Inflammation promotes free radical production and free radicals damage and destroy cells and tissues.

2. Inflammation increases clotting factors that can clog arteries and cause low oxygen tissue damage. When the arteries going to your heart muscle clog, you end up with a heart attack!

3. When you produce inflammation, your body responds by releasing more cortisol – the anti-inflammatory hormone. You might recall from my books that cortisol is also an anti-insulin hormone and is one of the stress hormones of the body. When blood and/or fat tissue cortisol levels are high, you gain fat weight and destroy lean body proteins – bones, muscle, hair, skin, cells, nails, etc.

4. High cortisol levels block the action of insulin and you become more insulin resistant when your body is inflamed. This leads to weight gain around the midsection and diseases of insulin resistance such as gout, high blood pressure, type II diabetes, strokes, Alzheimer’s and heart attacks.

5. Years of inflammation can lead to arthritis, depression, fat weight gain around the middle, fatigue, loss of stamina, heartburn, constipation and many more symptoms and problems.

6. Inflammation can destroy the cells of different organs and you end up with autoimmune diseases such as type I diabetes, Hashimoto’s thyroiditis, Chron’s disease, lupus and rheumatoid arthritis.

7. Years of inflammation leads to the destruction of cells and tissues that causes all the different degenerative diseases of aging. The specific disease someone gets from inflammatory damage is dependent on their genetic weakness for repairing a specific tissue and/or organ. Some people destroy their pancreas before their heart arteries and end up with type II diabetes. For others it is the other way around and they end up with heart attacks and not diabetes. Neither is optimal and both can be prevented with healthy lifestyle habits that start with proper nutrition and digestion of food.

The immune system protects you against NON-Self

To understand inflammation, you must understand that your own immune system is what causes it. Your immune system is there to protect you against “non-self” proteins. “Non-self” proteins are found in: viruses, bacteria, fungus, parasites etc. You and bugs do not share the same proteins; therefore, in order to protect you from “non-self”, your immune system attacks all foreign proteins found on these non-self “bugs.” It’s also true that humans and food sources do not share the same proteins. Getting the picture? Food is NON-self; therefore, the body had to devise a way of changing the protein from food into a form that the body recognized as “self” or food would end up killing us. That is exactly what happened. We developed a very complex gastrointestinal tract (GI tract) to digest food proteins into amino acids. Since all proteins are made up of the same amino acids, when food proteins (non-self) are digested into amino acids, they become “self.” The goal is to eat a food protein and thoroughly digest it into its amino acid components to maintain a healthy and functioning GI tract and to prevent your own immune system from attacking the food and causing inflammation.

The digestive tract... here’s how it works:

- Digestion of proteins start in the mouth by chewing your food – this is mechanical digestion not enzyme digestion.
- The chewed food is swallowed and goes to the stomach where specific protein digestive enzymes and hydrochloric acid (both made and secreted by stomach cells) act upon the food to begin the process of protein digestion.
- The digested proteins become peptides and amino acids and enter into the small intestine where more enzymes (proteases) help to digest the peptides into the final amino acid products. (As previously stated, amino acids are recognized as self; therefore, no inflammation occurs, and the amino acids are absorbed through the intestinal wall and used to rebuild body proteins such as cells, bones, muscles, some hormones, enzymes, immune chemicals etc.)
- The goal is to fully digest the proteins you eat. This will keep you happy and healthy.
Poor digestion leads to disease

Unfortunately, you cannot always tell when your digestive system is not functioning correctly because you secrete cortisol when you have an immune response to undigested proteins and ironically cortisol can make you feel very good. At first this problem may not be self-evident. It is only when you wear out your cortisol response that you may experience some of the following problems:

- Heartburn
- Abdominal bloating
- Excessive burping or gas
- Loose bowels or constipation
- Headaches
- Arthritis
- Fatigue
- Muscle and/or joint aches and pains
- Weight gain around the midsection

If you are experiencing some or any of these problems, you may already have damaged your metabolism.

If you have an autoimmune disorder or any of the chronic degenerative diseases of aging such as type II diabetes, coronary artery disease, stroke, Alzheimer’s, or osteoporosis, there is always a component of digestive tract problems. In some cases, it is the digestive tract problem that caused the disease.

Aging and digestion:

In general, we all end up with digestive problems as we age because our bodies can no longer make enough HCL acid and/or digestive enzymes and we lose the ability to thoroughly digest the food proteins we eat. Our bodies are destroyed by the chronic inflammation that is created. This destroys cells and tissues causing us to age. It is a vicious cycle. It is normal to age this way but the good news is that you can always improve your digestion by mindful eating habits, taking digestive aids and improving beneficial bacteria in your intestines.

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 – the ideal is to not eat the same protein 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 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 you own digestive problems

11. You can test for specific digestion problems including insufficient digestive enzyme production, hidden food immune responses, ongoing GI inflammation and intestinal “bugs” by taking the GI quiz on my site at http://www.schwarzbeinprinciple.com/pdfs/testing/testing_overview_gi.html.

After taking the GI quiz, check your results. Package A, B, C, or D may be suggested for your specific outcome.