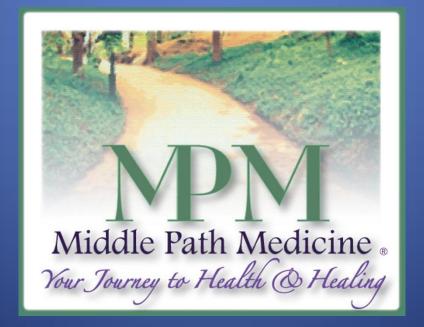
Digestive Difficulties

Gary E. Foresman, MD November 2012



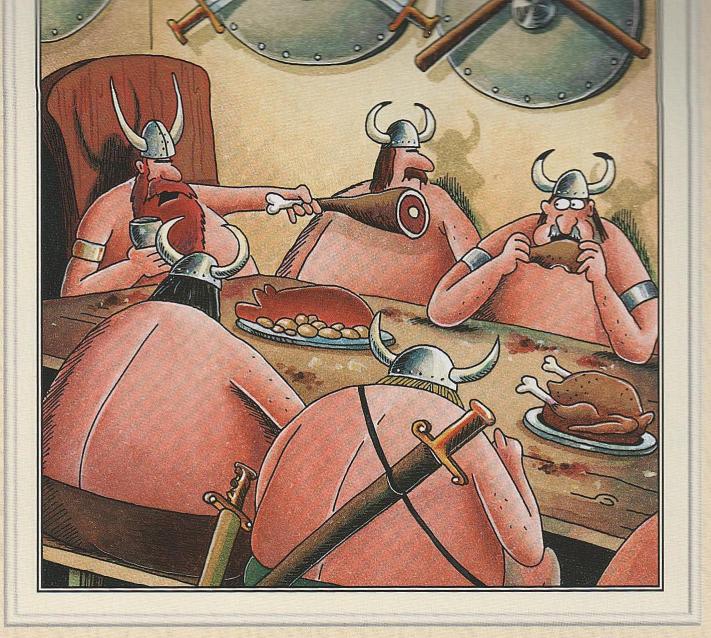
The 4 R Program

- Remove
- Replace
- Re-inoculate
- Repair

The approach to chronic digestive health issues must incorporate *all* components of the 4 R Program for successful healing.

- Stressful Eating Habits
 - Under stress, we literally "turn off" the gastro-intestinal (GI) tract. While under stress, your body de-prioritizes the digestion of food.
 - As most people are "stress-eaters", we are putting food into a GI tract that has been turned off, and yet we still wonder why so many of us have GI disturbances.

- Eating with awareness means agreeing to the following simple rules:
 - Treat your meal as if it is a movie, meaning you agree to only eat sitting down with all other distractions turned off. To get the most out of your meal, you must give it full attention.
 - Eat *slowly* and *deliberately*. Chew your food *slowly* and *deliberately*, paying attention to all aspects of the dining experience.
 - Enjoy your food, and tune in to the signals being received in each moment.



"Uh-uh-uh-uh. ... Question. Can anyone here tell me what Hanson there is doing wrong with his elbows?"

• Irritants

- No matter what your symptoms, and no matter what caused them, these irritants can make your symptoms worse:
 - Alcohol
 - Anti-inflammatory drugs
 - All sodas
 - Medicines
 - Any food that you personally don't respond well to.

- Food Sensitivities
 - Toxins in your diet, such as MSG and artificial sweeteners. Do not eat anything that has a label. "Paleo principles"
 - Eating right for your type: the role of lectins
 - Gluten intolerance and grain intolerance, eating "glue" is a true direct toxin that, like smoking, no safe dosage can be recommended. Tolerance to grains will vary, also like smoking.

- Dairy intolerance: eating raw, organic dairy changes everything.
- Food allergies: IgE, IgG, lymphocyte-mediated, and others — how to test for these. ALCAT and Cyrex labs.
- The role of detoxification

- Infectious Diseases
 - Bacterial Dysbiosis: Small bowel overgrowth syndrome
 - Candida Syndromes
 - Parasites
 - The role of natural anti-microbials: Tanalbit,
 Pyloricil, Paracid Forte, and Candicid Forte
 - Drug anti-microbials
 - Stool Testing the GI Effects test

Replace

- Digestive Enzymes
 - We all recognize that everyone is born with a certain digestive capacity, which diminishes with age.
 - A broad spectrum enzyme preparation with mixed amylases, lipases, and proteases is necessary to support digestion in so many individuals.
 - Best products: DigestzymeV and Spectrazyme, take 1-2 pills with each meal.



"Well, I'm addicted. ... Have you tried Carol's sheep dip?"

Replace

- Hydrochloric Acid-Betaine HCl
 - Especially useful for protein maldigestion and people who have symptoms immediately with eating
 - Typical dosage is 500-600mg capsules
 - Start with one capsule with each meal, mid-meal
 - Build up by one capsule for each similar meal until one feels just a slight warmth after eating, then decrease by one pill
 - So if 4 caps gives you a slight warmth, 3 caps is your dose.

Replace

HCl Continued

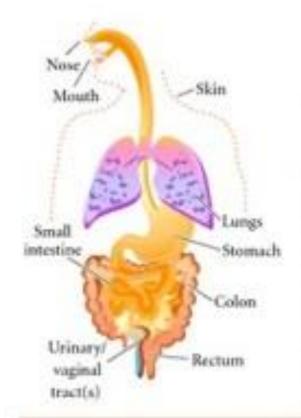
- Not to be used if the person has active ulcers, gastritis, or any unexplained upper abdominal pain.
- HCl improves protein digestion and all digestion by helping to activate enzymes.
- The extreme danger of using chronic antacids

Re-inoculate

Due to the use of antibiotics and hormones in our food supply, as well as the over-use of medicines in general (including prescription antibiotics, NSAIDS, oral contraceptives, and many others), one can argue that nearly everyone has an imbalance in his or her intestinal flora.

Re-inoculate

- We have 10 times the organisms in us as we have our own cells.
- The metabolic products of these organisms are absorbed directly into our blood stream.
- Your GI flora affects your metabolism as much as your liver does!
- You literally do feel like s#*%!



Human body 10¹³ cells 23,000 genes Normal flora 10¹⁴ microbial cells on the human body. 3.3 million genes

Amount of bacteria per gram of cellular component

- Stomach—10¹ to 10² cells
- Duodenum-10³ cells
- · Jejunum-104 cells
- . Beum 104 to 107 cells
- Proximal colon 10³⁰ to 10¹¹ cells
- Transverse colon 10¹¹ to 10¹² cells
- Distal colon >10¹² cells

"the microbiota can be viewed as a metabolic organ exquisitely tuned to our physiology that performs function we have not had to evolve on our own"

Backhed et al. 2004, PNAS 101:15718-15723

Re-inoculate

Probiotics

- The ingestion of "good bacteria" has been shown to not only prevent and treat traveler's diarrhea, antibiotic-associated diarrhea, and Irritable Bowel Syndrome (IBS), but also has been successfully utilized in programs supporting weight loss, lowering cholesterol, improving immune regulation, and decreasing systemic inflammation.

Re-inoculate - Probiotics

- Most probiotic supplements are well marketed and poorly researched.
- Only take the probiotics recommended by your health care professional.
- The best-researched probiotics include:
 - Culturelle (lactobacillus GG), Saccharomyces boulardii, I-Flora (Sedona Labs), Ultra Flora (Metagenics), Orthobiotic and ProBiotic 225 (Orthomolecular).
 - A prescription probiotic VSL#3 has many successful clinical trials.



- 1. Autism
- f C. holtenr/clostridia spores
- mechanism unknown
- 2. Mood: depression, arriety

Asthmalatopy

- Hygiene hypothesis:
- Eugengated invate immune response Upregulation of regulatory T cells
- after capture of Aga by DCs
- i Bifidobacteria, gram +ve organisms
- 1 Cloutridia

Hypertension/

- inchemic
- hourt
- disease

Diet high in red meat and animal fat.

- Lose SCEA/butyrate
- High focal fata
- Low vitamin absorption
- † 7a debydroxylating bacteria:
- Colon cancer sholic acid deoxycholic acid (oscarcinogen)
 - Law in H-5 metabolising bucteria

Biliary disease

Altered enterohepatic circulation of bile

Altered senobiotic/drug metabolism

- e.g., paracetamal metabolism:
- † predose urinary p-cressi sulfate leads to 1 postdose urinary acateminophen sulfate: acetaminophen glacuroride.
- Bacterially mediated p-cressl generation and competitive
- sulforation of p-cressl reduces the effective systemic capacity to sulforate acctaminophers.

Oboutymetabolic syndrome

- I flactoroidates and ? Acrosobacteria in obese
- Altered energy/lipid metabolism
- Higher relative abundance of glycoside hydrolases,
- carbulystrate-binding modules.
- glycosyltransfereses, polysaccharide lyones, and carbohydrate esterases in the Biocorosidetes
- TLR mediated

Inflammatory bosed disease

- Hygiene hypothesis
- Altered immune response: TLR signaling
- Less microbial diversity
- Activation of specific species e.g., Escherichia

Peripheral vascular disease

Result of metabolic syndrome-

altered lipid deposition/

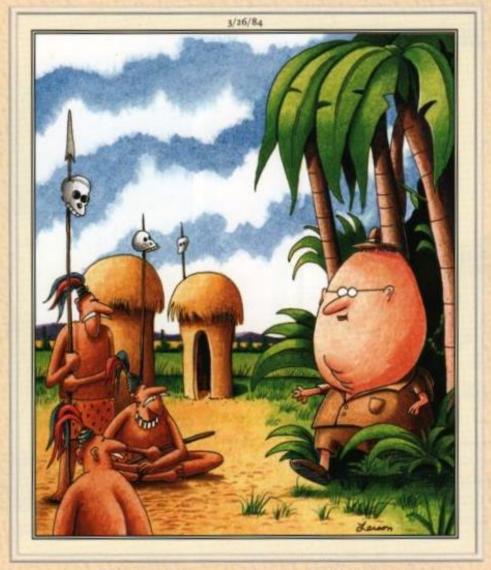
metabolism

Re-inoculate – Probiotics

- Typically, probiotics are taken on an empty stomach and at least 2 hours away from any prescription antibiotic.
- I strongly recommend rotating monthly among at least three probiotics to maintain GI health and prevent the development of resistance.

Re-inoculate

- **Prebiotics** the use of non-digestible carbohydrates to support the growth of healthy bacteria. **Synbiotics** combine preand pro-biotics.
 - The soluble fibers, including stevia, chicory, and jerusalem artichoke, that all provide fuel for our healthy bacteria and may improve dysbiosis more than probiotics.
 - The primary fuel of your intestinal cells come from the short-chain fatty acids (SCFA) produced when good bacteria digests good fiber.



Unwittingly, Palmer stepped out of the jungle and into headhunter folklore forever.

- Anyone who has experienced chronic digestive issues requires a repair formula if they expect healing.
- The optimal repair formula
 - Glutagenics (Metagenics) 1tsp. In 4-6oz of water consumed 3 times per day between meals for 4-8 weeks, depending on the condition.
 - Glutagenics has therapeutic levels of the conditionally-essential amino acid glutamine, aloe vera, and licorice.

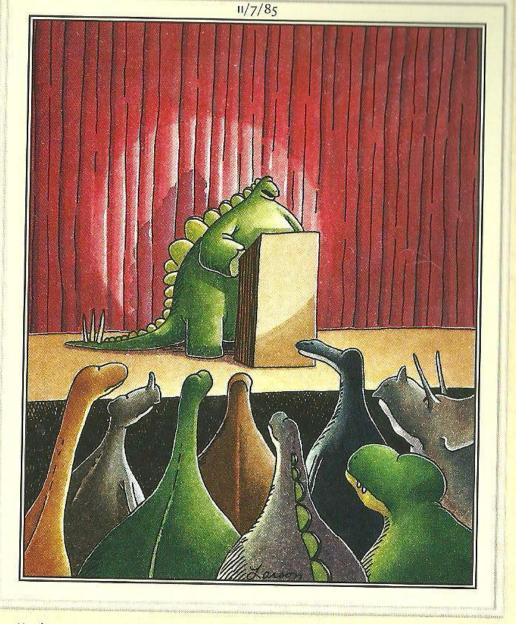
- Although I have used many other repair formulas over the last 12-13 years, I continually come back to this one as the most successful in supporting the repair of a myriad of GI conditions. I also recommend GlutAloeMine (Xymogen), InflammaCore (OrthoMolecular) and GI Revive (Designs for Health)
- Aloe Vera Juice (George's)
- Licorice DGL (Planetary Herbals)
- L-Glutamine, the conditionally-essential amino acid.

- Additional supportive supplements:
 - Triphala (Planetary Herbals) A traditional Ayurvedic formula for balancing colon health, especially for constipation.
 - Magnesium UltraMag (Source Naturals) 800-1,000mg per day, higher if needed.
 Supports many metabolic functions and is especially useful for treating constipation.

- Omega-3 Fatty Acids EPA/DHA direct anti-inflammatories for the GI tract.
- Mentharil Enteric-coated peppermint for the treatment of IBS
- Cat's Claw, Curcumin, Boswella Herbal antiinflammatories that support digestive function.
- Spascupreel A homotoxicology remedy for the treatment of intestinal and gallbladder spasm.

The 4 R Program

• For anyone looking to successfully treat not only the symptoms of GI dysfunction but also the etiologies of GI dysfunction, which precede systemic diseases, the 4 R Program is the key to optimal GI health and also metabolic, endocrine, and immune well-being.



"The picture's pretty bleak, gentlemen. ... The world's climates are changing, the mammals are taking over, and we all have a brain about the size of a walnut."