



In my last e-newsletter I wrote how problems with digestion and the digestive tract can accelerate aging and increase the risk of the degenerative diseases of aging. Here is a recap of my suggestions on how to minimize these risks:

### Mindful eating habits

- 1 Sit down and eat in a relaxed, happy setting.
- 2 Take the time to chew your food thoroughly before swallowing.
- 3 Eat smaller meals more frequently.
- 4 Rotate your protein sources – ideally you do not want to eat the same type of protein source more than every 3 to 4 days.
- 5 Drink liquids (preferably water) before or after a meal but not during – too much fluid intake can dilute your digestive chemicals making it harder to digest your protein foods.

### Digestive aids

- 6 Try a couple of tablespoons of lemon juice in warm water; or a couple of tablespoons of organic apple cider vinegar in room temperature water – and drink before your meals or sip with your meals to improve HCL acid secretion.
- 7 Take Betaine HCL acid capsules – 1 to 4 before each meal – instead of the lemon juice or apple cider vinegar.
- 8 Add digestive enzymes 15 to 20 minutes into the meal with food. If you forget you can always take them after you finish eating.

### Improve beneficial bacteria and get rid of yeast and candida

- 9 Taking probiotics at the end of your meal (not at the same time as the digestive enzymes) can help reduce inflammation and improve digestion.

**10** If you know that you have yeast or candida, take *sacchomyces boulardii* at the end of your meals (but not at the same time as the digestive enzymes).

### Test for your own digestive problems

You can determine which GI test package is appropriate for you by taking the GI quiz on my site at [http://www.schwarzbeinprinciple.com/pgs/testing/testing\\_overvw\\_gi.html](http://www.schwarzbeinprinciple.com/pgs/testing/testing_overvw_gi.html). The GI kit you receive will test for many different intestinal problems including insufficient digestive enzyme production, hidden food immune responses, ongoing GI inflammation, the health of your GI immune system and intestinal “bad bugs” (as opposed to the beneficial bacteria that your body requires for optimum health).

You can read the full text of past newsletters at <http://www.schwarzbeinprinciple.com/pgs/newsletters.html>

### INFLAMMATION AND ADRENAL GLAND BURNOUT – PART 2

This month’s newsletter focuses on how inflammation leads to adrenal gland burnout and why it is so important to work on digestive issues.

### Inflammation and Cortisol

Cortisol is a hormone made in the adrenal glands. It has many functions that are essential for life such as keeping your blood pressure and your blood sugar levels from getting too low. It also is extremely important in countering the inflammation reactions that occur in your body. Whenever there is an inflammatory response from infections, allergens, trauma or other causes, your body secretes cortisol to modulate the response. Without this counter anti-inflammatory response, the unchecked inflammation can destroy your tissues causing a lot more damage, disease and death.

In secreting cortisol, your body tries to protect itself from inflammatory damage but ironically high cortisol levels sustained over a long period of time, is also problematic. In fact, it creates the same type of tissue damage that inflammation does. The difference is that it takes longer for high cortisol levels to damage your tissues than for inflammation to damage them.

Initially you may not know that you are secreting higher levels of cortisol than normal because you feel very good when you do. This is due to the fact that cortisol is a hormone that tells your body to access and use up biochemicals. When you access biochemicals such as endorphins and neurotransmitters, life is good, colors are brighter, your body aches and pains disappear and mood is usually elevated.

Though higher cortisol levels make you feel good in the short term they can cause problems such as high cholesterol levels, high blood pressure, puffiness of face and hands, fat around your midsection, sleep disruption, irritability and/or insulin resistance if they stay too high over time.

### Besides inflammation some other causes of high cortisol include:

- 1 Skipping meals, low calorie intake, and/or high protein intake
- 2 Not enough sleep
- 3 Emotional stress, being too busy, pain and/or trauma
- 4 Too much caffeine and/or alcohol
- 5 Overexercising and/or cardiovascular exercises
- 6 Low estrogen conditions such as menopause and malnutrition
- 7 High progesterone states from birth control pills (BCP), pregnancy or taking progesterone without estrogen or using too much progesterone.

### Most likely your favorite foods are the ones you react to the most.

When you eat a food and don’t digest it, your immune system reacts to it by secreting inflammatory chemicals to attack the food. The endocrine system then joins in by secreting cortisol. The feeling you get when this happens is one of euphoria as high cortisol over a short period of time makes you feel really good. Any food eaten over and over again can cause an immune reaction leading to high cortisol levels that in the short term make us feel good. It becomes a vicious cycle—you eat a food, don’t digest it well, set up an inflammatory response, secrete cortisol, feel good and want more of the

same. This is how your “favorite” food becomes your favorite or how you can end up being addicted to certain foods.

## Bugs and inflammation

In the small intestine and colon there are about 3 pounds of “good” bacteria that live within us to help our body and immune system work better. These are known as the beneficial bacteria. They are part of a healthy gastrointestinal tract and since they are recognized by our immune system they do not cause an inflammatory response. In fact they do just the opposite because these beneficial bacteria protect your GI tract from becoming infected with “bad bugs”--foreign types of bacteria, fungi and parasites that you ingest from water or food-- as well as keep the small amounts of bad bugs that live within us from overgrowing and taking over the GI tract. If the number of these good bacteria is drastically reduced through antibiotics or poor nutrition we become more susceptible to being invaded by the bad bugs and when this happens our immune system attacks these foreign bad bugs, creating inflammation. These bad bugs set off the antiinflammatory/cortisol vicious response cycle. All of the degenerative diseases of aging have been linked to this response cycle.

You don't have to have severe symptoms such as diarrhea or cramping to have bad bugs. Most of these bad bugs cause long-term low-level inflammation that puts a 24/7 demand on the adrenal glands to constantly secrete higher levels of cortisol over years. Ironically, poor digestion can increase the risk of being infected with bad bugs because of the deleterious affect on your immune system. Your immune system is depleted by having to fight off and “kill” foods you don't digest. When you fight off a pseudo threat, you deplete your ability to combat a real threat, which leaves your GI tract exposed to these opportunistic infections.

Common bad bugs such as candida and bacterial overgrowth can be treated with natural herbs and changes in diet and lifestyle. Other not so common bugs such as H. Pylori and Blastocystis Hominis require antibiotic therapy. The only way to know what types and kinds of bugs you have and what to do about them is to do a stool test looking for these bugs.

## Cortisol and fat weight gain around your midsection

If you are having difficulty losing weight and you believe you are doing everything you should in order to do so, you may have high cortisol levels that are caused by an immune reaction to a “hidden” food allergy or to bad bugs in your intestines. The cause of your weight problem may be difficult to discover because high levels of cortisol produced in your fat cells are not easily detected by testing. Your adrenal hormone test results may come back looking normal so a “normal” salivary adrenal gland test or “normal” blood cortisol levels does not exclude an inflammatory type of fat weight gain from GI problems. The only way to know for sure if your inability to lose fat weight is being caused by inflammation is to do the GI testing recommend on my website. When the offending food and/or the bad bug is eliminated, you will be able to heal your metabolism and obtain your ideal body composition.

## Adrenal gland stress leads to adrenal gland burnout

The problem is that your body cannot sustain high cortisol levels forever. At one point, the adrenal glands get “burned out” from having to secrete high levels of cortisol over and over again. As you go through the phases of adrenal gland burnout – high levels down to very low levels – there are warning symptoms you can notice and address before it is too late.

As stated previously you feel really good in the early stages when cortisol levels are higher. As you enter the adrenal gland burnout stage and cortisol levels drop, you can get allergies, headaches, intestinal bloating, achy muscles and joints, sleep disturbances and high cholesterol levels. If you don't recognize these signs or why they occur, you can end up with even lower levels of cortisol causing asthma, migraines, irritable bowel, arthritis, hypoglycemia and an inability to sleep. Further progression of adrenal gland burnout leads to autoimmune disorders, weight issues, extreme fatigue, depression and worse yet you can end up with a degenerative disease of aging.

Ideally you want to recognize and fix adrenal issues before they lead to severe symptoms and diseases. One of the ways to do this is to test your GI tract for any “hidden” food reactions and bad bugs and address the

issues that this testing reveals. Also by following my 5-Step Program that includes recommendations to improve digestion, you can limit the amount of inflammation caused by poor eating habits and lifestyle habits and put less demand on your adrenal glands. The lower the demand on the adrenal glands the less likely they will burn out.

## In summary

Poor nutrition and lifestyle habits and problems with digestion can cause inflammation, high cortisol levels and bad bugs in the short term and adrenal gland burnout, tissue damage, diseases and earlier death in the long-term. You can be proactive and work on your habits but if you feel you may have poor digestion and/or bad bugs, you need to be tested and then follow the appropriate healing plan. If you already suspect you have adrenal gland burnout, you must heal your GI tract or you will never regain optimum adrenal gland function.

To your Gut Health and Happiness  
Diana L. Schwarzbein MD

## DR. SCHWARZBEIN'S - Latest Book

This book gives you an easy and practical application of the information Dr. Schwarzbein has presented in her first two books. You'll find easy to follow, week-by-week steps to implement the Schwarzbein Principle.

*Published January 2005*

