FOOD SENSITIVITIES/ ALLERGIES AND HOW THEY RELATE TO CHRONIC DISEASE

Dr. Elizabeth A. Boyle
Divine Awakenings Healing Spa
Montclair, NJ
973-509-7360
www.the-younger-you.com

HAVE YOU EVER HAD A “GUT” FEELING?

You know something is wrong because you “feel it in your gut?”

or

You feel sick to your stomach when you were anxious , scared or nervous?

What is the “GUT”?

- Simplistically, the gut is a long , curly tube where one takes in nutrition to absorb and utilize for health; and where one metabolizes this nutrition along with hormones and neurotransmitters
- After utilizing what one needs for bone health, heart health, brain health etc., one needs to pass the metabolites that are left over out of the body as waste or toxin

BUT:
The Gut Is More Complex Than This

- Seventy per cent of the immune system is located in the gut (small bowel)
- Ninety per cent of serotonin (the antianxiety,. antidepression neurotransmitter) is made in the gut

THE “GUT” IS YOUR SECOND BRAIN

There are messages sent to the brain via messengers (neurotransmitters, hormones etc) , and the brain responds by sending messages back to the gut all day

THE VAGUS NERVE

The longest of the twelve cranial nerves is the main channel where information is exchanged between hundreds of millions of nerve cells in our intestinal nervous system and our central nervous system

Gut Function:

- Digestion
- Absorption
- Metabolism
- Excretion

- YOU ARE WHAT YOU EAT!

So, Let's Talk About Digestion

- Digestion starts with salivation; one must have enough saliva and enzymes to break food into smaller particles to present to the stomach
- The stomach must have adequate acid to emulsify the food particles in order to present the nutrition to the small intestine where 70% of the immune system lives
- Without a balanced acidity produced by the stomach cells : disease can occur

Too much acid!: Can lead to ulcers!

However, Too Little Acid: Can Lead To Chronic Disease

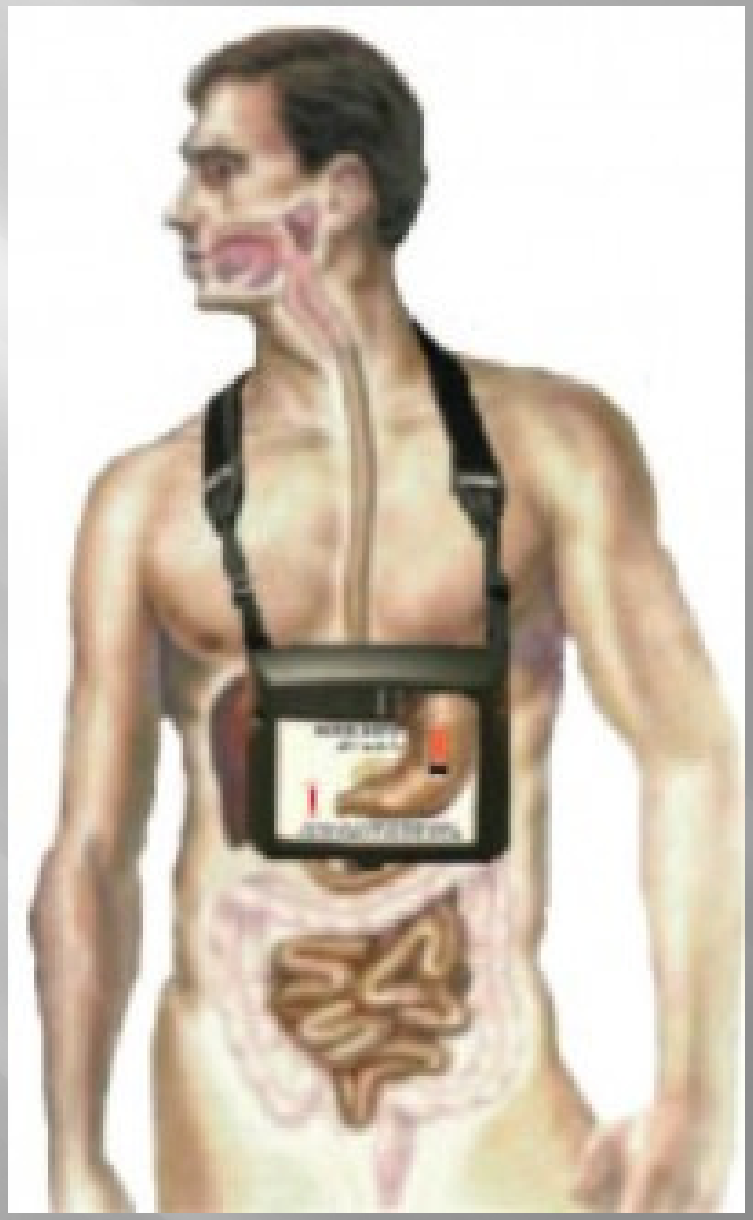
- H Pylori
- Allergies
- Autoimmune diseases
- Small Intestinal Bowel Overgrowth (symptoms : carbohydrate intolerance and immediate bloating)
- Dysbiosis (leaky gut , malabsorption)
- B-12 deficiency
- Mineral deficiency (Ca, Mg ,Zn, Fe , Cr, Mo, Mn, Cu)
- Cancer

Hypochlorydria:

- Bloating, belching , burning and flatulence within 1 hour after eating
- Skin rashes, acne, anal itching
- Peeling cracking finger nails
- Food sensitivities or allergies
- Causes: aging; fasting; viral or bacterial infection (fever); any debilitating chronic condition; H2 blockers and antacid abuse

How do we determine if we have imbalance in acidity?

- The only scientific way to determine stomach pH is to perform a relatively non invasive test called the pH Heidelberg test
- Invasive testing like esophagoscopy and colonoscopy, while important for "visible" disease do not determine pH or acidity which is necessary for proper digestion to prevent disease



Once the acidified food reaches the small intestine

- The immune system will determine if the particular food is inflammatory to an individual!
- Many inflammatory foods!
- Number one toxin is gluten: a protein found in wheat, barley and rye
- Casein is the substance that one would respond adversely to if one were dairy sensitive

The Immune System:

- Has two antibodies : IGE and IGG
- IGE is the quick release antibody that is usually associated with histamine and TRUE ALLERGY
- IGG is the antibody that is microscopic and is associated with a delayed reaction (9-14 days)
- Adequate testing for food allergens/ sensitivities , therefore, involves testing for both IGE and IGG responses

How does inflammation occur in the bowel when exposed to a “toxin”

- When the immune system recognizes a toxin such as gluten (a preservative used in wheat products), it will respond by making a microscopic immune complex
- This IGG complex will eventually settle on the microscopic villi of the small bowel
- As the reaction is delayed (9-14 days) and microscopic, one may not experience symptoms for days, weeks or months after chronic exposure to the toxin

What causes the symptoms?

- The upregulating of the immune system
- For instance: if an IGG complex is made when one is exposed to a particular toxin , and a person does not recognize the symptoms, more and more IGG complexes will be made until a state of inflammation is achieved
- If a person does not tie in the symptoms with a particular toxin and remove it from the diet , the immune system will start reacting to several foods : thus a LEAKY GUT!

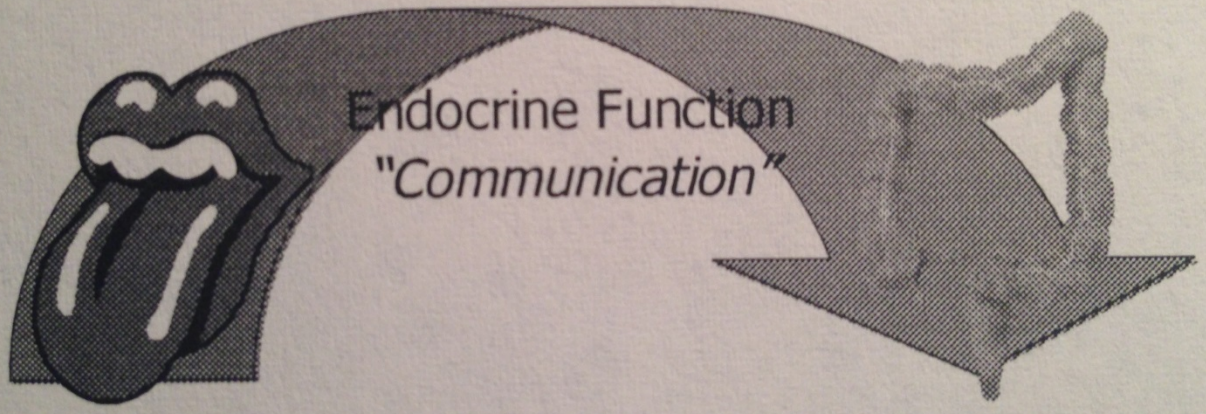
Leaky Gut

- Is simply a another word for malabsorption!
- If one is inflamed , one will not be able to absorb vitamins and minerals from their food and will not be able to detoxify well
- Inadequate or impaired detoxification plays a part in leading to disease: IBS, Crohn's , celiac disease, ADD, ADHD , autism autoimmunity, allergies, cancers

Metabolism: A Simplified Approach

Immune Function

"Defense & Repair"

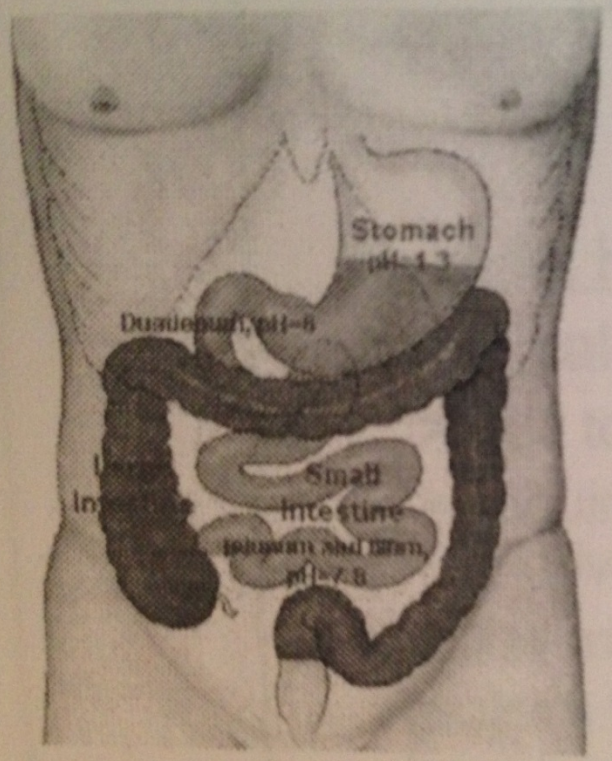


Nutrition & Digestion *"In"*

Detoxification & Elimination *"Out"*

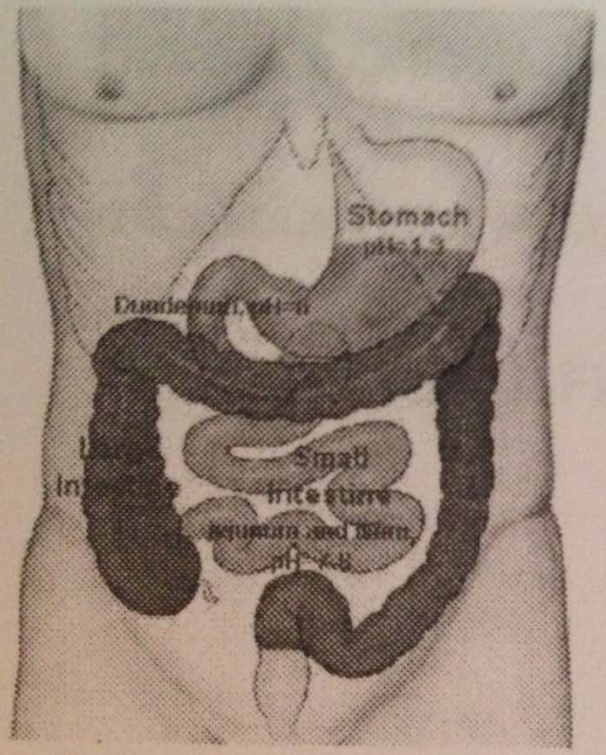
But , there's more to the story!

- Once the food is propelled to the large intestine, communication with microbes : "good and bad" bacteria takes place
- "Good" and " bad" bacteria are constantly at war!
- Five pounds of our weight is bacteria
- We have more bacteria in our bowels than we have DNA!



Colonization begins with birth and breast-feeding and continuing through life, leading to:

- 100 trillion bacteria
- 70% of human immune system localized in digestive tract
- accounts for half of the volume of contents in the colon



- At birth - digestive tract of humans is sterile.
- Colonised by microbes within the first few days of life
- At first, predominantly bifidobacteria (breast fed infants).
- With the introduction of other foods, a diverse microbial population develops in the gastrointestinal tract.
- By now, of all the cells in a human body, the overwhelming majority are non-human.

Cesarean Vs. Vaginal Delivery on infant's gut flora:

- In 2010 : one study revealed that infants born via the vaginal route colonized their bowel with beneficial Lactobacillus whereas babies born by Cesarean-section acquired colonies dominated by a harmful Staphylococcus
- In 2013 a Canadian study showed that disruption of an infant's gut flora has been linked to many inflammatory and immune problems like : allergies , asthma and cancer!
- Right from birth, bacteria of the bowel is important for heath! And sets the stage for an individual's health

Gauze technique: Dr . Maria Gloria Dominguez-Bello's research

- If a patient needs to undergo cesarean section: use gauze to collect a mother's birth–canal bacteria and rub the gauze over the newborn's mouth and nose so that the bacterial population most closely resembles vaginally born babies

Breast Feeding vs . Bottle feeding

- Benefits of breast feeding are well documented
- Studies are now showing that if a mother can not breast feed: supplementing the formula with probiotics can confer protection against colic and irritability But Breast Feeding Is Best!

What do these “gut bugs” do?

- Aid in digestion of nutrients
- Create a barrier against potential invaders (viruses , parasites , “bad “bacteria)
- Aid in detoxification (as they neutralize many food toxins, act as a microscopic liver!)
- Influence the immune system’s responses (prevent AUTOIMMUNITY)
- Produce and release vitamins and neurotransmitters
- Helps in handling stress (by effecting hormonal systems)
- Aid in helping sleep patterns
- Decrease inflammation!

Two most common organisms in the colon:

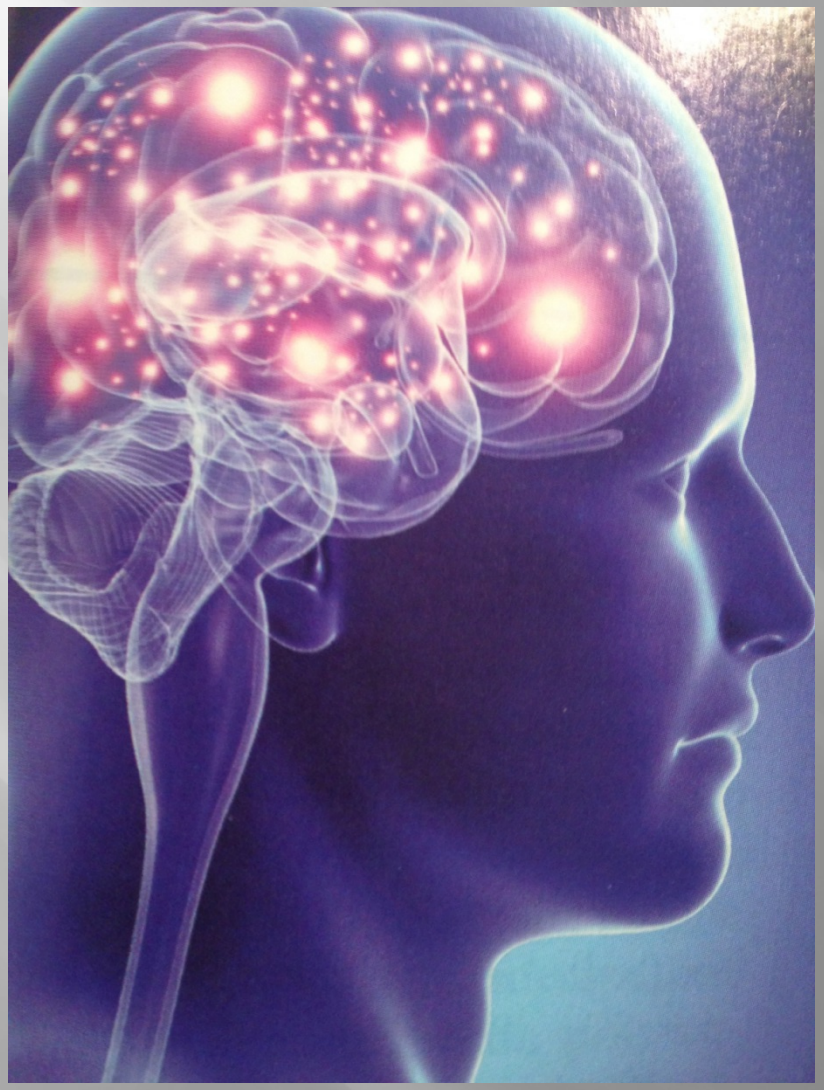
- 1. Firmicutes: “fat loving” bacteria; are more efficient at extracting energy (calories) from food
- Research has shown that obese people have elevated levels of firmicutes in their gut flora
- 2. Bacteroidetes

- The ratio of firmicutes –to- bateroidetes (F/B ratio) is critical for determining health and risk of illness and changes in the ratio of these bacteria can change the expression of your DNA

“Good” Bacteria

- Helps in balancing blood sugar: when firmicutes are reduced, so is the risk for diabetes
- Exercise will affect the microbiome by favoring colonies of bacteria that prevent weight gain (in lab studies on mice, higher levels of exercise correlated with a reduction in Firmicutes and an increase in Bacteroidetes
- Concerns about abundant use of antibiotic use in children (which changes the gut biome) can lead to childhood obesity

Gut “bugs” make serotonin to decrease depressive symptoms

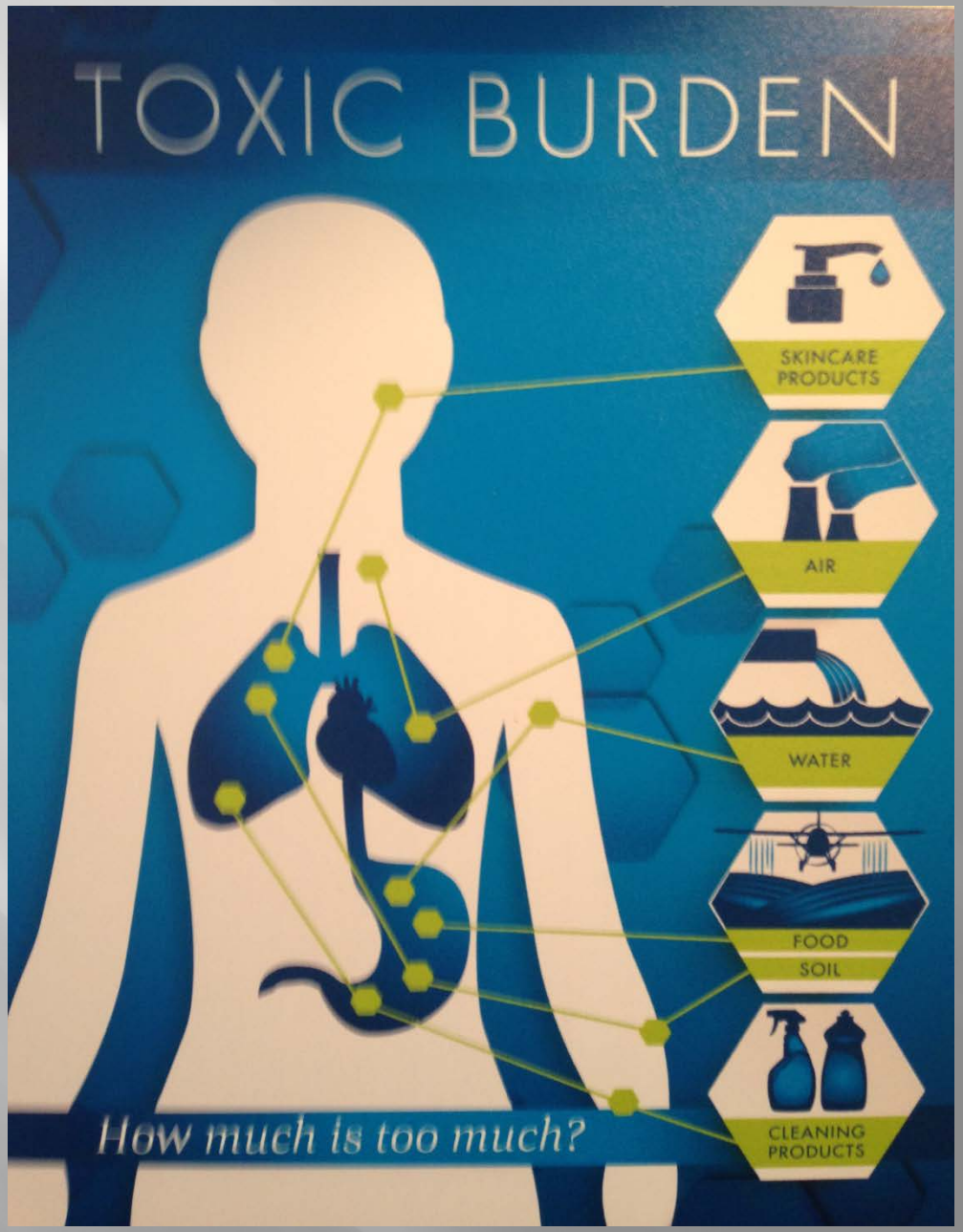


So what makes a sick gut?

- Poor diet
- Medications: ANTIBIOTICS! ORAL CONTRACEPTIVES increased risk of Crohns 3x with OCPs ?? Due to hormones changing the permeability of the intestinal lining; NSAIDS increase damage to gut lining especially in presence of gluten
- Infections
- Toxins (metals, molds)
- Inadequate digestive enzymes, altered pH
- Imbalanced ecology
- Impaired intestinal epithelial barrier
- Altered neuroendocrine balance and autonomic function

What affects the gut bacteria?

- Western diet :low in fiber, fruits and vegetables
- Artificial sweeteners :saccharin, sucralose and aspartame .While these sweeteners do not raise insulin, they favor dysbiosis, change the microbiome by creating blood sugar imbalances
- High fructose corn syrup: gases are created when the gut bacteria rapidly ferment these sugars causing bloating, abdominal pain and discomfort


TOXIC BURDEN
SKINCARE PRODUCTS
AIR
WATER
FOOD
SOIL
CLEANING PRODUCTS
How much is too much?

Dirty Dozen, Clean Fifteen

Environmental Chemicals

- Tend to be lipophilic; can accumulate in endocrine glands and fatty tissue
- When the liver is overloaded with toxins to process., it will be less effective at clearing toxins from the body
- Chemicals may be estrogenic
- Chemicals in water supply change the microbiome

Comprehensive Stool Analysis

- Infection
- Inflammation
- Fecal fats; protein products
- Imbalance of bacteria

"That's not quite the stool sample we had in mind, Mr. O'Donnell."

How to Increase your gut bacteria

- Choose foods rich in probiotics: live cultured yogurt (be careful of the sugar content, and if sensitive to dairy: coconut yogurt is an option)
- Kefir (similar to yogurt: combines yeast and bacteria and goat's milk)
- Tempeh: fermented soybeans; source of B-12
- Sauerkraut: fermented cabbage fuels healthy bacteria
- Pickles: a probiotic ! Pregnant women crave for a reason
- Pickled fruits and veggies: only if pickled in brine*
- not vinegar!!!
- Cultured condiments: salsa; mustard; lacto-fermented mayo; guacamole
- Fermented meat, fish, eggs

- * Brine : distilled water (cold) and pure sea salt fine or course

WHICH PROBIOTICS TO CHOOSE?

- Lactobacillus Plantarum : found in sauerkraut and cultures veggies; absorbs and maintains vitamins
- Lactobacillus acidophilus: found in fermented dairy products and yogurt; curbs Candida; maintains cholesterol levels
- Lactobacillus brevis: enhances immune system
- Bifidobacterium lactis: found in yogurt ; kills salmonella and other diarrhea forming food borne pathogens
- Bifidobacterium longum : One of the first bacteria to colonize our bodies at birth: improves lactose intolerance; food allergies etc

Can We Start at Birth?

- Yes ! Infants who are administered probiotic therapy seem to do better with protection against allergies and food sensitivities
- Add The Probiotic to the breast milk or formula
- Lactobacillus rhamnosus GG (or LGG); to treat infectious diarrhea in children as well; half as likely to develop eczema than placebo
- Lactobacillus reuteri; decreases colic

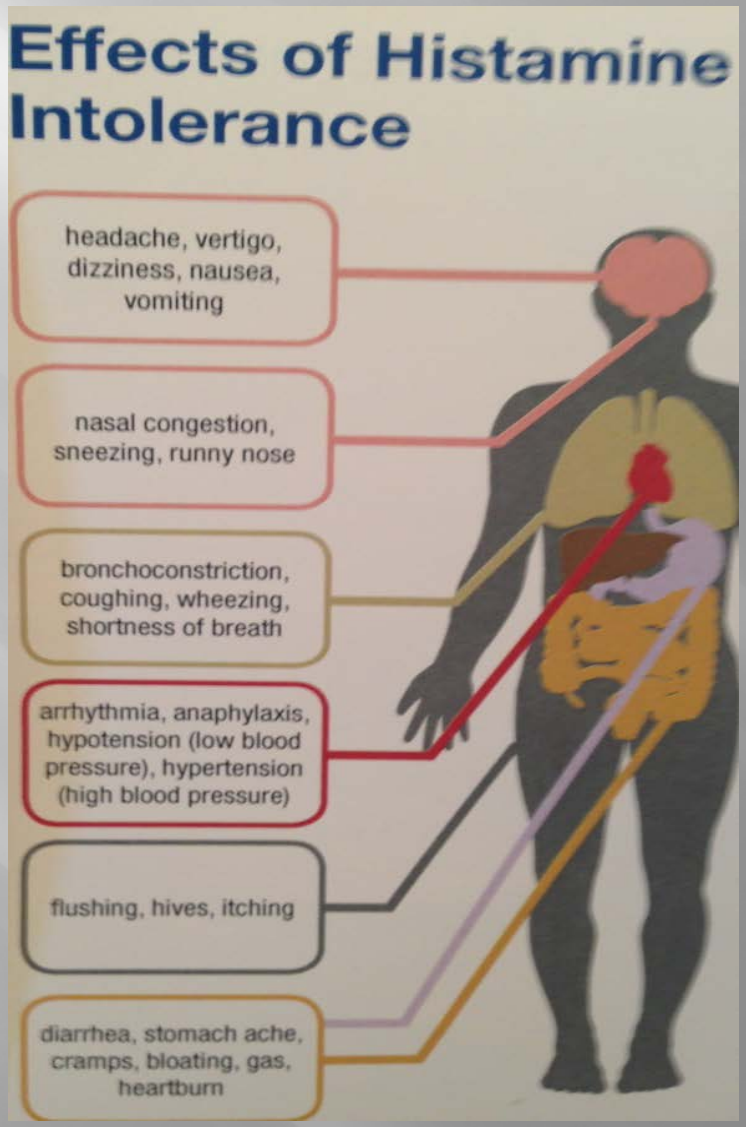
How to increase your gut bacteria

- Choose foods rich in PREBIOTICS: food for the probiotics
- PREBIOTICS: must have three characteristics: 1. non-digestible 2. must be able to be fermented or metabolized by the intestine 3.this activity has to confer health benefits
- Inulin (a type of fiber that the typical ancestral hunter gatherer ate); chicory, Jerusalem artichoke; onions; leeks; garlic; Mexican yam; raw asparagus

What benefits do we get from prebiotics?

- Reduce fever or febrile episodes in infants
- Reduce inflammation in bowel disease
- Enhance absorption of minerals
- Lower risk factors of Cardiovascular disease
- Promote a sense of fullness or satiety
- Reduce glycation (Glycation increases free radicals, triggers inflammation, and lowers insulin resistance thus compromising gut lining)

And Still another form of Imbalance!



Histamine intolerance can closely resemble food allergy

HISTAMINE RELEASE

- Shellfish, crustaceans
- Nuts , sunflower seeds
- Wheat Germ, buckwheat
- Black and Green Tea
- Spinach, eggplant, avocado
- Vinegar, mustard , pickles, olives
- Certain fruits

HISTAMINE RICH

- Fish (tuna, sardines, mackerel)
- Cheese
- Sauerkraut
- Smoked meats
- Tomatoes, ketchup
- Soy sauce, fish sauce
- chocolate; cocoa
- Alcohol : wine , beer

Histamine Intolerance:

- Gastrointestinal discomfort (gas, bloating, etc.)
- Skin symptoms (itching, flushing, redness , rash)
- Headache
- Mental Fatigue
- Joint Discomfort
- Panic attacks (after a meal)
- Exhaustion (during or after a meal)
- Chills, shivers , difficulty catching breath
- Symptoms occurring after consuming certain foods

Histamine Intolerance Test:

SYMPTOMS:

- Gastrointestinal discomfort
- Skin symptoms
- Headache
- Mental Fatigue
- Joint discomfort
- Panic Attacks
- Exhaustion (related to meals)
- Chills Difficulty catching breath
- Symptoms after certain foods

RATINGS:

- 0: never
- 1:once per month
- 2: once per week
- 3: daily
- 4: always
- SCORE: 1-10 : mild
- 11-23: moderate
- 24-36: severe Histamine intolerance

DAO: DIAMINE OXIDASE

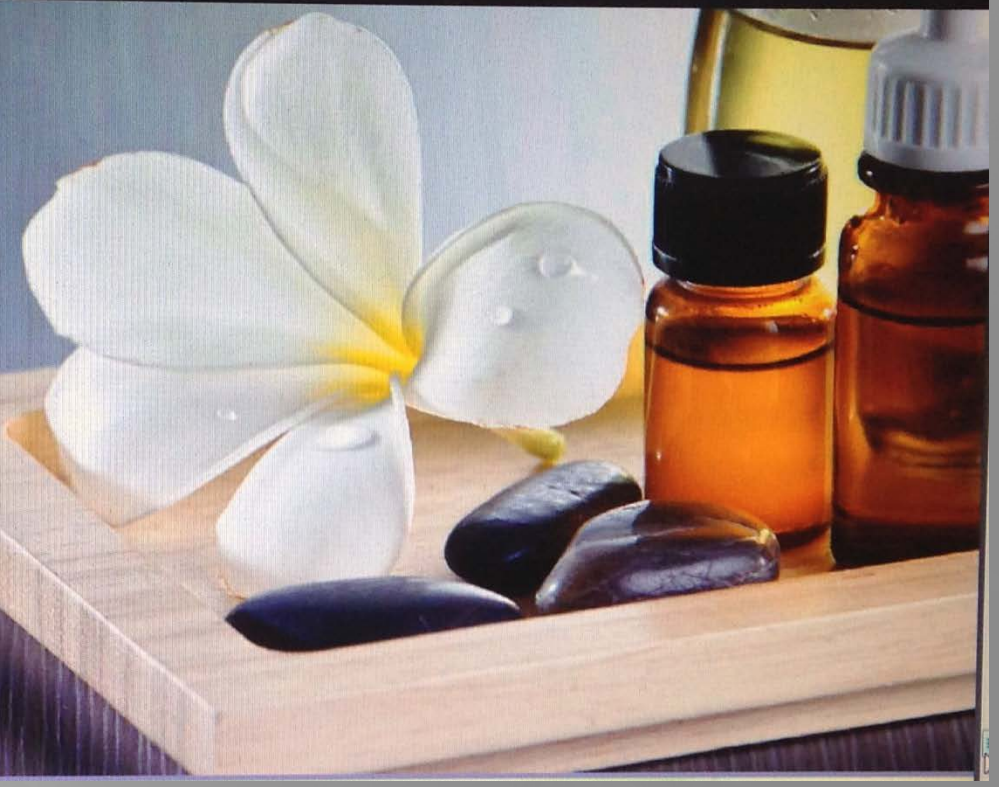
- Enzyme needed to degrade histamine
- Can perform a blood test to determine DAO deficiency

Dealing with Chronic Illness: Fix the Gut

- Improve the diet; nutrient density; essential fatty acids ; fiber; phytonutrients
- Support digestion: enzymes and HCL
- Support normal flora : prebiotics and probiotics
- Support repair and regeneration: glutamine, theanine
- Immune modulators : nutrients , antioxidants, herbs
- Remove infections and toxins

Benefits of Oils

- Energy and health
- Mood and anxiety
- Digestive system
- Relaxation response



Oils for Digestion

- Peppermint
- Caraway seed
- Tarragon

Oils for Digestion

- Bergamot: stimulates digestive juices
- Has antibacterial effects ; fights food poisoning
- Stimulates intestinal contractions
- Helps Gum health; infected teeth
- Kills intestinal worms
- OTHER important non digestive actions!

Oils For Digestion:

- DiGize
- Coconut oil : heat stable; especially if cooking at high temperatures
- DHA from fish oils or algae

Vitamin D3:

- Vitamin D3: Not “just a vitamin “, is a hormone!
- Vitamin D3 deficiency can lead to autoimmunity and deficiency in Vitamin D3 is a red flag for bowel imbalances
- Make sure you are taking adequate Vitamin D3

Thank you

- Picture slides :
- Genova labs
- Patrick Hanaway MD
- David Perlmutter, MD
- pH Heidelberg testing resources
- Xymogen
- OrthoMolecular
- Life Extension
- Essential oil revolution
- Young Loving Oils


Divine Awakenings
HEALING SPA

Divine Awakenings Healing Spa