

You are wasting your time! That is right, I said it you are spending countless hours in the gym, hundreds of dollars on organic foods and exotic supplements and you are wasting your time! Before you guys accuse me of being some grain eating vegetarian, or some anti-muscle hippie let me explain. I have been training clients and helping them with nutrition for over 15 years. It is truly my passion. I have corresponded with Dr. Eric Serrano for the last 10 years, attended and achieved certification in Charles Poliquin's Biosignature L1 & 2 and sat in on lectures by Dr Suzanne Mack. Three to five hours out of my typical morning are spent answering e mails from clients, athletes and physique enthusiasts about their nutrition and supplement programs. They detail everything from the side of the plate they put their fork on to the milligrams of sodium in their last glass of water. Their attention to detail is astounding.....even to me! The diets I look at range from carb cycling approaches to cyclic ketogenic diets and everything imaginable in between. They will tell me about everything from their Iron Fortress Wal Mart Whey protein (which I quickly convince them to change to Grow) to the latest products Biotest and Poliquin have to offer. Overall, their approach is usually well laid out. There are no glaring errors in their training program, they seem intelligently designed. On the surface it looks like they should be getting results but, for some reason, they are stuck. Not only has their progress come to a screeching halt but, often times they tell me they feel sluggish or depressed. They can't figure out why they aren't "ripped" in fact, the only thing that is close to being ripped is the seam in their pants from the pressure of their distended abdomen. They are expecting me to offer some elaborate solution such as replacing their strawberries with white grapes or decreasing their sodium by 150mgs. at their last meal but the simple and effective solution I pose is for them to fix their gut. At first I am met with skepticism, they think I am holding out on some esoteric supplement, but I convince them to try and they are always amazed and grateful.

Your digestive health is at the apex of your progress both in terms of health and physique. According to the Royal Society of Medicine U.K - 90% of all chronic diseases are due to infection of the gastrointestinal tract. By fixing clients digestive disorders I have personally witnessed everything from improvements in health, to decreases in body fat, surges in muscle growth and increases in strength. The importance of a healthy gut simply can't be overstated. No matter what you are doing, your gut health should come first. Imagine if you went to a gas station to fill your Bentley up with premium and left the gas cap on while you pumped 50.00 worth of gas "onto" your car, you would feel pretty stupid. Buying the right organic foods and the latest cutting edge supplements but not making sure your body can take in the nutrients is basically the same thing. By the end of this article you will have a simple way to check your gut's health and a four step protocol to ensure your insides are as healthy as your outsides!

It begins with your GI mucosa; it is a vital link to your health. It filters toxins, blocks bacteria, viruses, parasites and other organisms from entry, assists in digestion, tries to assure that large, poorly absorbed food particles are kept out, while at the same time attempting to assimilate vitamins, minerals, amino acids, fatty acids, and all the other great supplements taken in (1). On top of this, it bears the burden of maintaining itself through an extremely high rate of regeneration of the surface cells (1). An interesting side note is that seventy (YES 70) percent of your nutrition goes for repair of your immune

system and detoxification purposes (4). It's no wonder we often feel undernourished when we add in working out and the demands of a physical job. This process requires a lot of blood! The body shuttles blood to the plexus of vessels surrounding the intestines. This process better aids digestion when we consume a meal. This is one of the reasons a nap sounds pretty good after eating a Thanksgiving feast. It is the body doing it's best to remove blood volume from the muscles and temporarily use it to do the work of the gut. (1) As we look to today's stressful society, we are constantly being confronted with stresses. Whether it is our nagging spouse, a stack of mounting bills, our boss at our dead end job or not being able to hit that 5lb PR on bench, our body perceives it as stress. These and other stresses initiate our body's amazing "fight or flight" sequence. The body then prepares to defend itself in times of stress as a means of survival. Adrenalin is released to deal with the stress and one aspect of this response is to shut down the gut, shunting blood to the muscles in preparation for immediate defense. This is a necessary reaction, after all when you think back to where our genetic blueprints came from it would be far more important to be able to outrun a saber tooth tiger than it would be to digest that last bite of meat.

Over time, what happens is if you are frequently stressed out, this constant release of adrenalin will keep the gut from doing its job (2). With food these days, we have a lot to deal with: refined sugars, starches and other processed foods; synthetic chemicals (artificial colors/ flavors/ preservatives, pesticide residues, fertilizers, herbicides); antibiotics, hormones and other drugs; alcohol; caffeine and other stimulants; chlorine; fluoride; and parasites and other invading organisms...I think you can see where I am going with this (4). It is these challenges that help to destroy the gut's ability to keep out things we wouldn't want in and when this stuff I am talking about gets in that isn't supposed to, we are left with what experts term "leaky gut syndrome" (2).

Leaky gut syndrome is a low-level inflammatory process many believe to be the beginning of disease processes in the body. Food particles sneak in that are poorly digested and too large in size, so they are improperly handled. These stealth particles can cause allergic responses that formerly weren't present (5). Toxins are allowed to enter which would normally have been filtered out. Worse still, is that the mechanisms for absorbing nutrients is impaired in such a situation and deficiencies arise making the long-term situation worse. Undesirable microbes enter the body across the weakened defenses of the inflamed and stressed mucosa, wreaking their own varieties of havoc. The list continues to grow and before you know it, you're looking at the start of chronic disease (2).

Now that you have a sense of what begins to go wrong, let us look at what we can do to fix it. The best approach I have found to date is one I picked up at Charles Poliquin's Level 2 Biosignature Modulation seminar and originated from Jeffrey Bland, it is simply named the 4 "R's". The 4R's stand for: Remove, Replace, Reinoculate and Repair. The terms are fairly straightforward but I will walk through the specifics.

Step 1. Remove. The first step of the program focuses on taking out allergic foods.

Sometimes an allergic reaction to a food is obvious, if I eat regular white eggs my nose runs, my eyes water and I sneeze.....duh! Other times, the reaction may be a little more subtle. Other times a reaction to the food may not appear for hours or even days. An example that comes to mind is, wheat, some people don't notice any symptoms for about 24 hours. Some people might take two days before they feel anything. In rare cases, symptoms may not appear for a week. This can make the job of determining what you are allergic to very difficult but to help out here is a more complete list I give my clients of common allergenic foods: Cow's Milk, Wheat gluten (gliadin), Gluten (in wheat, oats, rye and barley), Yeast, Egg Whites, Cashew nuts, Egg Yolk, Garlic, Soya beans, Brazil nuts, Almonds, Corn, Hazelnuts, Oats, Lentils, Kiwi fruit, chili peppers, Sesame seeds, Sunflower seeds, Peanuts, If you think you might be suffering from a food allergy, but are not sure which food is causing the problem, start by cutting out all of the above foods. Other foods commonly associated with allergic reactions (although not necessarily delayed) include: Spinach, Shrimp, Oranges, Chicken, Strawberries, Tomato, Pork, and Beef. For a more accurate list specific to your body I recommend the LEAP MRT food allergy test. The program includes testing of 150 foods and chemicals for reactivity (2).

Step 2. Replace. Start with an HCL protocol. If you need to know how to do the test here is a great link to an article posted on Charles Poliquin's website:

[http://www.charlespoliquin.com/index.php?option=com\\_content&task=view&id=947&Itemid=10173](http://www.charlespoliquin.com/index.php?option=com_content&task=view&id=947&Itemid=10173)

Additionally, you will benefit from adding in enzymes. Choose an animal source over vegetarian. There are a lot of good ones out there. Another trick I picked up from Dr. Eric Serrano is to add in aminos at this stage. They will help speed tissue and gut regeneration by increasing protein synthesis and reducing rate limiting factors. I like MR and MS by SST or Density by Beverly (3). Below I have included a link which is an excellent resource to determine whether HCL and/or enzymes is the best choice for your gut's needs and only takes a couple of minutes to fill out.

<http://www.nutri-linkltd.co.uk/documents/HCLandEnzymeQuestionnaires.pdf>

Step 3. Re-inoculate. This is the step is where you introduce pro-biotics. An effective course should include: Bifidobacteria and Lactobacillus Acidophillus. In addition to your probiotics, be sure to include adequate "pre" biotics. Prebiotics are usually a carbohydrate (such as an oligosaccharide). They can be some other type of macro though. Prebiotics are nutritionally classified as soluble fiber. To some extent, many forms of dietary fiber exude some level of prebiotic effects. Some great probiotic formulas are: HMF Replete or Poliquin's Proflora Excellence. Be sure to take your probiotic at the end of the day and if you happen to be on antibiotics, follow the rule of 2's by Dr. Suzanne Mack....take 2 capsules of probiotic either 2 hours before or 2 hours after the antibiotic at least 2 times daily (4).

Step 4. Repair. Now you are ready to start re-building, this is the fourth and final step. You will need to supply the nutrients your body needs for gut cells. Special attention should be paid to glutamine, zinc carnosinate, B5 and EFA's. Additionally, if your gut is inflamed you will benefit from DGL (deglycerated licorice), Aloe Vera, Slippery Elm, Mucin, Marshmellow (root), N-Acetyl Glucosamine, Quercetin. The best product out there hands down is Designs For Health's GI-Revive which not only contains the aforementioned supplements but a few others as well (4).

Now that you have completed the gut repair protocol and you are ready to test your results! According to Dr. Mack, a healthy 70kg male will poop about 5 cups of soft poop daily in one or more bowel movements (or think tank sessions as I like to call them) (4). If you addressed the 4 R's then you should hit the goal every time. This being said, Biosignature practitioners including myself use three basic tests to check our results:

Test 1.) The Zinc Taste Test. For this test you will take one teaspoon of Zinc Sulfate and hold it in your mouth. Swish it around for about 5 seconds and it should taste like the inside of a 3 day old plastic protein shaker.....awful!!!! If not, then you should replenish Zinc. Charles Poliquin recommends starting with 120mgs a day for 8 weeks and then cutting 15mg/ day every 5 days until a maintenance dose of 30mgs is reached (4). Dr Eric Serrano added that if you go over 50mgs it may be necessary to supplement copper as well and anyone taking insulin should work with their doctor to determine the correct dose (3). Zinc is needed for HCL production so be sure to check levels regularly (1). The two work in synergy.

Test 2.) HCL test. This is the test I made reference to earlier. Whether you burn or not you should not exceed 1400mgs. It could take anywhere from a month to a couple of years for your HCL levels to restore but stay with it. You NEED HCL to digest your food!!! (4)

Test 3.) This last test gets a little gross....it is the poop test. You guessed it; you need to evaluate your stool. What you will be checking for is the transit time for either corn or beets. The reason one chooses one of these options should be fairly obvious. When you eat corn or beets they have a way of showing back up later. What you will do is eat 3-5 cups of corn or 1-3 cups of beets at your evening meal. Note when the first and last sign of the item is in your stool. Normal transit would be between 8-20 hours approximately (4). If you have diarrhea but are not seriously ill (vomiting or a fever) use *Saccharomyces boulardi* three times a day until it is resolved. On the flip side, should you be constipated, a cocktail of Vitamin C 500-3000mg (this dose is actually taken three times a day), Aloe Vera 1-3 caps and Magnesium Glycinate (although any form would work) 300-1500mg. at bedtime will get things moving. They can be taken together or separately (4).

Remember your body's top priority is to remain healthy (1) . Seventy percent of your immunity is clustered around the gut (1). By keeping the gut healthy and immune system strong you will be well on your way to better health and better gains in the gym! By

giving the 4R's a go you will be getting the most out of your food and supplements and your body and bank account will both thank you.

## References

- 1.) Digestive Wellness: Completely Revised and Updated Third Edition by Elizabeth Lipski
- 2.) Ultrametabolism: The Simple Plan for Automatic Weight Loss by Mark, M.D. Hyman
- 3.) Correspondence with Dr. Eric Serrano
- 4.) Biosignature Level 2 Seminar with Dr. Suzanne Mack, Charles Poliquin and Mark Schauss
- 5.) Intestinal Toxicity and Inner Cleansing by Jeffery Bland