

**The Relationship Between**

**Fibromyalgia**


**and**

**Fungal Infections**

**Part II**

# The Guaifenesin Protocol WORKS!



A faint, light blue background image of a pair of scales of justice, positioned on the right side of the frame. The scales are slightly out of focus, with the pans hanging from a central beam.

We hope to  
find ways to  
make it work

**BETTER, FASTER & EASIER!!**

**A**  
**Quick Review**  
**Of**  
**Part I**



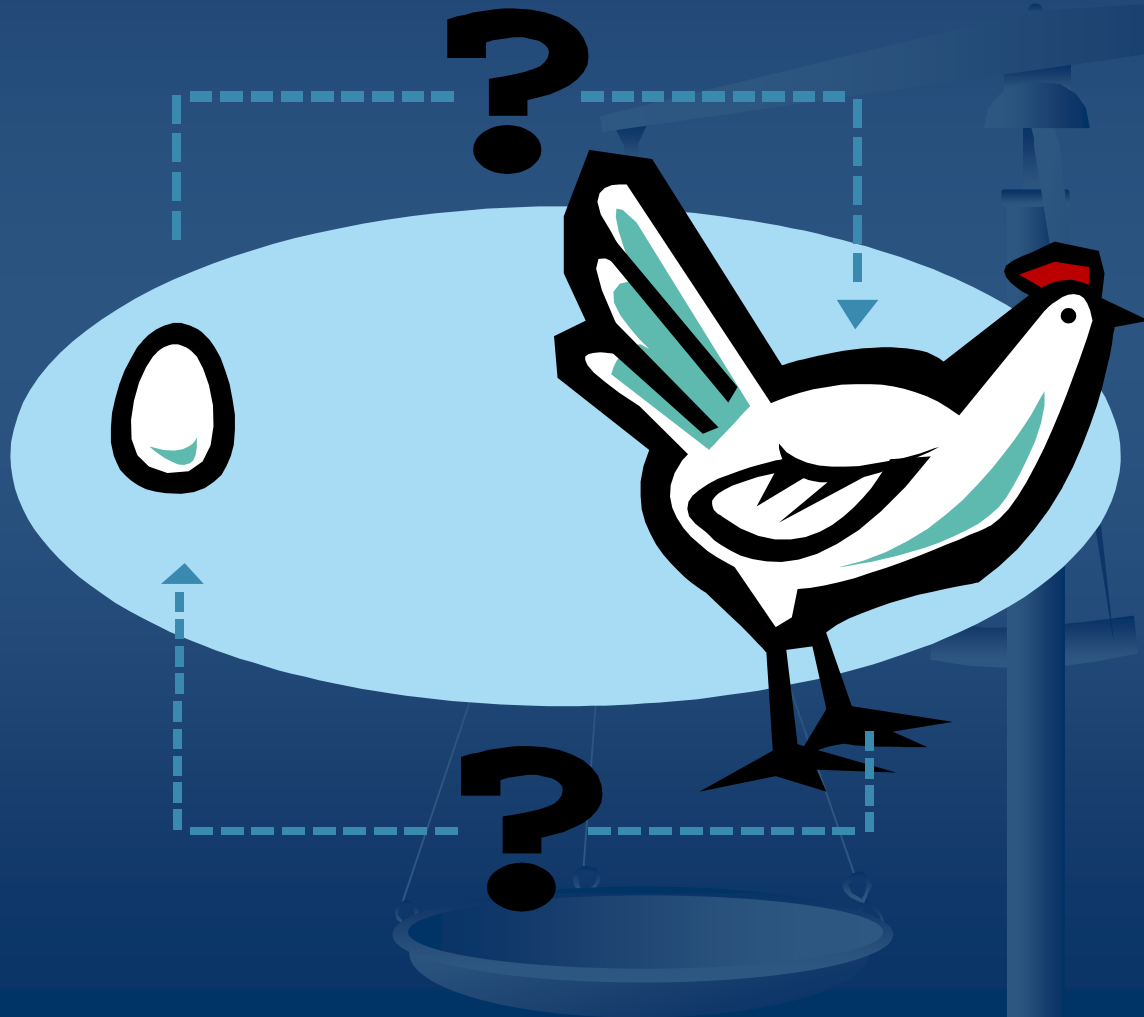
# What do the experts say?

“We know the immune system in FMS (and most chronic illnesses) is depressed. So it makes sense there would be more fungal infections, etc. You are looking at a ‘chicken and egg’ situation.”

*Claudia Marek, June 2006*

*Co-Author of “What Your Doctor May Not Tell You About Fibromyalgia”*

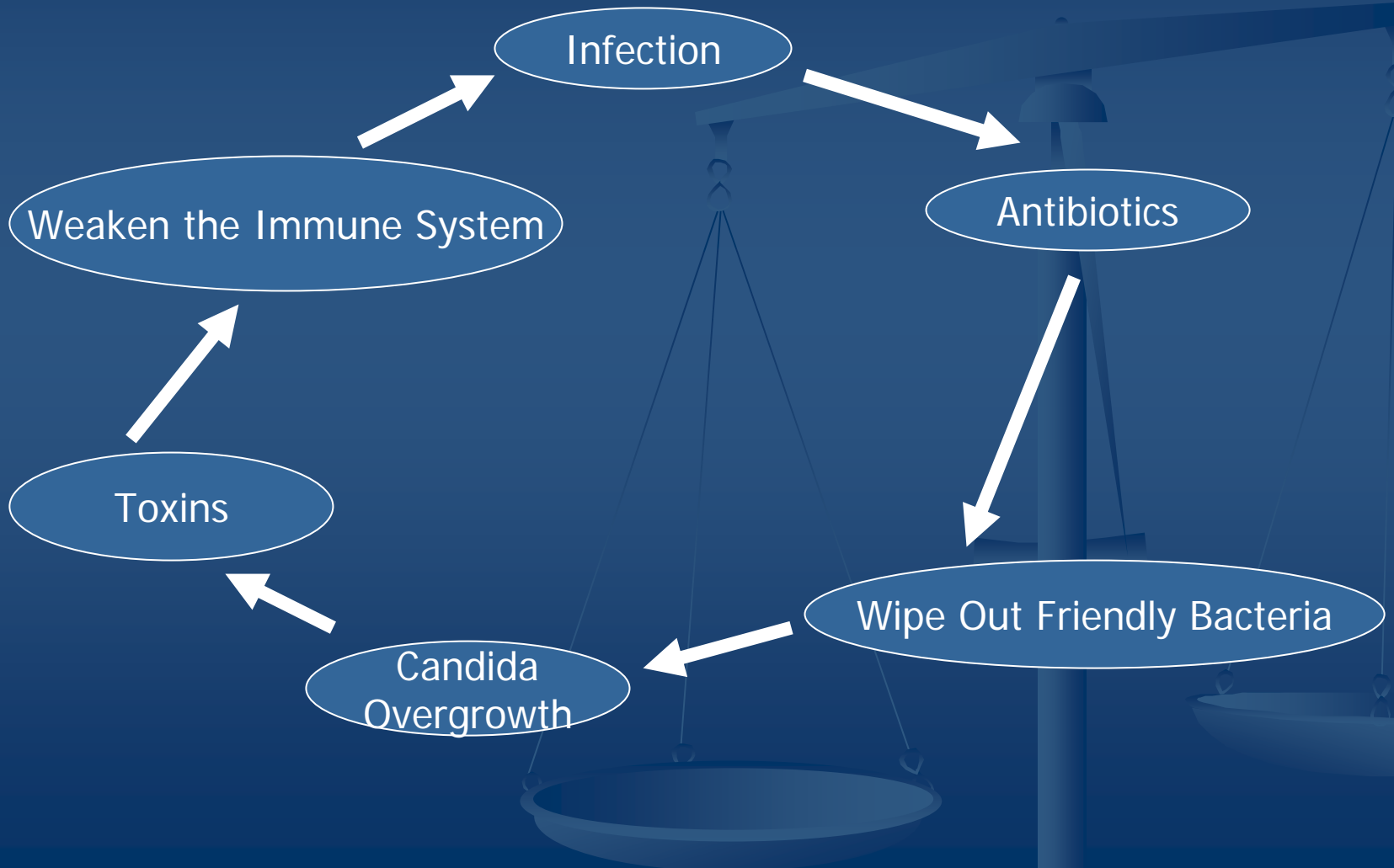
# Which came first?



# Two Different Theories

1. Immune disorders such as chronic fatigue and fibromyalgia make one more susceptible to fungal infections.
2. Fungal infections cause altered immunity which leads to disorders such as chronic fatigue and fibromyalgia.

# The Vicious Circle




# Benefits of Good Bacteria

Good Bacteria are a Normal Part of Our Body's Ecological System which:

- Acidify the Colon
  - Normalize Bowel Movements
  - Strengthen the Immune System
  - Assist in Vitamin Synthesis (B, K)
    - Assist in Enzyme Production
    - Decrease Lactose Intolerance
- Aid in Digestion of Proteins, Fats, Carbohydrates
  - Remove Cancer-Causing Elements
    - Reduce Cholesterol Levels

# Low Levels of Helpful Bacteria are Hazardous to Your Health!

## Without good bacteria you get:

- Poor Vitamin K Synthesis
  - Magnesium Deficiencies
  - Vitamin B Deficiencies
  - Toxicity from Nitrites
  - Dairy Intolerance
  - Overgrowth of Harmful Bacteria
  - Overgrowth of Yeast
- 

# Problems with Yeast Overgrowth

- Yeast creates between 79-180 toxins. Some of these toxins, like tartaric acid, acetaldehyde and arabinol, interfere with the body's ability to produce energy.
- Drs. Truss, Galland and Ionescu have all measured reduced levels of amino acids, imbalances of fatty acids and deficiencies of various vitamins and minerals in their yeast syndrome patients.
- The Great Plains Laboratory has found that tartaric acid from yeast causes muscle weakness in autistic children. Tartaric acid is also found in the urine of those with fibromyalgia and can be elevated as high as 50 times normal in adults with fibromyalgia.

# Dr. St. Amand, Gout & Uric Acid

"I had been interested in gout and suspected that there was more to the illness than merely joint pains and swelling. I reread the original description Thomas Sydenham had written more than three hundred years before, in 1683. He described gout as a disease with joint pain and one manifested by 'great mental torpor,' 'suffision of the sinuses,' generalized flu-like aching, and malaise or fatigue, along with many other complaints...When I treated these patients with gout medication, their uric acid precipitously dropped to normal."

From "What Your Doctor May Not Tell You About Fibromyalgia" by R. Paul St. Amand

# Other Gout Study Gives Clues

Dr. A.V. Constantini, MD, focused on gout which his literature review concludes is not a disease of metabolism but an infectious, granulomatous disorder based on abnormality of mycotoxicity, due to exposure to fungus. Looking at the veterinarian literature, it is observed that chickens and turkeys develop gout from mycotoxins. He then looked at one of the standard gout cures, colchicine, to understand its mechanism of action. Colchicine has no specific activity against uric acid, but is highly effective in the acute gout attack. His literature research reveals that colchicine has an anti-fungal activity. This led Dr. Constantini to suspect that **fungus may play an important role in causing a broad number of diseases.** His research suggests that **fungal etiologies may be seen in some forms of cancer, cardiovascular disease, alcoholism, psoriasis, leukemia, rheumatoid arthritis, bowel-related diseases, and sarcoidosis.**

*Jonathan Collin, MD*

# The Downward Spiral of Mycotoxins

- The amount of uric acid and acetaldehyde produced by yeast and fungus can be overwhelming to the body.
- When acetaldehyde is converted into alcohol in the liver, the body is depleted of magnesium, sulfur, hydrogen, and potassium, thus reducing cell energy.
- The body chelates uric acid and other toxins with fats, raising cholesterol. (In a way, cholesterol is part of the body's immune system!)
- In a similar balancing act, the body reacts chemically to neutralize uric acid by binding it with minerals such as potassium, magnesium, sodium, zinc, and calcium; this process further reduces mineral supplies and can create deficiencies.

# “Die-off” = Herxheimer = “Cycling”?

- When yeast cells are rapidly killed by the immune system, drug treatment, or dietary intervention, a "die-off" or Herxheimer reaction occurs. This reaction is caused by the massive release of toxins from dying candida cells. Toxic proteins from the dead yeasts cross cell membranes, enter the bloodstream, and trigger an intense immune reaction.
- A die-off reaction is especially pronounced when using powerful antifungal drugs like Nystatin that literally cause yeast cells to burst apart.
- Even though a strong die-off reaction causes a significant amount of discomfort, it is a sign of a successful treatment. (You get WORSE before you get BETTER!!!)

# What About Salicylates?

**“Plants in your garden produce salicylates to ward off fungus.”**

*R. Paul St. Amand, MD*

# Is Aspirin an Antifungal Drug?

There are some researchers and clinicians who have been able to demonstrate a direct link between the presence of fungi in the body and cardiovascular disease of all kinds. This is known as the fungal mycotoxin etiology of atherosclerosis and has been promoted by Dr. A.V. Costantini and other researchers working for the World Health Organization. According to these doctors, aspirin is an antifungal drug which can go a long way towards offsetting the negative effects of fungi and their mycotoxins. They believe that it is this antifungal property of aspirin that prevents heart disease, stroke and cancer - diseases all suspected to have a fungal mycotoxin etiology.

# Does Aspirin BLOCK the Action of Guaifenesin?

On p. 76 of WYDMNTYAF, Dr. St. Amand says:

“We knew enough to avoid aspirin from the very beginning, because it’s contraindicated with the uricosuric gout medications, including the very first one we ever used, probenecid. That fact is well documented in medical resources. We never had to discover that aspirin was a problem---and knowing this fact afforded us important clues early in the game and helped us to figure out and learn what follows.”

# Does Aspirin BLOCK?

Dr. St. Amand's conclusion would seem to be contradicted by a study reported in the December 2000 issue of the Journal of Rheumatology. (Harris, Bryant, Danaher, & Alloway, Department of Rheumatology and Medicine, San Antonio)

**STUDY:** Effect of low dose daily aspirin on serum urate levels and urinary excretion in patients receiving probenecid for gouty arthritis.

**OBJECTIVE:** To determine if low dose daily enteric coated aspirin significantly affects the therapeutic actions of probenecid with respect to serum urate levels or urinary urate excretion.

**CONCLUSION:** Low dose daily enteric coated aspirin does not significantly interfere with the effects of probenecid in patients with gouty arthritis.

# Questions for Consideration:

Could symptoms of “blocking” with salicylates when taking guaifenesin actually be an increase in the “Die-off” or Herxheimer Reaction?

Could using salicylates actually increase the effectiveness of guaifenesin in treating fibromyalgia, chronic fatigue and Candida?

**MORE RESEARCH IS NEEDED!**

# Three Means to Control Candida

Diet/Fiber

Starve and Remove  
Candida

Probiotics

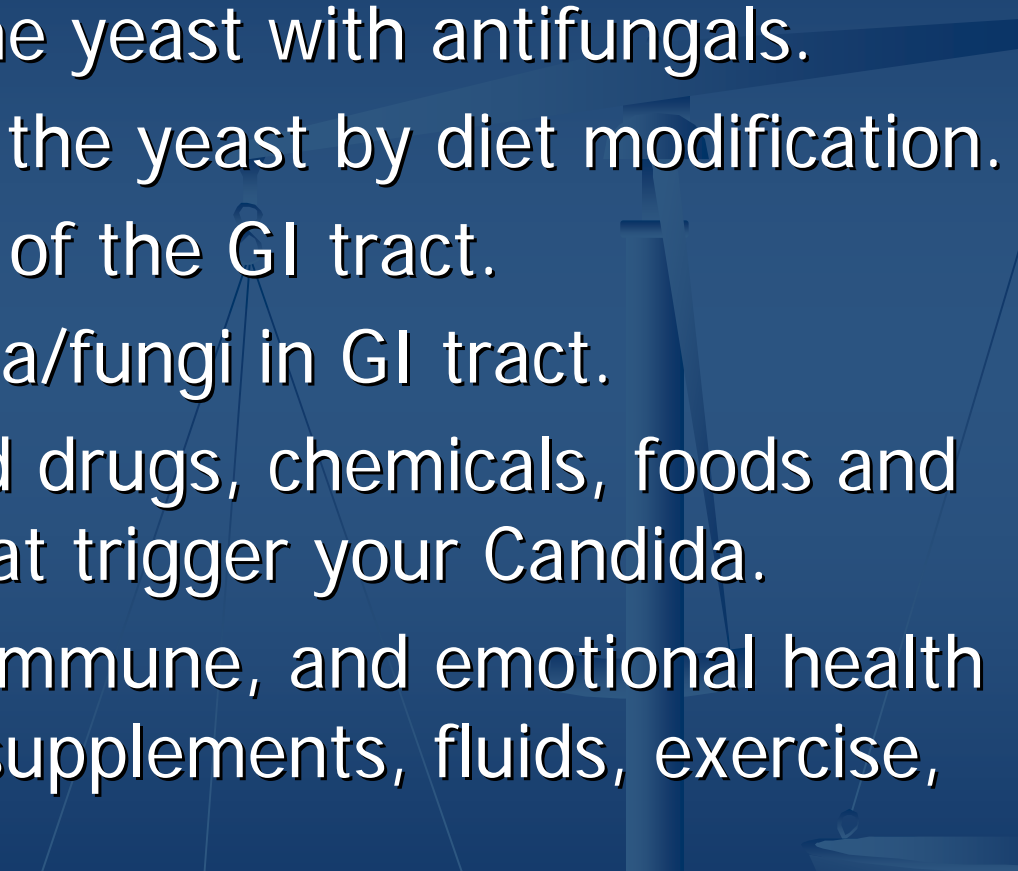
Improve Intestinal  
Ecosystem & Immunity

Antifungals

Kill Candida

This is a battle not easily won!

# Protocol for Candida

1. Suppress or kill the yeast with antifungals.
  2. Deprive or starve the yeast by diet modification.
  3. Cleanse the walls of the GI tract.
  4. Rebalance bacteria/fungi in GI tract.
  5. Identify and avoid drugs, chemicals, foods and other allergens that trigger your Candida.
  6. Build your body, immune, and emotional health via a program of supplements, fluids, exercise, and meditation.
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# How Might This Relate To The Guai Protocol?

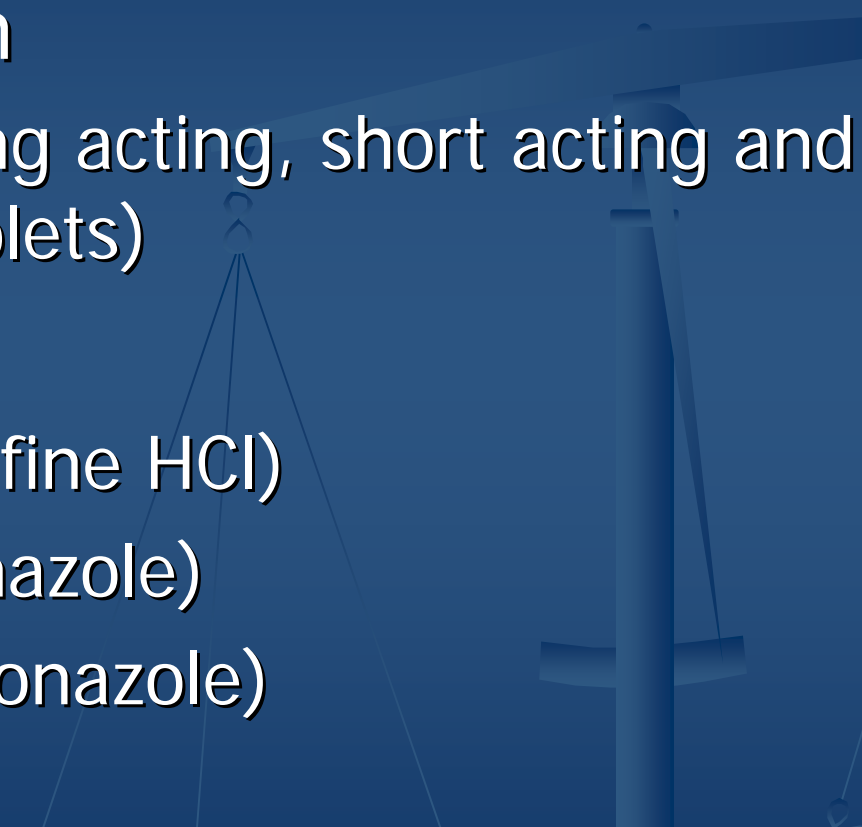
1. Like all uricosuric drugs, Guaifenesin is a mucus thinning, systemic anti-fungal. Candida live on the mucosal membranes of the body. Additional stronger anti-fungal medications may be needed for more severe or localized infections.
2. Even though a strong die-off reaction causes a significant amount of discomfort ("cycling"), it is a sign of a successful treatment.
3. The strict diet for hypoglycemia starves the yeast which live on carbohydrates.
4. Supplementation with magnesium and B-vitamins replaces nutrients lost when beneficial bacteria are destroyed and Candida takes over. Increasing fiber and water in the diet helps to cleanse the GI tract.
5. **Rebalance bacteria/fungi in GI tract with probiotics.\***
6. Identify and avoid drugs, chemicals (including salicylates?), foods and other allergens that trigger your Candida.
7. Build your body, immune, and emotional health via a program of exercise and meditation.

\* Not currently discussed as part of the guai protocol

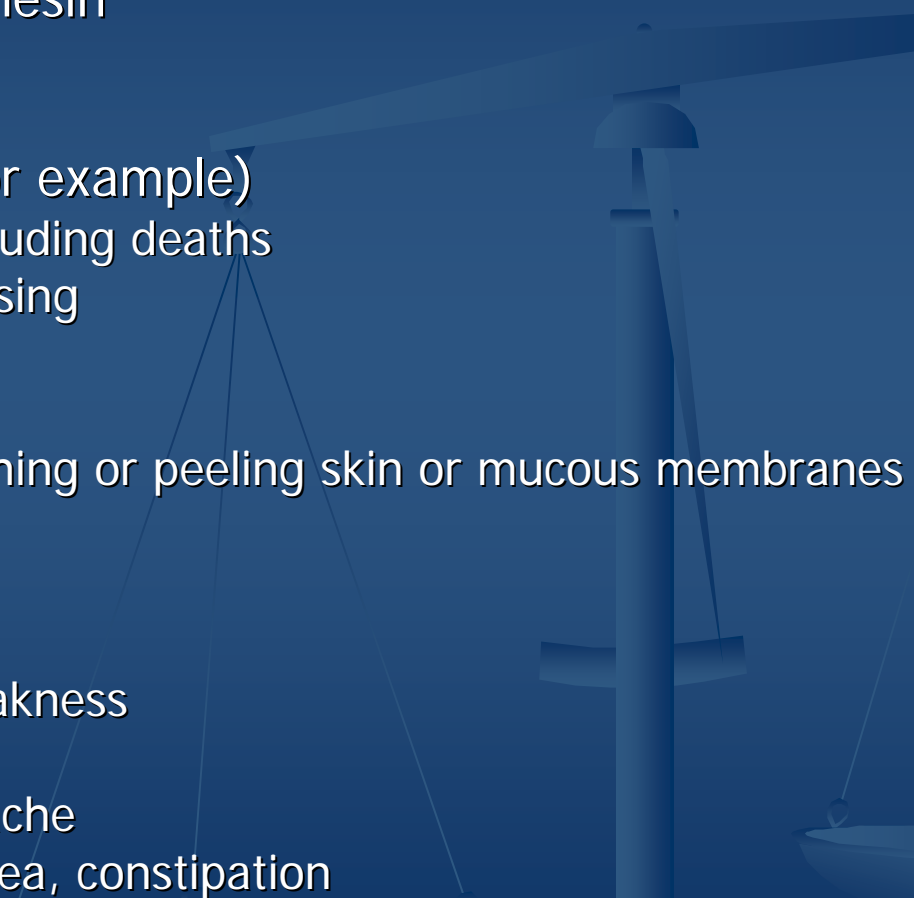
# Candida Treatment Options



# Antifungal Medications

- Non-prescription
    - Guaifenesin (long acting, short acting and combination tablets)
  - Prescription
    - Lamisil (Terbinafine HCl)
    - Diflucan (Fluconazole)
    - Sporanox (Itraconazole)
    - Nystatin
- 

# Drug Side Effects

- Non-prescription - Guaifenesin
    - None documented
  - Prescription – Diflucan (for example)
    - Serious liver toxicity, including deaths
    - Unusual bleeding or bruising
    - Abdominal pain
    - Seizures
    - Reddened, blistering, itching or peeling skin or mucous membranes
    - Dark, amber urine
    - Loss of appetite
    - Pale stools
    - Unusual tiredness or weakness
    - Stomach pain
    - Dizziness, fatigue, headache
    - Nausea, vomiting, diarrhea, constipation
- 

# The Candida Diet



The "experts" cannot agree!

# Candida Diet Requirements

## Eat

- Meat: All meat, fowl, game, fish & shellfish
- Dairy: Butter, Eggs, Cream, Some Cheeses
- Vegetables: Almost all
- Fruits: Apples (Granny Smith); Blueberries; Coconut; Lemon
- Oils: Coconut; Olive; Ghee
- Nuts: Almonds
- Grains: ??? (Eat Cautiously)
- Legumes: ??? (Eat Cautiously)
- Drinks: Water with Lemon or Lime Juice; Club Soda
- Miscellaneous: Condiments without sugar & additives; Apple Cider Vinegar; Fermented Veggies

## Avoid

- Cold Cuts; Hot Dogs, Sausage; smoked, processed or pickled
- Milk, Margarine, Moldy Cheese
- Mushrooms; Potatoes
- Dried fruits; Melons; Bananas
- Polyunsaturated Oils
- Peanuts, Pistachios
- Wheat; Corn
- Fruit juices; Soda Pop; Black Tea; Coffee (?); Alcohol
- Vinegar (except Apple Cider Vinegar); SUGAR in any form; Natural and Artificial Sweeteners; Yeast; Black Pepper

# What Are The Differences?

## Dr. St. Amand's HG Diet

- Eat all meat, fowl & fish
- All cheeses, milk allowed
- Allows melons, strawberries, limits other fruit
- Allows mushrooms
- Avoid sweet potatoes
- Eat all types of nuts
- May eat yeasty breads (cautiously)
- Drink decaffeinated coffee & tea
- Vinegar allowed
- Artificial sweeteners allowed

## Candida Diet

- No cured (smoked), processed or pickled meats (No ham or bacon)
- No moldy cheese; Avoid uncultured milk
- No melons or moldy berries
- No mushrooms or edible fungi
- Use sweet potatoes cautiously
- Avoid peanuts, pistachios
- Avoid yeast in food and supplements
- Avoid black tea & coffee (?)
- Avoid vinegar (except Apple Cider)
- Avoid artificial sweeteners (for other health reasons?) – Use Stevia & Xylitol (?)

# Diet Debates



- Grains
- Fruits & Starchy Vegetables
- Dairy (Especially Cheese, Milk)
- Yeast & Fermented Foods

Be willing to read, question and experiment.  
Test each category and various items within each to see  
what your tolerance level is.  
Avoid what you know you react to.

# Antifungal Supplements

- Tea Tree Oil
- Grapefruit Seed Extract
  - Coconut Oil
- Oil of Oregano
  - Garlic

# Tea Tree Oil

**Tea Tree Oil** is a natural antiseptic, germicide, antibacterial, fungicide. Many people use tea tree oil for: athlete's foot, oral thrush, cold sores & canker sores, tooth ache & gum infections, ringworm, candida, mouth ulcers, anorectal or vaginal yeast infections, unwanted body odors, acne, toe nail infections, and many other uses. It is a salicylate, so use with caution.

# Grapefruit Seed Extract

- "There's something unique about this particular substance (grapefruit seed extract). Whatever it does, it does without the debilitating side effects. It has the advantage of being very safe. In the treatment of candidiasis it appears as effective as nystatin, caprylic acid, and other non-absorbed intestinal antifungal agents."
- [Dr. Galland considers the availability of grapefruit seed extract to be] "...a major therapeutic breakthrough for patients with chronic parasitic and yeast infections..."
- "Many drug sensitive individuals find GSE to be much better tolerated than other antifungal preparations, and I have several patients in whom this product alone helped control chronic candidiasis when no other medication was tolerated or effective."

*Dr. Leo Galland*

(Note: Pure Grapefruit Seed Extract is NOT a salicylate.)

# Coconut Oil

- Research now shows that the medium chain fatty acids in coconut oil kill candida. Caprylic acid, well known for its anti-candida properties, is one of the fatty acids found in coconut oil. Two other medium chain fatty acids found in coconut oil have also been found to kill candida. A study done at the University of Iceland showed that "capric acid, a 10-carbon saturated fatty acid, causes the fastest and most effective killing of all three strains of *Candida albicans* tested, leaving the cytoplasm disorganized and shrunken because of a disrupted or disintegrated plasma membrane. Lauric acid, a 12-carbon saturated fatty acid, was the most active at lower concentrations and after a longer incubation time." This study shows great promise that **all the medium chain fatty acids in coconut oil work together to kill *Candida albicans*.**
- Anal Itching - Coconut oil can sooth anal itching by direct application.
- Skin Fungus – Coconut oil applied directly to the skin can kill fungal growths.

Note: Coconut Oil is a salicylate.

# Oil of Oregano

Scientific studies and clinical reports show that oil of oregano is an effective anti-yeast agent and more potent than caprylic acid. (The Journal of Applied Nutrition 1995,7:1996, 101).

- **Oil of Oregano** can be used for active infections and parasitic infections. It kills Candida (yeast), molds and can calm herpes outbreaks.
- Oregano Oil has been clinically shown to be a promising natural deterrent against Bird Flu, Staphylococcus, Hepatitis, Candida, and many other ailments. Studies conducted at Georgetown University, Cornell University, and the University of Tennessee have shown Oregano Oil to rival the effectiveness of standard antibiotics such as Streptomycin, Penicillin, Vacnomycin, Nystatin, and Amphotericin. Carvacrol has been identified as the active constituent of Oregano Oil. Carvacrol has been found useful in combating gum disease, food poisoning (caused by Staph or Strep), sinus infections, nail fungus, athlete's foot, respiratory infections and urinary tract infections.

Note: Oil of Oregano is a salicylate.

# Garlic

"Garlic is probably the best known herb that lowers cholesterol (by up to 10%) and triglycerides (by up to 13%) while raising HDL-cholesterol (by up to 31%), prevents thrombus (blood clot) formation and lowers blood pressure. It prevents platelet stickiness and has natural anti-bacterial, anti-fungal and anti-parasitic properties."

*Zoltan P. Rona, MD*

Note: Garlic eaten as a food is not a salicylate.

# Other Antifungal Products

- **Emu Oil**
  - **Xango Juice**
  - **Folic Acid**
- 

# Emu Oil

- Emu oil has been shown to have antibacterial and antifungal properties that support the natural healing process.
- For those who suffer from vulvar pain syndrome or vulvodynia, it can provide wonderful relief.

Note: Emu oil is not a salicylate.

# Xango Juice

**Xango Juice** contains the exotic mangosteen fruit, which has been shown to have more potent antioxidant activity than vitamin E. Some of the most well known antioxidants in the mangosteen are:

- \* Xanthones - anti-viral, anti-fungal, anti-inflammatory, anti-bacterial and anti-hepatotoxic (prevents liver poisoning)
- \* Polysaccharides - potent anti-cancer and anti-bacterial plant compounds
- \* Quinones - known for their anti-bacterial properties, similar molecular structure to Tetracycline (common antibiotic)
- \* Stilbenes - strong antioxidant with anti-fungal properties.

Note: Xango Juice will not block guaifenesin.

# Folic Acid

“Folic acid has recently been heralded as a potent preventive remedy against heart disease. Aside from its ability to lower dangerously high homocysteine blood levels, folic acid appears to be antifungal. It has also long been known that folic acid lowers uric acid levels in the body. Since gout is really the result of a fungal production of uric acid, folic acid may actually be an effective gout remedy, simply because it is antifungal.”

*Zoltan P. Rona, MD*

# What Are Probiotics?

- Probiotics are considered functional foods and contain beneficial bacteria. They can re-establish colonization and restore the microfloral balance of the intestinal tract.
- Three of the most important species of beneficial intestinal organisms are *Lactobacillus acidophilus*, *Bifidobacterium bifidum* (Bifidus) and *Saccharomyces Boulardii*.
- *Lactobacillus* and *Saccharomyces Boulardii* primarily colonize the upper GI tract (small intestine), while bifidobacteria are anaerobic bacteria that predominate in the lower GI tract (large intestine).
- Many Soil-Based Organisms (SBO's) have very recently been found to benefit the human GI tract as well.
- In a healthy intestinal environment, most of these organisms attach themselves to the surfaces of the intestinal tract, where they rapidly multiply and become an important part of the immune system.
- **If the intestinal lining is coated with beneficial bacteria, there is no room for pathological organisms to attach.**

# Benefits of Probiotics

- Competition against harmful micro-organisms including Candida
- Preventing colonization of pathogens through the production of inhibitory substances including acids and hydrogen peroxide and natural antibiotics
- Immune enhancement, including enhanced macrophage activity
- Direct anti-tumor activity of certain strains
- Reduction in liver toxicity
- Enhancement of peristalsis, digestion, regularity and re-absorption of nutrients
- In infants, promotion of healthy digestive tract colonization
- Enhancement and balance of estrogen levels, prevention of osteoporosis through increased calcium uptake
- Protection against food poisoning, travelers' diarrhea, allergies, skin problems

*The Evidence for Probiotics*, Sarah Goodman, Ph.D.

# Lactobacillus Acidophilus

- The ecosystem of the human gastrointestinal tract is extremely complex, colonized by more than 500 species of bacteria. Although lactobacilli in general represent a smaller percentage of the intestinal flora, their metabolic functions make them important. On colonization of the germ-free gastrointestinal tract in the human infant, shortly after birth, with normal gut flora, 2.4% are lactobacilli.
- Lactobacillus acidophilus synthesizes vitamins such as B-2, B-3, B-6, B-12, folic acid and vitamin K in our intestinal tract as metabolic byproducts
- Enhances mineral uptake, particularly calcium and magnesium
- Assists in digestion and assimilation of food
- Has antibiotic-like effects against certain pathogenic organisms
- Detoxifies toxic metabolites from other bacteria
- Helps with lactose intolerance

# Bifidobacteria

- While lactobacilli protect the small intestine, bifidobacteria are abundant in the colon, the lower portions of the small intestine and the vaginal tract. The health of the large intestine is dependent upon adequate colonization of these organisms.
- Bifidobacteria produce short-chain fatty acids (SCFA's), including acetic, propionic, butyric, lactic and formic acids.
- Adequate colonization of these beneficial bacteria also protects us simply by occupying space. The presence of billions of beneficial bacteria within the intestinal tract literally leaves no room for undesirable organisms or parasites to attach. This is known by microbiologists as the principle of exclusion.
- Competition for nutrients is another factor. When adequate numbers of beneficial organisms are present, they consume most of the available bacterial nutrients, making it difficult for pathogenic organisms to proliferate.

# Other Forms of Beneficial Bacilli

- **Streptococcus thermophilus** - Enhances digestion of milk sugars & exerts an inhibitory effect on pathogenic bacteria.
- **Enterococcus faecium** - Inhibits the growth of certain pathogens that cause diarrhea. Experimentally demonstrated inhibition of E. coli, Listeria, Salmonella, Shigella and Staphylococcus aureus.
- **Bacillus subtilis** - Effective against pathogenic bacteria & beneficial in some intestinal disorders.
- See Handout "Probiotics and Prebiotics" for descriptions of many additional beneficial bacteria.

**Beneficial Bacteria  
Are  
The New Stars  
In Treating  
Many Diseases!**



# A Cancer Treatment?

*"Lactobacilli and Bifidobacteria also show anti-cancer activity, by two mechanisms: they inhibit the growth or activity of cancer-promoting bacteria and some strains actually produce chemicals which inhibit tumor growth."*

*Dr. Leo Galland, MD*

# A Halitosis (Bad Breath) Solution?

"Streptococcus salivarius is a normal bacteria of the mouth.... In healthy subjects, normal counts of Streptococcus salivarius is obtained. However in chronically sick people or people with chronic halitosis, Streptococcus salivarius is missing."

*Dr. W. J. Loesche, et. al.*

# An Obesity Solution?

- One Washington University professor likened the functioning of gut microflora in our bodies to that of an ant farm that works together as an intelligence to perform an array of functions we're unable to manage on our own.
- One of those chores includes extracting calories from the foods we eat, so the microflora in your gut may play a key role in obesity. While the field is still relatively new, a variety of studies -- including experiments in changing the gut microflora of mice -- indicate that such microbes can strongly affect metabolism.

*Dr. Joseph Mercola*

# A Heartburn Solution?

- Commercials for heartburn relief have given stomach acid a bad rap.
- Too much stomach acid and too little stomach acid have the same symptoms!
- Most people with autoimmunity problems have too little stomach acid, not too much.
- Consistent use of antacids favors yeast growth, bad bacteria in the stomach, inflammation and stomach cancer.
- Take probiotics and DGL instead of TUMS!

# A Bird Flu Solution?

- Men's Health magazine, in its November, 2005 issue, suggested Americans put together pandemic kits containing a few cans of sauerkraut, among other nonperishable foods, because — like kim-chi — it is packed with lactic-acid bacteria “shown by Korean researchers to speed recovery of chickens infected with avian flu.” [NOTE: Store bought sauerkraut is pasteurized and pasteurization kills the beneficial probiotics! **Make your own cultured vegetables!**]
- Another recently released study at the University of New Mexico indicates that **sauerkraut (cultured vegetables) may reduce the risk of breast cancer by up to 74 percent.**

# A Cholesterol Solution?

- Millions of people are taking cholesterol-lowering drugs, usually statin medications. Many experience side effects from these drugs such as achy muscles and fatigue. Statin drugs are designed to control how much cholesterol is manufactured in the liver. In this process, the medication often compromises the liver's normal ability to detoxify.
- In the past, medical professionals have said that the way to reduce cholesterol is to reduce saturated fat. However, new research suggests that saturated fat is not the cause of cholesterol problems; the real culprits are trans fats, processed carbohydrates and sugar.
- Probiotics reduce bad cholesterol and increase good cholesterol.

# Cholesterol Study Results

Short term hypolipedemic effects of oral *Lactobacillus sporogenes* therapy (360 million spores per day in tablet form) were studied in 17 patients (15 men and 2 women in the 32-61 year age group) with type II hyperlipidemia in an open label fixed dose trial. Total serum cholesterol, LDL-cholesterol and total cholesterol to HDL-cholesterol and LDL-cholesterol to HDL-cholesterol ratios were reduced significantly over a period of three months. HDL-cholesterol was marginally increased.

# Good Bacteria Can Reduce Cholesterol – NATURALLY!

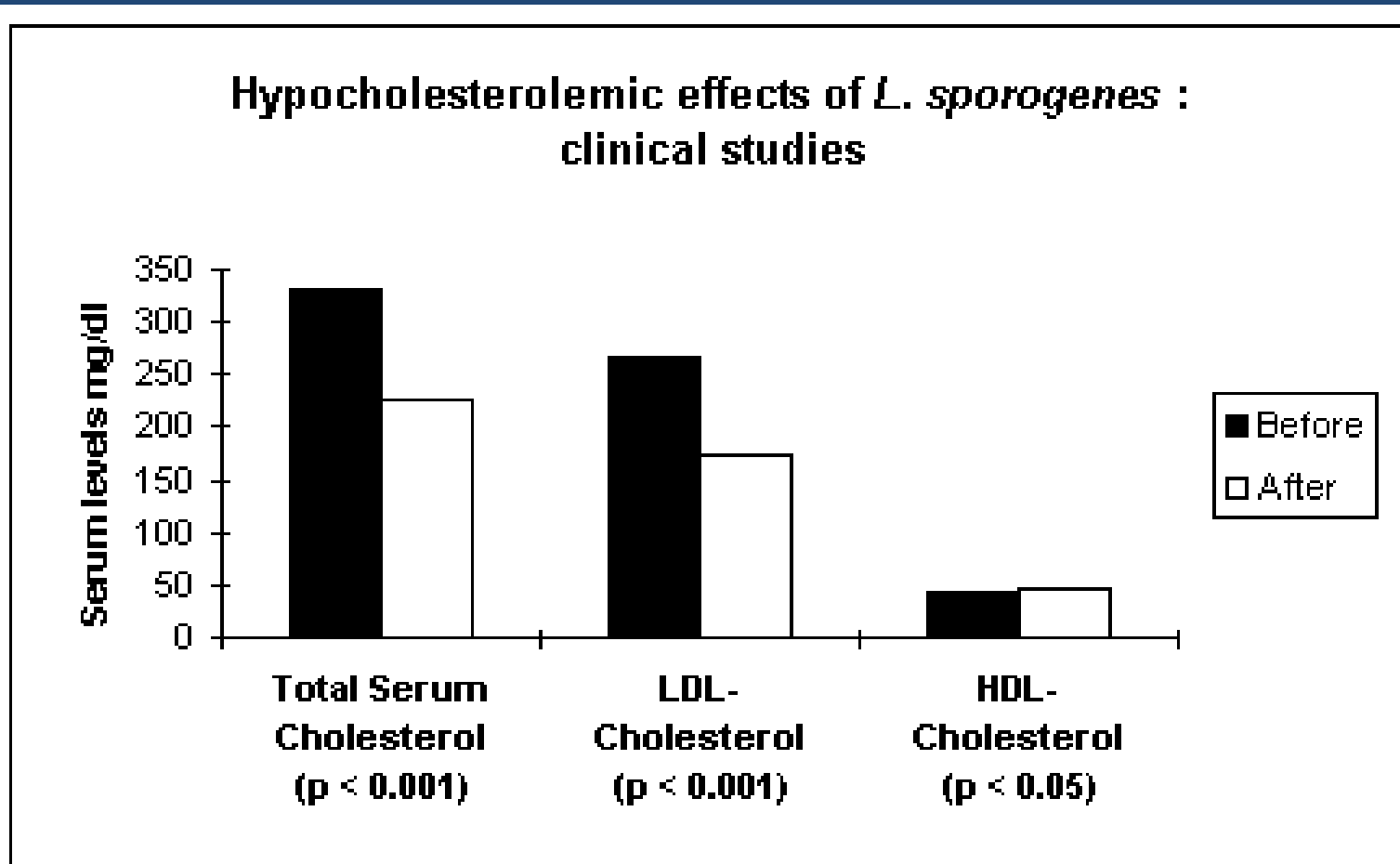
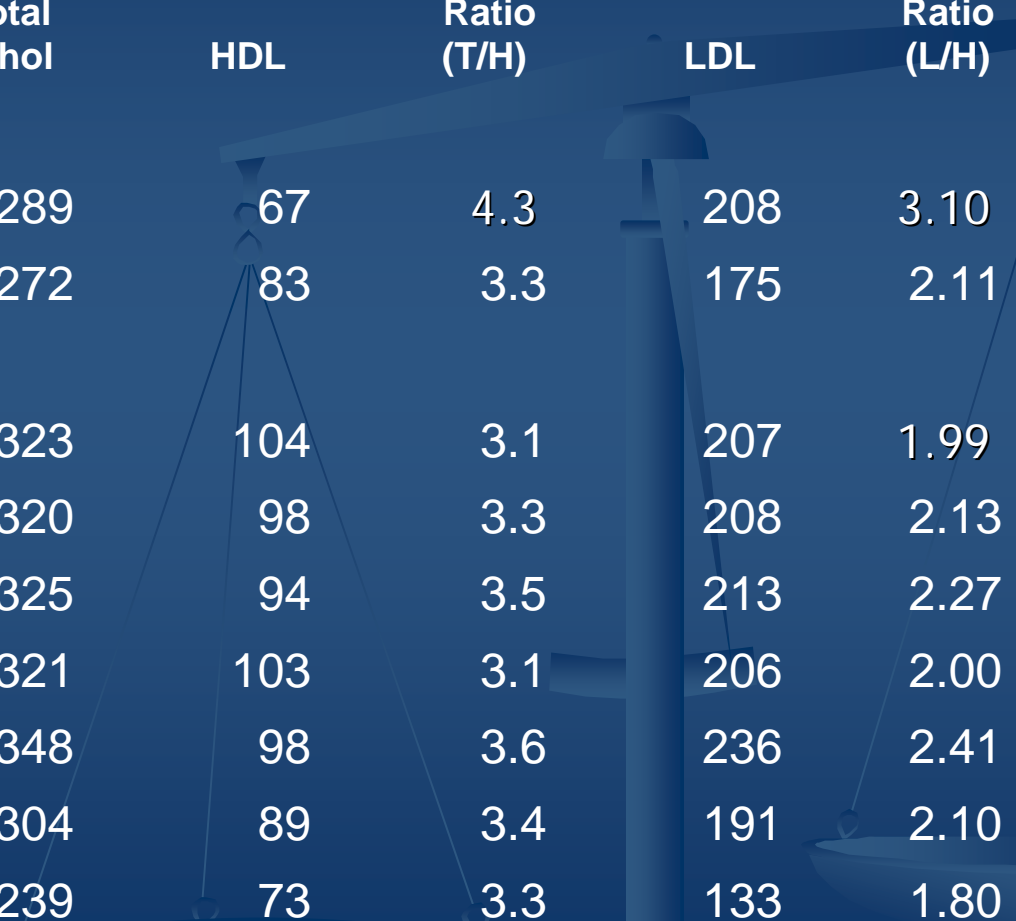


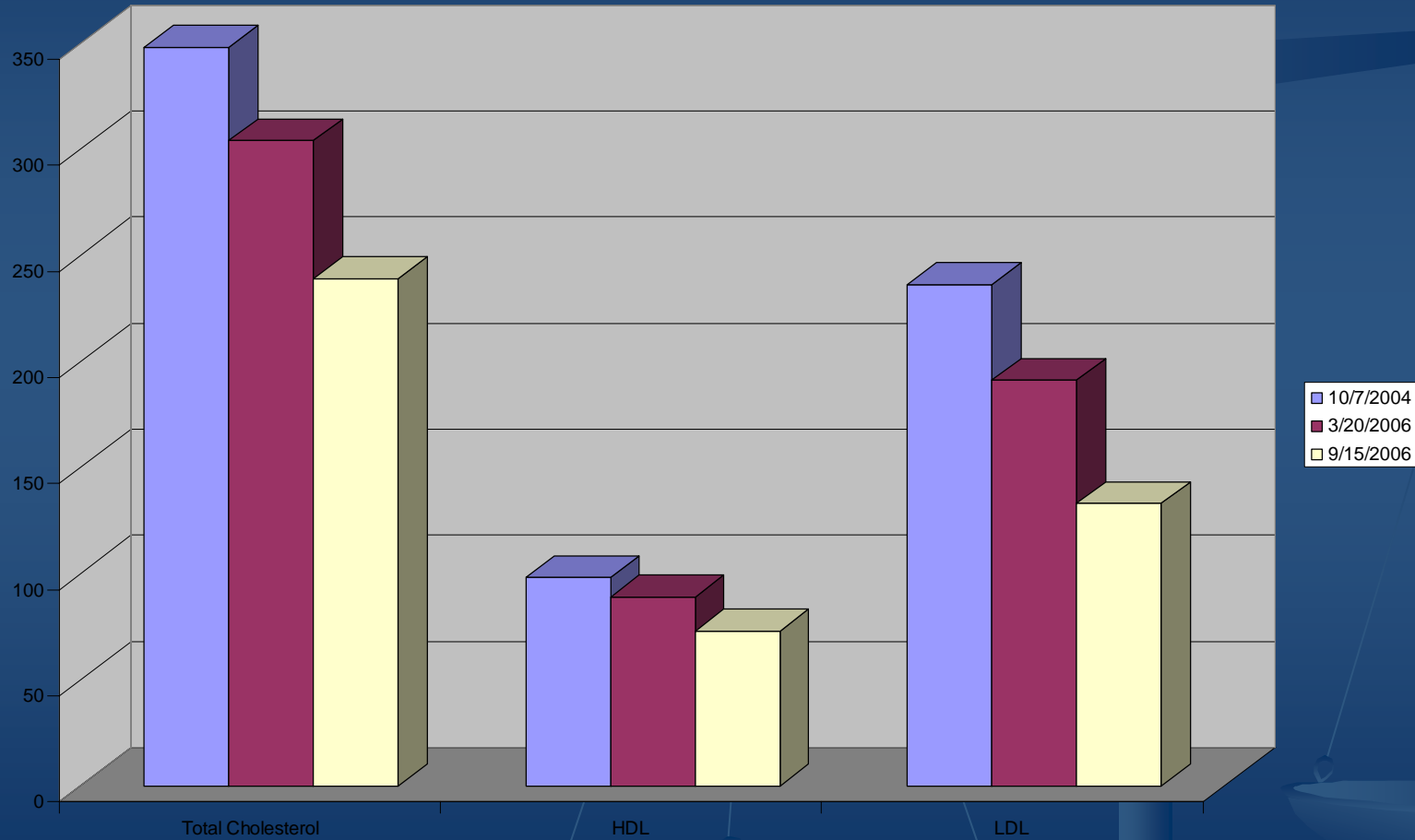
Figure 5.1

# 9.5 Years of Cholesterol Data



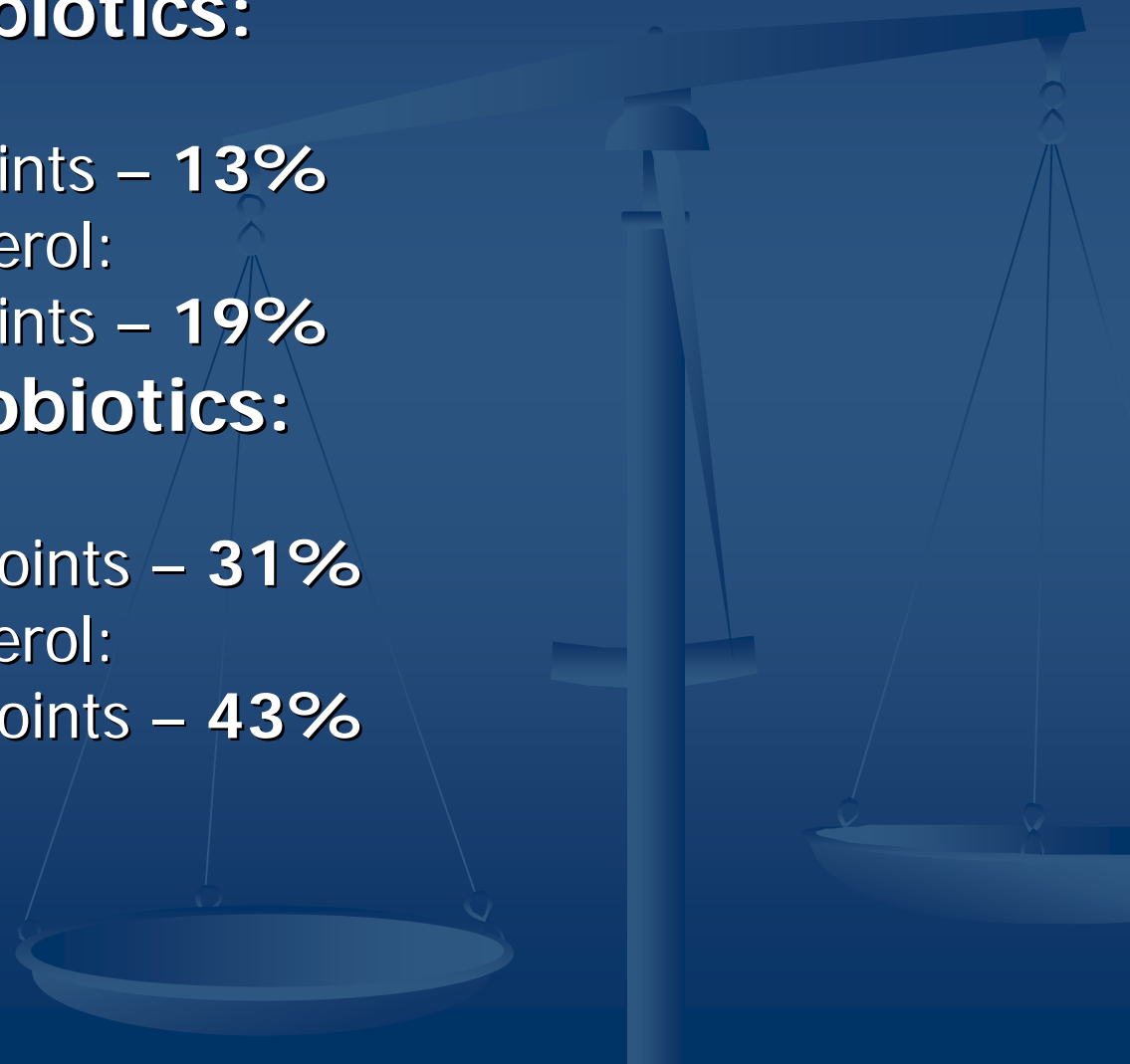
Date	Trigly	Total Chol	HDL	Ratio (T/H)	LDL	Ratio (L/H)
4/29/1997		289	67	4.3	208	3.10
8/13/1999	68	272	83	3.3	175	2.11
3/29/2000	61	323	104	3.1	207	1.99
4/4/2002	68	320	98	3.3	208	2.13
10/30/2003	110	325	94	3.5	213	2.27
4/13/2004	58	321	103	3.1	206	2.00
10/7/2004	70	348	98	3.6	236	2.41
3/20/2006	122	304	89	3.4	191	2.10
9/15/2006	163	239	73	3.3	133	1.80

# Probiotic Effect on Brenda's Cholesterol



# Here Are The Numbers!!

- **1 month on probiotics:**
  - Total cholesterol:
    - Reduced 44 points – **13%**
  - LDL (bad) cholesterol:
    - Reduced 45 points – **19%**
- **7 months on probiotics:**
  - Total cholesterol:
    - Reduced 109 points – **31%**
  - LDL (bad) cholesterol:
    - Reduced 103 points – **43%**
  - Ratio of LDL/HDL
    - Reduced **25%**



# A Group “Non-Clinical” Test?

- Check with your doctor to see if it is OK to temporarily STOP taking your cholesterol lowering drugs
- Do a blood test BEFORE you start on probiotics
- Use [www.HealthCheckUSA.com](http://www.HealthCheckUSA.com) to order a cholesterol check (\$37)
- Get blood drawn at Lab One (no extra charge)
- Results will be posted to your on-line account in 48 hours.
- Re-test after 1 month and after 7 months
- Report back to the group
- **Report back to your doctor, and let's tell the world about our results!!!**

# Pulsing & Rotating Your Probiotics

“Most probiotics have similar effects, so people often select and use a single probiotic. But anecdotal evidence has shown that...the body somehow becomes accustomed to this organism, such that it has less and less of a positive effect over time.”

*Dr. Mark A. Brudnak*

# The Brudnak Method

- "PULSE" - A high dose of a single strain or a limited number of strains is ingested for several days (or several weeks if it's a lower dose).
- "ROTATION" - After that, another dose of another strain or mixed culture of several strains is used for a two-week phase.
- "MAINTENANCE" – A maintenance dose of a third strain or strains should be taken over a longer period of time every day or every other day. Maintenance is necessary because of *genetic drift*. Put simply, the probiotics slowly mutate, ultimately to the point of dying.
- This process may need to be repeated over time.

# Ways to Get Your Probiotics

1. Supplements (Pills or Powders)
  2. Natural Cultured Foods
- 

# Probiotic Supplements

## Pro

- Convenient
- Easy to Rotate
- Varied Bacterial Strains
- Travels Better

## Con

- Can Be Expensive
- Deceptive Labeling
- Potency Can Be Lost
- May Need Refrigeration

# Yogurt, Kefir, and Cultured Vegetables


## Pro

- Historical Use
- Less Expensive
- Viable Cultures
- Real "Food"
- Added Nutrition of Other Ingredients

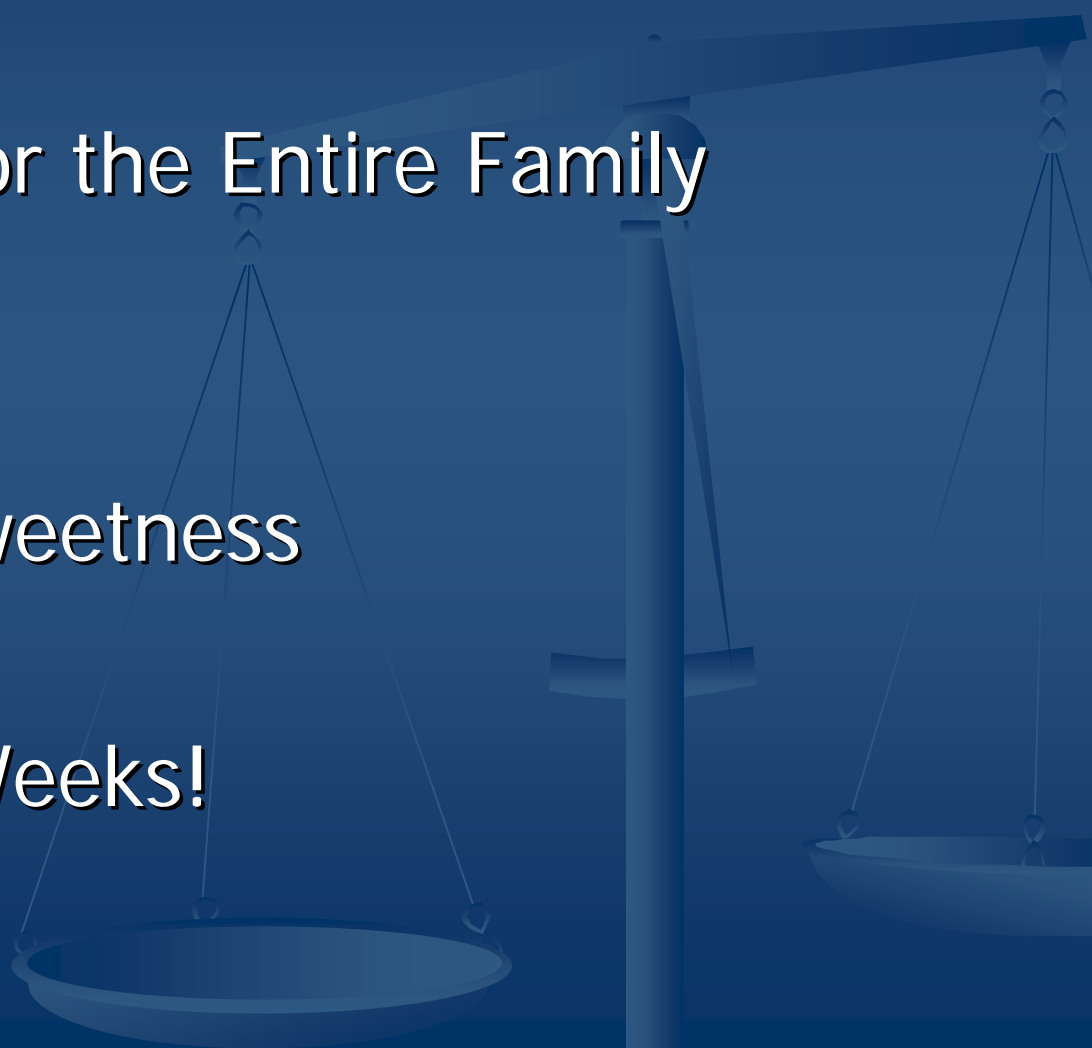
## Con

- Less Convenient
- "Travel" problems
- Harder to "Pulse" and "Rotate"
- Needs Refrigeration

# Make Your Own Cultured Vegetables

- Healthy Addition to Family Meals
  - Easy
  - Make Your Own Creative Combinations
  - Inexpensive
  - Stores Well
  - Unique Gifts for the Holidays!
  - Keeps Under Refrigeration for up to 8 months
- 

# Make Your Own Milk Kefir

- Healthy Drink for the Entire Family
  - Inexpensive
  - Easy
  - Choose Your Sweetness
  - Add Fresh Fruit
  - Keeps for 6-7 Weeks!
- 

# Coconut Kefir

- Stops Cravings for Sugar
- Aids in Digestion of All Foods
- Tones and Cleanses the Intestines & Liver
- Eases Aches and Joint Pains
- Clears Up Skin Problems
- Improves Vision
- Makes Hair and Nails Healthier Because of High Mineral Content (Potassium, Calcium, Magnesium)
- Cleanses the Endocrine System (Adrenals, Thyroid, Pituitary, Ovaries)
- Good for Those With Milk Allergies
- TASTES GREAT!

*Donna Gates, "The Body Ecology Diet"*

# Disclaimer

The information provided in this presentation is for informational purposes only and is not intended as a substitute for advice from your physician or other health care professional or any information contained on or in any product label or packaging. You should not use the information from this presentation for diagnosis or treatment of any health problem or for prescription of any medication or other treatment. You should consult with a healthcare professional before starting any diet, exercise or supplementation program, before taking any medication, or if you have or suspect you might have a health problem.

*The Fibromyalgia Recovery Group*