Metabolic Typing and Your Digestion

The purpose of our metabolic typing programs is to balance body chemistry and maximize metabolic efficiency by properly addressing metabolic individuality. It is our belief that the presence of any degenerative disease (85% - 90% of diseases afflicting our population) is due to the failure to do just that. Thus, one way or the other, all degenerative disease has its origin in malnutrition.

For us, the idea of malnutrition takes on an entirely different light when viewed through the perspective of metabolic typing and metabolic individuality. We know that *someone can eat the best organic foods and take the finest supplements that money can buy, yet still develop or fail to reverse degenerative disease*. Time and again we have seen that this can be due to the failure to meet one's genetically-based requirements for nutritional, biochemical individuality.

Digestion -- Prerequisite For Utilization

However, there is yet another component to the equation -- the efficient digestion (and absorption) of the nutrients we consume. Even if we eat the right kinds of foods for our metabolic types, it is still necessary to properly digest those foods in order to benefit from their nutritional value.

If the proper food for your metabolic type is eaten and the proper supplements are taken, that is one thing. It is quite another for that food and those nutrients to be absorbed into your body. In other words, just because a food goes down your esophagus, it does not mean that the nutrients will make it to your cells. First, digestion must prepare the food to enable it to penetrate the wall of your intestines. But if the food does not encounter the proper acid and enzymes, it will not digest and thereby will not absorb properly, potentially causing malnourishment, as well as making your body fertile ground for the development of infectious and degenerative diseases.

Normal digestion is a complex cascade of events beginning when food is placed in the mouth and ending with elimination about 24 hours later. Normal digestion requires thorough chewing, mixing of food with enzymes, efficient swallowing, followed by exposure to a large quantity of acid and enzyme in the stomach. About two hours later, the chyme (food in the process of digestion) is moved on to the small intestine where it is bathed in bile, bile salts and more enzymes. More absorption occurs, and the chyme is mixed with bacteria to aid in digestion.

Hypochlorhydria -- An "Epidemic"

There is a common, frequently undiagnosed and usually untreated condition known as hypochlorhydria. Hypochlorhydria is the underproduction of hydrochloric acid by the stomach. Hydrochloric acid (HCL) is responsible for three important functions:

1. It begins the breakdown of protein
2. In the presence of food, it activates an enzyme called "pepsin," which further breaks down protein
3. It is necessary for the breakdown and utilization of minerals, especially calcium.

For the most part, hypochlorhydria is a condition that is left undiagnosed and untreated. Years ago the only lab tests available were so difficult to administer that it was easier to rationalize not making the diagnosis and not treating the illness. This test involved shoving a tube down the esophagus and periodically suctioning out the stomach contents after a meal, so the acidity of

those contents could be measured. In the late 1960s, the Heidelberg test was developed. This elegant (but expensive) device involves swallowing a capsule about the size of a vitamin pill that can measure the stomach acid content. But this relatively simple ability to diagnose hypochlorhydria is infrequently used due to the mistaken belief by most practitioners that hypochlorhydria is not worth treating -- astonishing when sales of antacids, acid blockers and ulcer medications consistently top the list of drug sales.

The situation is further complexed by the fact that the symptoms of hypochlorhydria are similar to those of *hyper*chlorhydria. *Burping, belching, bloating, "heartburn," gas, sour stomach, undigested food in stool, a voracious appetite (due to cellular "starvation"), food sitting in stomach too long, slow digestion, inability to eat a large meal due to feeling full quickly, constipation, and diarrhea can all be due to insufficient HCL production.* Thus, many of those who have too *little* HCL production are treated as though they have too *much*.

When the stomach is deficient in HCL production, food eaten lies in the stomach and ferments leading to gas, burning and bloating. For those people, reaching for their Tums or Maalox is the *worst* thing that they can do since it only alleviates the burning symptoms but actually over the long haul just contributes to the real problem!

The Need For HCL

Stomach acid serves many important functions, not only in digestion, but also in keeping the body free from disease. Many bacteria enter the body with food. Some of them are not friendly to human life. In a normal stomach, these bacteria are doused with acid and die. In a person with hypochlorhydria, these bacteria are escorted into the small intestine along with a generous food supply. It has been shown that people with hypochlorhydria have more than their share of infections. The ever present yeast organism makes its entrance via the mouth. Many people with the so-called "yeast syndrome" are unable to get rid of their yeast because the organism continues to reinfect the body through the mouth.

Another important function of hydrochloric acid is the stimulation of pancreatic enzyme and bile release into the small intestine. Without enough pancreatic enzymes and bile, the digestion and absorption of carbohydrates, proteins, fats, and vitamins A and E, is severely compromised, inadvertently causing undernutrition even with an excellent diet.

The following conditions have been linked to hypochlorhydria:

- Acne rosacea
- Adrenal insufficiency
- Allergies
- Anemia
- Arthritis
- Asthma
- Autoimmune Diseases
- Celiac Disease
- Chronic fatigue
- Chronic hepatitis
- Diabetes mellitus
- Dry skin
- Gallbladder disease
- GERD - misdiagnosed acid reflux, but really hypochlorhydria
- Hypoglycemia
- Infections increased - parasitic, yeast, bacterial
- Lupus erythematosis
- Nail weaknesses
- Osteoporosis
- Poor night vision
- Psoriasis
- Rheumatic arthritis
- Stomach cancer risk increased
- Thyroid disorders
- Vitiligo

Along with a deficiency of HCL, the same cells (the parietal cells) which make HCL also make pepsinogen, which is converted to pepsin in an acid environment. Therefore, pepsin usually is also deficient and therefore also must be replaced along with HCL for best results.

HCL Supplementation

It has been our experience over the last 25 years that most people who come to us for help are deficient in HCL (as well as enzymes). This is why all of our programs recommend HCL and digestive enzymes as a matter of course.

What we can't determine, however, is how much should be taken. This is where you as a Metabolic Typing Advisor come in. Here's what you should do:

1. Educate your client as to the importance of HCL in their digestion and overall health
2. Inform them of the specific symptoms that may suggest HCL deficiency
3. Encourage them to find their own optimum tolerance level for HCL supplementation.

Here's how:

In general, we recommend that someone start out with 1 HCL with each meal. [Take HCL before or right at the start of the meal.) After 3 days, if this produces no burning or worsening of existing burning symptoms in the stomach, increase to 2 HCL with each meal. Again wait 3 days and if no burning is present, increase to 3 with each meal, continuing in this fashion until 5 with each meal is reached, if necessary.

If at any time a burning sensation in the stomach ensues, drop back down to the previous intake. In other words, if 4 with each meal produces no burning, but 5 with each meal does, drop down to 4 with each meal. Then, stay at that level until at some point burning commences at which time you should drop down one more.

For example, were you to work up to 5 HCL and 5 produces burning, you would drop back to and hold at 4. Then when 4 produces burning, drop down to 3. When 3 produces burning, drop down to 2. Continue in this manner until no HCL is required. When even 1 HCL produces burning, this likely will mean that the body is now producing sufficient levels of its own HCL and substitution is no longer needed.

Some "experts" believe that supplementing with HCL will weaken even further the body's ability to produce its own HCL. Although this may be true for someone not following a proper metabolic typing program, our experience has been just the opposite. By eating the right foods for your metabolic type AND by assuring efficient digestion and absorption of those nutrients, the stomach's inherent ability to produce sufficient HCL can be restored (along with all other metabolic functions). Degenerative processes can be reversed into regenerative processes. Here's how the negative spiral of degeneration works:

- If you don't eat the right foods for your metabolic type, the body loses its efficiencies (e.g., digestive efficiency) over time, little by little
- As digestion worsens, fewer and fewer nutrients are absorbed
- As less nutrients are absorbed, digestive efficiency weakens further
- Etc. (The cycle keeps feeding on itself, going ever deeper into degeneration)

Health-building processes of *re*generation work exactly in reverse. Ingesting, *digesting*, absorbing, and utilizing foods *right for your metabolic type* will balance body chemistry, rebuild organs and glands, and maximize metabolic efficiency over time.

Enzyme Supplementation

In general, the same principles that apply to working with HCL apply to working with the digestive enzymes. The digestive enzymes (Enzigest) used in our programs are plant-based. As such, they have a much wider pH range of utilization than animal-based products. As a result, they are highly effective for a wider range of individuals.

In order to be active, enzymes will only function within a certain pH range. For example, animal-based enzymes like pancreatin are only active in a pH range of about 7.5 - 9.0. But our plant-based formulas are active between 3.0 - 9.0. This means they are extremely effective digestive aids, even for those individuals who have very altered pH in their digestive tracts.

Once you have determined the proper amount of HCL supplementation, then add in the Enzigest to the program. Minimum intake is 1 with each meal. One could take up to 6 with a meal but that is rarely necessary. Use anywhere from 1 - 6 with each meal as needed to assure maximum digestion. Use the same traits listed above for digestive insufficiency as your guide and also include *intestinal gas* in your list.

Enzymes Info

The “de-naturalization” effects from modern food-processing techniques often result in the depletion of the nutrient value and vitality of our food. One important factor which may be destroyed in processing as well as in improper food preparation is *enzymes*. Enzymes are substances which make life possible and which are found in natural, “live” foods and also in your body. Enzymes are the
“work force” of the body. Without them, chemical reactions cannot take place, and hormones, minerals, and vitamins cannot carry out their functions. There are believed to be hundreds of thousands of enzymes in the body; different enzymes perform different functions. Without them, life cannot exist. Although the voluminous extent of their activity is beyond the scope of this guide, some activities of enzymes are:

- Digest food to a size capable of being absorbed into the blood
- Rebuild food into tissue of muscle, bone, organs, glands, etc.
- Work to store food in the liver and muscles for fuel later on
- Coagulate blood
- Attach iron to red blood cells
- Eliminate carbon dioxide from the lungs
- Promote oxidation
- Attack waste material in the blood and prepare it for elimination
- Change protein into sugar or fat
- Change carbohydrate into fat
- Change fat into carbohydrate

You can have all the raw materials necessary for good health – vitamins, minerals, intrinsic factors, proteins, carbohydrates, fats, amino acids, etc. – but enzymes are necessary in order for your body to *utilize* all the raw materials in its life-supporting activities of metabolism.

At birth, we acquire a limited supply of enzymes. Throughout our lifetime, as enzymes perform their function, they are destroyed and eliminated from the body. *It is vital to your health and longevity that your enzymes be replenished in the body from your diet and that your diet provide a sufficient source of enzymes.* [Note: Read Food Enzymes, by Edward Howell.]

The critical role of enzymes in the maintenance of health and well-being was dramatically demonstrated in an experiment now known as “The Pottenger Cat Studies,” which was performed by Francis Pottenger, M.D., in 1946.

For ten years, Dr. Pottenger studied two groups of cats who lived in outdoor pens which were placed side by side. At the beginning of the experiment, the two groups were as identical in health and characteristics as possible. During the course of the entire experiment, one group was fed exclusively cooked food; the other group was fed only raw food. Although the foods given the two groups were identical in kind and amount, the cooked food was devoid of enzymes (enzymes are totally destroyed at 220 degrees).

Throughout the entire experiment, the group fed the raw food remained healthy and normal in all respects. The group fed the enzyme-deficient cooked food was a different story altogether. They developed all manner of degenerative conditions which affected their physiologies as well as their behavior. Their coats lost their luster; their bone structures developed deformities; their behavior became hyperactive, aggressive and wild. And by the 7th generation, they had lost the capacity to reproduce. As an interesting sidelight, the vegetation which grew in the pen of the raw food-fed cats was healthy and profuse. The vegetation in the pen of the cooked food-fed cats was sparse and unhealthy in appearance. This was due to the lack of enzymes in their feces which failed to fertilize the soil, unlike that of the enzyme-rich feces of the other group who existed on the enzyme-rich raw food diet.

Be Enzyme Rich

Unfortunately, all too many people eat a diet which is not only high in unnatural, chemicalized, processed and nutrient depleted food, but they also eat a large percentage of cooked food which has totally destroyed the enzyme content. As a result, the body is forced to use its own enzymes to help digest the food that might otherwise be used in rebuilding bodily tissue or in other important metabolic activities. This enzyme shortage may contribute significantly to metabolic imbalance, inefficiency and degeneration. Many researchers also believe this to be a contributing factor in premature aging and obesity. Raw food contains enzymes which may help replenish your body's enzyme pools as well as to actually help in the digestion of your food. Because it is very difficult to make up enzyme depletions exclusively from food sources, enzyme supplementation is a vital part of your Healthexcel Program.
As an integral part of your health-building program then, it is important to:

- *Select whole, natural food whenever possible,* and
- *Prepare food properly in order to:*
  1. Eliminate any toxic substances
  2. Acquire the maximum nutrient value

Metabolic Types and Digestion

Typically, differences do exist in "normal" digestive capacity between metabolic types. The digestive functions are dependent on and influenced by autonomic, endocrine and nutrient balances. In general, the parasympathetic system "turns on" digestive organs and secretions and the sympathetic system shuts them off. Potassium is needed for HCL production. Thus, parasympathetics and fast oxidizers (both high in potassium) tend to have higher HCL and enzyme production, while sympathetics and slow oxidizers tend toward less production of digestive secretions. Blood Type O's also have higher HCL production and Blood Type A's tend to have lower production.

Although these facts are true in principle, in practice each case must be individually considered. Remember that within any metabolic type, there can exist good or poor efficiency. For example, even though one's overall style of functioning may be accurately classified as Parasympathetic Dominant, it is still possible that inefficiency can exist in a localized function, even in HCL production. Therefore, in clinical practice it is best to *assume nothing.* The infinite variability expressed through human metabolic individuality will fool you more often than not. It is better to just follow the practical steps given above to determine each person's tolerance level and work from there.

Conclusion

Bottom line? . . . ***Maximize digestive capacity to maximize rate of progress and benefits of any metabolic typing program.*** If necessary, HCL can also be taken after a particularly heavy meal. And additional Enzigest can be taken anytime, even between meals, away from food. Taking a few Enzigest before bed is a great way to assure complete digestion of the day's food intake. As the saying goes, "It all starts with digestion." So, optimize the use of Healthexcel's incomparable metabolic type digestive aid formulations in your practice and see the difference both in yourself and your clients.