

GASTROINTESTINAL SYSTEM

(Part 2)

by Ronald L. Myers, CNC

In this issue we will continue our way *south* in treating the G.I. system. In the last issue we began by evaluating the HCl producing potential of the stomach and providing necessary nutrients (including pure water) to facilitate this production, if needed; or in many cases providing the necessary, inexpensive end product—HCl.

THE SMALL INTESTINE

After the food has been acted on in the acid medium of the stomach, it passes through the pyloric cap into the small intestine. Upon passing through the pyloric valve, hormonal messengers are released to stop the production of hydrochloric acid (enterogasterone) and to initiate the release of pancreatic enzymes (secretin) and bile (cholecystokinin) into the small intestine. In order for these hormonal messengers to be correctly released, the pH of the food entering through the pyloric valve must be 3.0 or less. You can now see why if the hydrochloric acid content of the stomach is not sufficient enough to completely acidify the food, the ability of the gall bladder and pancreas to neutralize the food (pancreatic enzymes and bile have a pH of about 8.0), are significantly reduced. The result is a significant reduction in the amount of nutrients that are able to be correctly absorbed across the small intestine barrier. The food (which is still acid) then creates inflammation in the small intestine, which results in any number of different problems such as allergy, colitis, etc.

The pancreas is further taxed in its ability to produce enzymes by the ingestion of excess amounts of refined carbohydrates (they lack the trace elements and enzymes required to produce pancreatic enzymes).

The ability of the liver to produce bile, which is stored in the gallbladder, is reduced by excess hydrogenated fats, cooked foods, refined foods in general and xenobiotics that reduce or compromise the ability of the liver to detoxify.

COMMON SUBJECTIVE INDICATORS OF GALLBLADDER DYSFUNCTION

- Inability to tolerate greasy foods
- Pain between the shoulder blades
- Stools that are grey or light colored rather than brown (bile insufficiency)
- Headaches over the eyes
- Tenderness in the web between the right thumb and fore finger
- Bitter or metallic taste in the mouth
- Bloating after meals, may occur up to 3 hours after meals

COMMON SUBJECTIVE INDICATORS OF PANCREATIC DYSFUNCTION

- Inability to tolerate fruits or vegetables, especially lettuce
- Particles of undigested vegetables seen in the stool
- Inability tolerate sweets

LABORATORY INDICATORS OF BILIARY OR PANCREATIC DYSFUNCTION

Increased GGT, SGOT, SGPT or Alkaline Phosphatase (ALP). If the GGT is increased above the SGPT and SGOT level, the problem almost always involves dysfunction in the biliary tree (gallbladder, pancreas, common bile duct).

An increase of alpha 2 and beta globulins (as seen on SPE) in conjunction with a normal alpha 1 and gamma globulin is indicative of gallbladder disease. Also, if another peak is noted between alpha 2 and beta globulin, this additional peak (often called alpha 3) can be indicative of gallbladder disease.

An increase or decrease in pancreatic enzymes (lipase or amylase) is seen with pancreatic dysfunction. An increase of trypsin on a stool analysis is indicative of transit time that is too fast (hypermotility).

SILVER BULLETS FOR THE USE OF BILIARY AND PANCREATIC SUPPORT

Use **Beta-TCP** if the stools are not light colored and if the gall bladder has not been removed. If the gall bladder has been removed or the stools are light colored (indicating a need for additional bile), use **Beta-Plus**.

In any case where **Livotrit-Plus** or **MCS (Metabolic Clearing Support)** are used, **always** use **Beta-TCP** or **Beta-Plus** in conjunction with these two products. The use of **MCS** or **Livotrit-Plus** will result in increased release of toxins from the liver and increased Phase II detoxification in the liver. If the bile is not sufficient or of the right consistency to remove the toxins, the toxins will be reabsorbed in the small intestine with a resulting increase in the patients symptoms.

With pancreatic dysfunction, pancreatic support in the form of **Cytozyme PAN** and **Bio-6-Plus** should be used to support pancreatic function. **Intenzyme Forte** and **IPS** should be used to control and resolve both pancreatic and small intestine inflammation, which are almost always present with pancreatic dysfunction. **NOTE:** Many companies advertise that their trypsin/chymotrypsin containing products are very active. To make this determination for yourself, simply crush 2-3 tablets and place the crushed tablets in a shot glass full of milk. If the enzymes are active, they will curdle the milk, if not, the activity of the enzymes are questionable.

With both biliary and pancreatic dysfunction, a low residue diet should be used.

With both biliary and pancreatic dysfunction, all fried foods, hydrogenated fats and oils and refined carbohydrates should be eliminated from the diet. With pancreatic problems, red meat, raw vegetables and raw fruit (including fruit juice), should be restricted until the problem is controlled. With severe pancreatitis, hospitalization and I.V. feeding is sometimes required to resolve the problem.

THE LARGE INTESTINE

Problems occurring in the large intestine are often a result of a problem above the large intestine. For example, if the amount of hydrochloric acid is not sufficient to correctly acidify the food, it follows that the ability of the pancreas (enzymes) and liver (bile) to neutralize the acidity of the food will be compromised. The food that then passes into the large intestine has a lower pH than is normal. This results in bacterial imbalance in the colon and bacteria that are normally symbiotic become antagonistic to one another. Bacteria and yeast such as E. coli, candida, moniliasis, etc., are then allowed to proliferate with resulting dysbiosis. **Remember, with any digestive problem; always look at the problem from north to south. Often the problem that is manifesting itself in symptoms related to the colon (gas, diarrhea, constipation, etc.), are symptoms that are generated by a problem above (north) of the colon or small intestine (that is the stomach).**

Normal pH of the colon should be slightly acidic, optimally around a pH of 6.8; therefore, stool pH should be checked to give you a starting point on where to begin your therapy.

In any colon problem that does not begin to resolve after 10-14 days of supplemental and dietary support, a comprehensive stool and digestive analysis should be ordered.

SUPPLEMENTAL/DIETARY SUPPORT FOR COLON DYSFUNCTION

Insure that the patient drinks eight (8) full glasses of *pure* water daily (water containing fluoride and chlorine and well water are not considered pure).

If the patient is constipated consider the following: **MG-Zyme** – 4 tablets at bedtime, increasing by 1 tablet each night to bowel tolerance, **Colon Plus Capsules** – 4 capsules with each meal. One-half of a small white potato (sliced and salted with sea salt) at bedtime.

If the patient has diarrhea consider the following: **Bentonite** – 4 tablets just before each meal, **Colon Plus Capsules** – 4 capsules with each meal and **IPS** – 2 capsules with each meal.

Clinical experience has shown that dairy products (casein) and wheat (gluten) are the two food substances most detrimental to patients with either constipation or diarrhea.

Always rule out primary thyroid hypofunction or thyroid hypofunction secondary to anterior pituitary hypofunction with constipation.

GENERAL INFORMATION ON DIGESTIVE FUNCTION

Fructo-oligosaccharides (FOS) provides essential nutrients for gut microflora. FOS is contained in **IPS** (Jerusalem Artichoke). FOS will facilitate the production of Lactobacillus acidophilus and Bifidobacterium in the colon. If the patient has Klebsiella, FOS (**IPS** and **Biodophilus FOS**) should not be used because FOS will increase the growth rate of this potential pathogen.

The sulfur bearing amino acid glutamine is a primary energy source for the small intestine. Glutamine is a component of **IPS**.

Glucosamine sulfate acts as a precursor in the biosynthesis of mucosal glycoproteins, which form the intestinal glycocalyx (the most superficial, highly viscous layer of the gut). Glucosamine in the sulfate form is a component of **IPS**.

Sulfur bearing amino acids (methionine, taurine and cysteine) are most important to Phase II detoxification in the liver. These amino acids are components of **MCS**.

To increase Phase I detoxification in the liver consider **ADHS**. To increase Phase I liver detoxification, consider grapefruit juice. Remember, if the patient is on a prescribed drug, increasing Phase I detoxification will often result in the patient being required to use more of the drug (the drug will clear the system faster).

For every case of digestive dysfunction where the colon or small intestine is found to be the major problem, you will find 10 times as many cases where the locus to the problem is the stomach (insufficient hydrochloric acid production).

With nutritional therapy, ALWAYS begin with the G.I. system. Treat the G.I. system from north to south; support south as needed while correcting the *cause* north.

Many thanks to Harry O. Eidenier, Jr., Ph.D, N.M.D. for his generous contributions to this issue of eBytes.

**Available from Viotron International, Ltd.
(800) 437-1298**