area you just cleaned and press lancet firmly against puncture site. Once the site has been punctured, set the lancet aside. Gently massage from the hand toward the puncture site to obtain required volume. Do not squeeze or apply strong repetitive pressure to the site as it may damage the sample. 
5	Fill each circle on the provided collection card with blood. It is important to fill each circle to ensure enough sample can be obtained to properly administer the test. At least three circles must be filled, but if possible please fill all five.
6	Following collection, clean the area with the second provided alcohol wipe and press clean gauze or cotton on the area until bleeding has stopped.
	Label the collection card with name and date the sample was collected. Wait a few minutes until the blood has dried completely on the card before placing it inside the provided biohazard bag, sealing it and placing it inside the provided return envelope.
7	Ship the envelope in the mail to: KBMO Diagnostics 1a Business Way Hopedale MA, 01747
8	KBMO Diagnostics will analyze the sample and e-mail a complete report in 5-7 days.

For Further Information and more Draw Kits Contact:
INFO@KBMODiagnostics.com
Call with any questions at 6179905741 or Send an e-mail:

FIT(Food Inflammation Test) Test:
Good Spot versus a Rejected one



The FIT Test : Symptoms Checklist

If you have one or more symptoms, you'll probably benefit from a food sensitivity test. Place a check for each symptom and include symptoms that you've 'learned to live with'. Return the completed checklist to your physician.

Digestive Tract
- ☐ Belching
- ☐ Bloated feeling
- ☐ Constipation
- ☐ Diarrhea
- ☐ Nausea
- ☐ Passing gas
- ☐ Stomach pains
- ☐ Vomiting

Ears
- ☐ Drainage
- ☐ Ear aches
- ☐ Ear infections
- ☐ Hearing loss
- ☐ Itchy ears
- ☐ Ringing

Emotions
- ☐ Aggressiveness
- ☐ Anxiety/fear
- ☐ Depression
- ☐ Irritability/anger
- ☐ Mood swings
- ☐ Nervousness

Energy & Activity
- ☐ Apathy
- ☐ Fatigue
- ☐ Hyperactivity
- ☐ Lethargy
- ☐ Restlessness
- ☐ Sluggishness

Eyes
- ☐ Blurred vision
- ☐ Dark circles
- ☐ Itchy eyes
- ☐ Sticky eyelids
- ☐ Swollen eyelids
- ☐ Watery eyes

Head
- ☐ Dizziness
- ☐ Faintness
- ☐ Headaches
- ☐ Insomnia
- ☐ Lightheadedness

Joint & Muscles
- ☐ Aches in muscles
- ☐ Arthritis
- ☐ Feeling of weakness
- ☐ Limited movement
- ☐ Pain in joints
- ☐ Stiffness

Lungs
- ☐ Asthma/bronchitis
- ☐ Chest congestion
- ☐ Difficulty breathing
- ☐ Shortness of breath
- ☐ Wheezing

Mind
- ☐ Confusion
- ☐ Learning disability
- ☐ Poor concentration
- ☐ Poor memory
- ☐ Stuttering

Mouth & Throat
- ☐ Canker sores
- ☐ Chronic coughing
- ☐ Gagging
- ☐ Often clear throat
- ☐ Sore throat
- ☐ Swollen tongue
- ☐ Swollen lips/gums

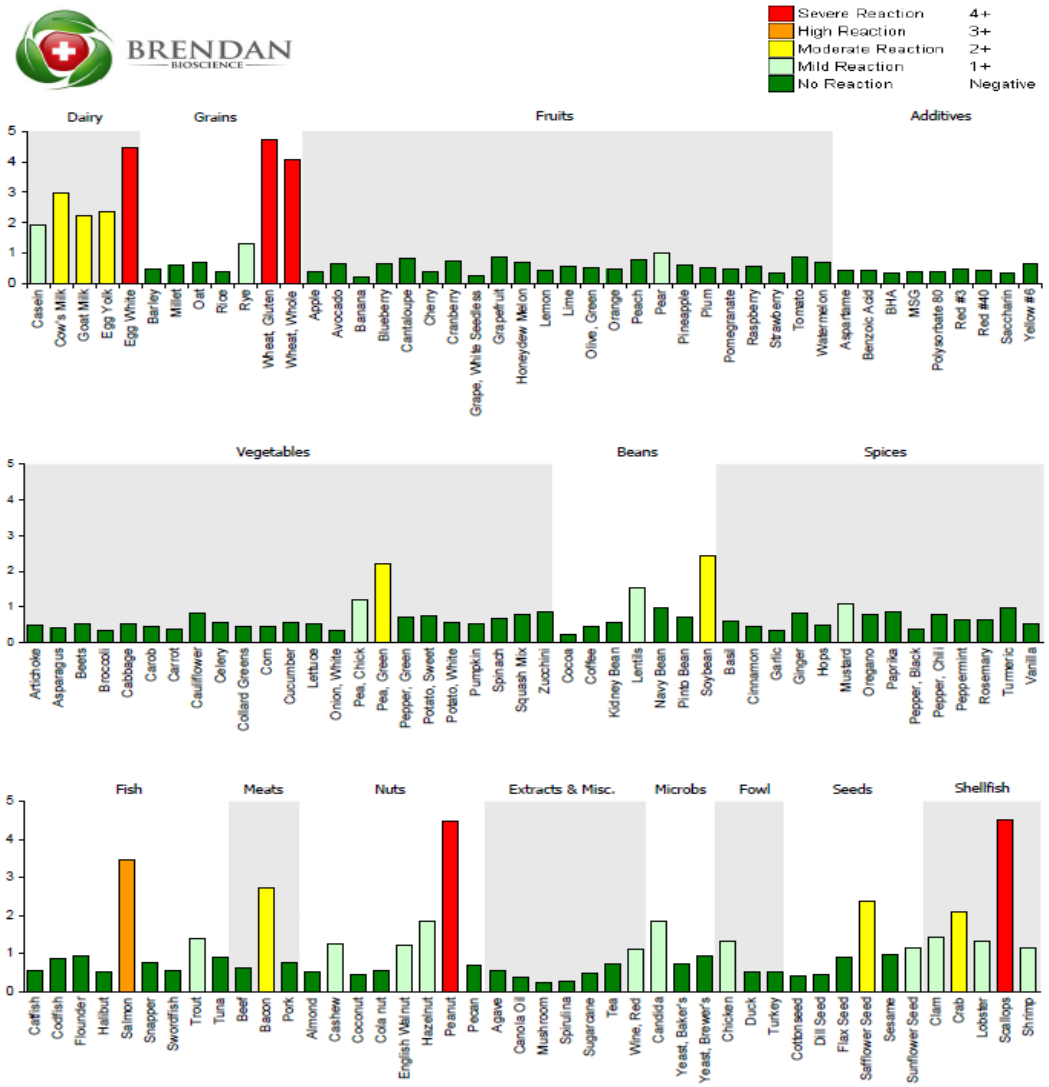
Nose
- ☐ Excessive mucous
- ☐ Hay fever
- ☐ Sinus problems
- ☐ Sneezing attacks
- ☐ Stuffy nose

Skin
- ☐ Acne
- ☐ Dermatitis
- ☐ Eczema
- ☐ Excessive sweating
- ☐ Flushing/hot flashes
- ☐ Hair loss
- ☐ Hives/rashes
- ☐ Itching

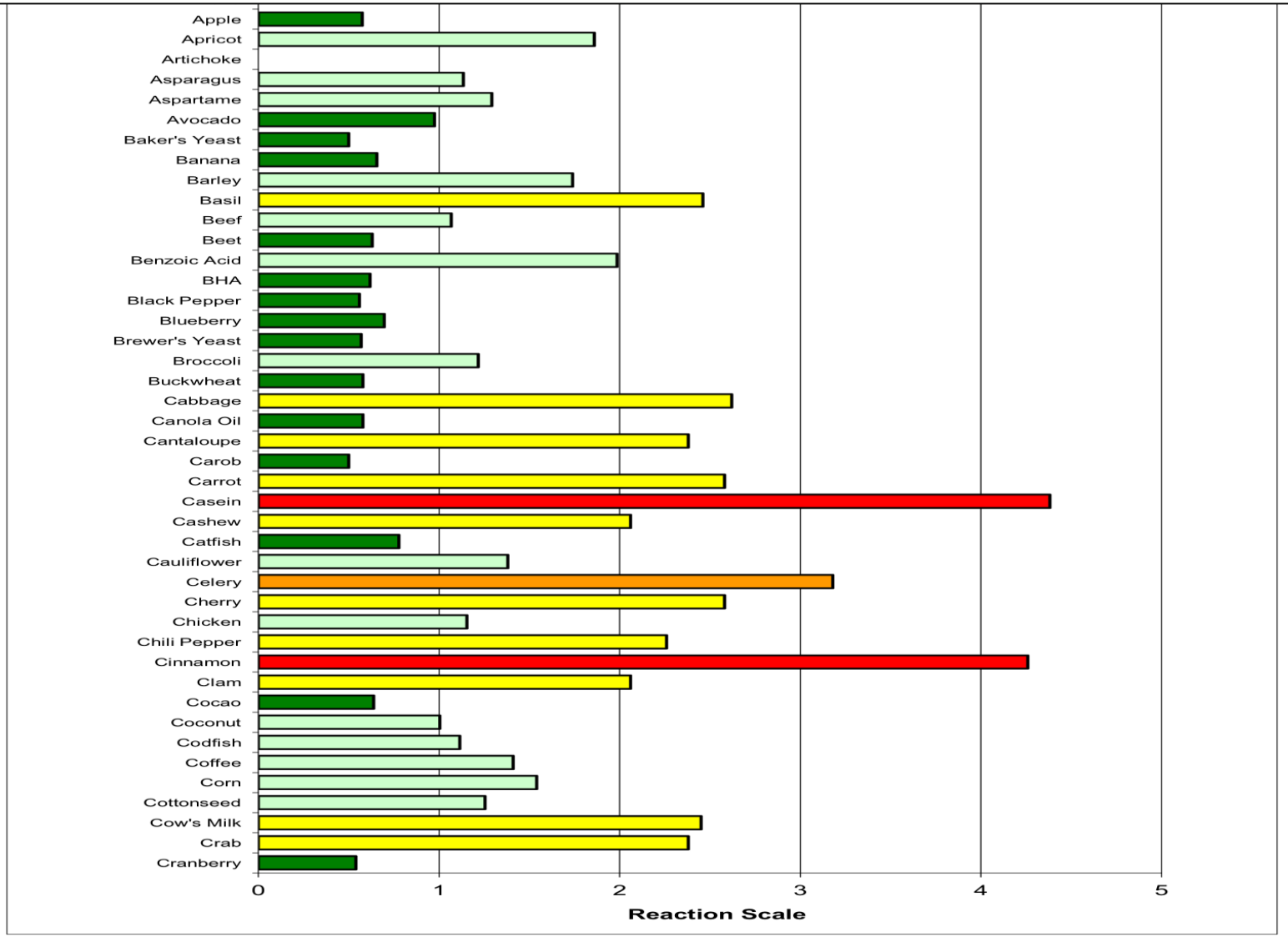
Weight
- ☐ Binge eating
- ☐ Compulsive eating
- ☐ Cravings
- ☐ Excessive weight
- ☐ Underweight
- ☐ Water retention

Other
- ☐ Anaphylactic reaction
- ☐ Chest pains
- ☐ Frequent illness
- ☐ Genital itch
- ☐ Irregular heartbeat
- ☐ Rapid heartbeat
- ☐ Urgent urination

The FIT Test: Patient Report

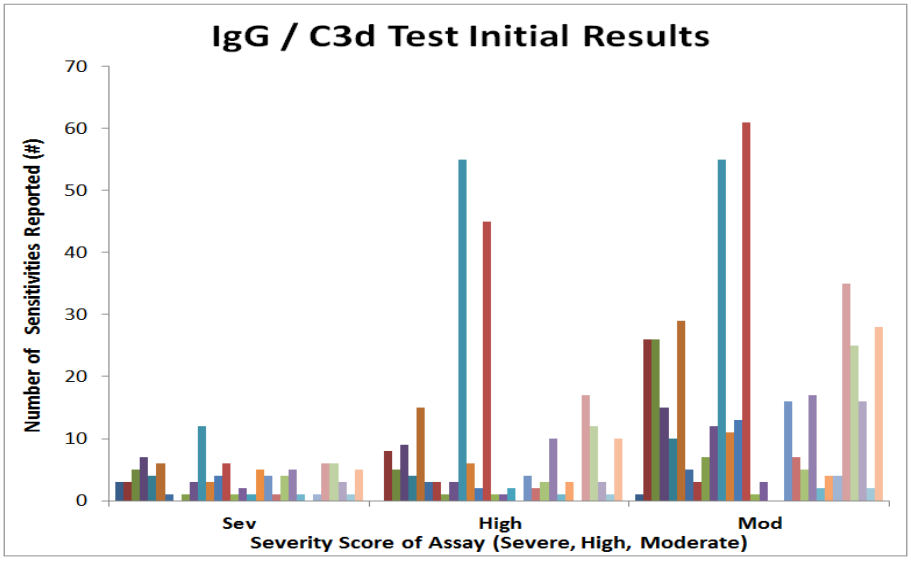


The FIT Test: Typical Report

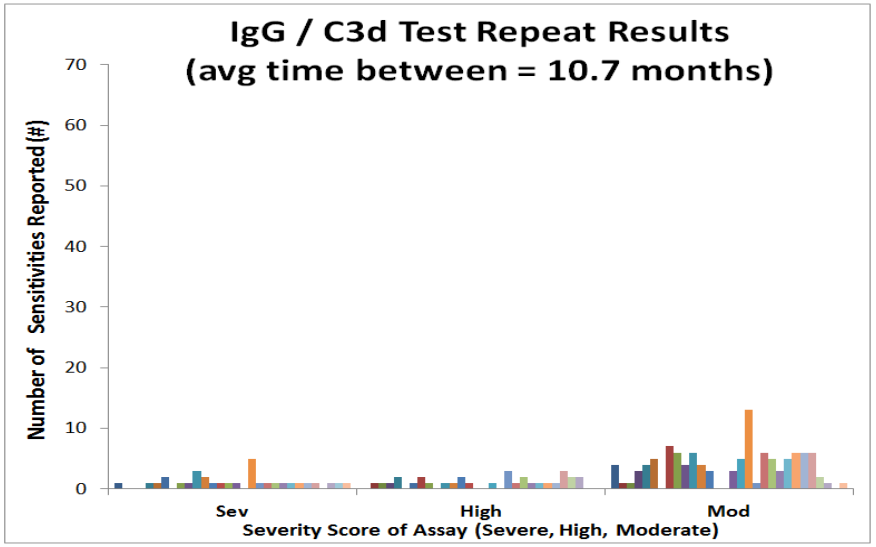


The FIT Test: Clinical

Test before elimination Diet



Test after elimination Diet



Data was analyzed for 30 patients tested before and after the elimination diet. There was a significant reduction in number of sensitivities reported after the elimination diet which indicates the FIT Test could predict specific food sensitivities.

The FIT Test: Clinical Testing Results

Significant Improvement in Symptoms was observed after the elimination diet

Complaint/Symptom	Number of Patients Reporting on Initial Test	Number of Patients Reporting on Second Test
Memory/Concentration	*22*	*3*
Anxiety/Mood/Depression	*20*	*3*
Bloating/Stomach Pain	*18*	*2*
Fatigue	*18*	*4*
Sleeplessness/Insomnia	*15*	*3*
Joint Pain / Stiffness / Swelling	*13*	*1*
Muscle Aches	*13*	*1*
Craving Sugar	*12*	*2*
Sleeplessness/Insomnia	*12*	0
Lightheaded/Dizzy	*11*	*2*
Allergies/Sinus	*9*	*2*
Cold Intolerance	*9*	*3*
Inability to lose weight	*9*	*2*
Libido/Impotence	*9*	0
Constipation	*8*	*2*
Diarrhea	*7*	*1*
Halitosis	*7*	*1*
Tearing Eyes	*6*	*1*
Brittle Nails/Dry Skin/Dry Mouth	*5*	0
Bruising	*5*	*1*
Headaches	*5*	*3*
Irregular Heart Beat	*5*	*1*
Numbness Hands/Feet	*5*	*1*
Sinus Problems	*5*	0
Thyroid	*5*	*1*
Eczema	*4*	0
Drowsiness	*3*	0
PMS	*3*	*1*

My Case:

The Center for Women's Health

Name: Kimberly L

Address: ___

CC: 48 yo F P10L1 LMP 22 d ago was referred by Dr Pugles for Rx of "worst GI sx."

MENSES: Onset: _____ Regularity: 28 Intermenstrual Bleeding: 0

CONTRACEPTION: Breast Discharge or Lumps: 0 STD: 0
femidon

LAST PAP: 2 no LAST MAMMO: 1 no BONE DENSITY: _____

GYN HISTORY:	SEXUAL HISTORY:
0	0

PREGNANCIES:

No.	Year	Hospital	Dur. of Gestation	Dur. of Labor	Type of Delivery	Born A or D	Weight	Complications Mother	Complications Child
1		NSD x1							
2		TAB x1							
3		spont AB x1							
4									

MEDICAL HISTORY:

Got well until 3 yrs ago then would wake up & stomach "soreness" - varies in ways - not worse -

Lost full labs 2 wks go for ventigo

SURGICAL HISTORY:

0

STRESSORS:

not very bad some calling emotionally - good

spiritually - atheist - great

MEDS: Femcon

ALLERGIES: 0

SUMMARY OF PROBLEMS:

GI issues - ? IBS

TREATMENT PLAN:

Before LHCC protocol

FIT

Miracural

Metamucil stool

CMP - LHCA D&L 2+8, full labs, B12, Dilterts

IBS

Pap:

Mammo:

6 | 20 | 15 | explained metametrics and nutreval to pt. Gave pt. BRWK. Did FIT today.

7 | 15 | 15 | Spoke to pt and informed her FIT results are in. pt has consult scheduled 7/21/15. pt stated she did not do metametrics or nutreval. MM

6	20	15 explained metametrics and nutreval to pt. Gave pt. BIDWK. Did FIT today.
7	15	15 Spoke to pt and informed her FIT results are in. pt has consult scheduled 7/21/15. pt stated she did not do metametrics or nutreval.
Thalia		Consult dyslipid FIT test

Kimberly [redacted] 6/26/2015

Restricted Foods

4+ Items	Wheat, Gluten Wheat, Whole
3+ Items	
2+ Items	Cow's Milk Egg White Oregano Lobster

6/20/15 explained metametrics and nutreval to pt, Gave pt, Bldwk, Did FIT today.

7/15/15 Spoke to pt and informed her FIT results are in. pt has consult scheduled 7/21/15. pt stated she did not do metametrics or nutreval.

7/21/15 Consult
dis[illegible] FIT test
will [illegible] [illegible] test - [illegible] [illegible], [illegible], [illegible], [illegible], [illegible]
[illegible] [illegible]
will do other test.

10-20-15 consult

11-3-15 consult

I feel great

I feel really sad

Hate different

Want to stay in all night

will report cont until January

The FIT Test: Conclusions

- The test is highly sensitive and accurate
- Manufactured using a ISO 13485 quality system in a FDA registered facility to ensure quality, reliability and reproducibility
- Patented technology which ensures patients the best in class technology
- Excellent clinical outcomes demonstrating a reduction in symptoms
- A growing list of thought leaders are adopting this test in their practices