Rationale For Colex™

A healthy digestive tract is a vital link between nutrition and optimal health, since it is responsible for making the most of the foods we eat. The thorough breakdown of food, the efficient absorption of valuable nutrients, and the prompt transport of wastes and toxins out of the body are all important digestive functions.

Fiber

Fiber is having a major nutritional impact on the dietary habits and health of Americans and can no longer be seen as a fad. With new interest in fiber has come new promise of protection against colon/rectal cancers, heart disease, diverticulosis, constipation, obesity, gallbladder disease, and diabetes. To those who embrace the relationship between whole foods and sound health, this is exciting news.

COLEX™
Nutrient Support Formula
W Y S O N G

PURPOSE:
To supply natural nutrients to support the health of the intestinal tract and its anti-pathogenic, anti-parasitic and anti-toxic capabilities.

INGREDIENTS:
Natural Phytonutrient Extracts and Concentrates of Apple Fiber, Oat Fiber, Dried Plums, Pea Fiber, Psyllium Seed, Sea Plankton, Modified Plant Fiber, Flax Seeds, Cascara Sagrada Bark, Gentian Root, Aloe, Ginger Root, Licorice Root, Rhubarb Root, Irish Moss, Black Walnut Bark, Butternut Bark; Mannanoligosaccharides, Fructo-oligosaccharides, Naturally Chelated Trace Minerals, Activated Charcoal, Wysong Oxherphol-D™ Antioxidant, Amylase, Protease, Lipase, Cellulase, Lactobacillus acidophilus, Lactobacillus bifidus, and Enterococcus faecium.

- Contains no additives -

DIRECTIONS:
Suggested Dosage: Begin with 2-4 capsules 3 times daily with meals. After two days increase dose to 6-8 capsules three times until bottle is finished. Gradually change the diet to natural, whole, raw foods and be sure to increase consumption of water (4-10 glasses of pure water daily) while taking Colex™. For best results, Colex should be used as a part of the Wysong Optimal Health Program™.

For long-term usage discontinue dose two days out of every week and five successive days every month to decrease the potential for intolerance developing.

In the early 1970's, epidemiological studies pointed out a noteworthy correlation between health and the high fiber diet of rural Africans. It was postulated that dietary fiber may play a protective role in diverticular disease, heart disease, obesity, gallbladder disease, and peptic ulcers – ailments virtually unheard of among African villagers. Theory suggested that the native, unrefined high-fiber diet (30-50 g/day) was the link to good health. Conversely, in Western countries where such diseases are common, it was suspected that a relatively low-fiber (5-10 g/day), more processed diet typical of urban areas played a significant role in the deterioration of "civilized" health.

The modern Western diet contains only 20% of the dietary fiber present in diets of 100 years ago. Over the last 100 years in the U.S., there has been an increase in the incidence of constipation, diverticular disease, appendicitis, hemorrhoids, coronary heart disease, and colon cancer. For significant segments of our population, consumption of whole grains, vegetables, legumes, etc. is so low that the leading source of dietary fiber is white bread — a pitiful fiber source (white flour contains only 8% of the fiber found in whole wheat flour).

Fiber Types

Fiber from plant sources can be classified into two basic categories – insoluble and soluble fibers. Soluble fiber sources readily mix with water to form viscous or gel-like texture. Examples of soluble fiber include pectin, gums, mucilages, and some types of hemicellulose. Tougher, more fibrous insoluble fibers include cellulose, lignin, and some types of hemicellulose. By definition, fibers are those components of food that are resistant to the enzymes of the human digestive tract. Fiber

gives strength and stability to plant cell walls and provides overall plant structure. We recognize fiber as the crunch of an apple, the bulk in salads, the chewiness of whole-meal bread, and the viscosity of pea soup.

Nature provides ample sources of fiber in whole, raw foods ranging from grains to prunes. Such natural plant foods contain a mixture of both soluble and insoluble fibers which can perform different useful functions within the body.

A healthful balance of both soluble and insoluble fibers results in the prompt transportation of toxins and carcinogens out of the digestive system. Insoluble fibers alleviate constipation and speed digestion time, which is helpful in colon cancer prevention. Soluble fibers, on the other hand, seem to be more effective in the treatment or prevention of a greater diversity of health-related complications such as elevated serum cholesterol and lipids, obesity, and diabetes.

Therapeutic Effects of Fiber

Fiber helps prevent the formation of stools which are difficult to pass and reduces luminal pressure. Cultures who regularly consume unrefined high-fiber foods rarely suffer from intestinal disorders of Westernized cultures.

Fiber is not easily digested by the body's digestive secretions, fiber enters the large intestine essentially intact. In the large intestine, water is drawn into and confined within the spongy matrix structure fiber provides. The hydrophilic (water loving) nature of fiber assists in the development of a bulkier, softer stool and its swift passage through the body. Fiber's ability to stimulate the smooth, efficient working of the bowel makes it an excellent natural laxative.

For a nation that spends $500 million on literally hundreds of over-the-counter laxative products – many of which can cause cramps, diarrhea, and excessive fluid and mineral loss – natural fiber is an excellent way to gently coax the return of digestive rhythms. Many laxative drugs on the other hand act as stimulants to the colon which, with repeated use, can eventually impair the colon's ability to act on its own. Furthermore, most laxative products produce a watery, less controlled stool.

Diverticulosis

A diet low in fiber results in small, hardened stools which, when propelled along the colon, create an increased pressure in the lumen of the colon. This pressure can cause areas of weakness in the colon to bulge, creating small outpouchings with no apparent symptoms. These outpouchings, or diverticuli, are highly prone to infection, – a condition known as diverticulosis. Diverticular disease is characterized by widespread abdominal pain, irregular bowel habits, and nausea. In progressed cases, when diverticuli break open, massive colonic bleeding may ensue requiring surgery. It is a well established fact that the middle-aged and elderly of Westernized countries are especially susceptible to colonic diverticular complications.

Appendicitis

Small, hardened fecal matter resulting from low fiber diets can obstruct the opening of the appendix and cause impaction. As with diverticuli that house impacted fecal matter, serious infection can occur within the appendix. The incidence of appendicitis also appears to be greatest in modern, developed countries where dietary fiber intake is low.

Irritable Bowel Syndrome

Another condition that may be related to fiber intake is the "irritable bowel syndrome," perhaps the most common affliction encountered by the gastroenterologist. Abdominal aching, and alternating periods of constipation and diarrhea characterize it. Added fiber bulk expands the radius of the colon and encourages the colonic musculature to function smoothly and rhythmically.

Obesity

Obesity is often referred to as America's number one health problem and is extremely rare in populations where unrefined diets, complete with natural fiber, are regularly consumed. Many high-fiber foods, namely fruits and vegetables, are naturally low in calories. Fiber itself yields few if any calories (these calories being the result of fatty acids produced by fiber's interaction with gut bacteria).

Because fiber readily absorbs water, which tends to increase the viscosity of stomach contents, one is likely to feel full faster. With a consequent increase of stomach distention, dietary fiber also helps to slow down the process of gastric emptying. This slower emptying keeps one feeling full longer. In addition, the extra time needed to chew most fibrous foods slows down the overall process of eating. The slower one eats, the more time is apportioned for signals of satiety to reach the brain, to serve as a natural warning against overeating. Finally, since fiber-rich foods take less time to pass through the digestive tract, it is possible that not every calorie is absorbed in the small intestine but rather some may be excreted with the feces.

Diabetes

A positive relationship appears to exist between adequate fiber intake and the control of blood sugar. Some doctors have seen dramatically reduced diabetic insulin need through the use of high-fiber diets. Soluble fibers, particularly pectin, have demonstrated to be the most effective fiber types for

reducing the glycemia curve (rate at which insulin rises after a meal) and insulin response. Because pectin has an especially high affinity for water, it has been suggested that its ability to reduce the rate of sugar absorption may be due to the dispersion of nutrients within the watery gel matrix formed by these fibers. When carbohydrates are consumed along with fiber, blood sugar levels do not rise as high as when carbohydrates are consumed without fiber.

Heart Disease

A high serum cholesterol concentration relates to increased risk of coronary heart disease. Certain fibers have been shown to have substantial hypocholesterolemic preventing effects.

It is especially important to distinguish fiber type. Cholesterol lowering properties appear to be related to the water-soluble fibers. Bile salts, synthesized from body stores of cholesterol, are found in the digestive fluids secreted by the liver and gallbladder and play an integral role in fat digestion. After bile salts are used to digest food, they are normally reabsorbed into the body. When in the gut, certain types of soluble fiber, such as pectin, bind bile salts. When bound, bile salts cannot be reabsorbed; they are excreted through the feces. This means that cholesterol must then be taken from the serum to make new bile salts to replace those excreted. The more this cycle is repeated, the lower the serum cholesterol.

Colon Cancer

Physicians diagnose 90,000 cases of colon cancer every year; the disease kills some 60,000 people annually. Only half of those diagnosed live five or more years after diagnosis. Needless to say, any dietary measure that may reduce the risk of the disease is deserving of attention.

Colon cancer is thought to be triggered by the presence of carcinogens in the digestive tract. These carcinogens, such as nitrosamines and phenols, are generated when colonic bacteria act on dietary components, namely bile acids. Bile acids can be absorbed into fiber and passed out in the stool before intestinal bacteria are allowed to form concentrated carcinogens. Fiber's proven ability to shorten transit time translates into minimum exposure of the colon mucosa to suspected carcinogens. Because fiber builds a more bulky, fluid retentive, sponge-like stool, cancer-inducing chemicals can in effect be washed out of the digestive tract. Those fibers that decrease transit time, dilute colon contents, and increase stool bulk tend to reduce tumor formation.

Colex Fiber Spectrum

To reap the full benefits of fiber, one cannot eat only one type of fibrous food. In other words, sprinkling bran here and there will not do the trick. A variety of fruits and vegetables should become an increasing proportion of the diet. It is important to realize what different fiber types can do for the body.

Oat bran has been shown to reduce serum cholesterol levels an average of 14% over a ten day span in hypercholesterolemic males, while beneficial HDL (high-density lipoproteins related to decreased risk) levels remains unchanged. The ratio of oat's soluble dietary fiber to total dietary fiber is higher than many other less easily tolerated commercial fibers such as wheat bran. Thirty percent of oat's fiber is soluble hemicellulose.

Colex's apple fiber is comprised of whole apples which contain fibers of cellulose, hemicellulose, lignin, and pectin, with pectin being the apple's standout fiber. Pectin is the most widely studied fiber in relation to serum cholesterol reduction. It has proven its worth in this regard in numerous documented studies. Pectin is also especially effective in reducing blood glucose levels. It has a remarkable capacity to absorb water, form gels easily, and increase enzyme secretion.

Peas are an extremely rich multi-fiber source containing up to 93% total dietary fiber. Soluble hemicellulose and insoluble cellulose, among others, are primary pea fibers. Pea fiber is often used in bread products to raise dietary fiber levels to the equivalent fiber content of 100% whole wheat products.

Cellulose is the primary fiber matrix of plants. Methylation allows cellulose to form a "gum" that is non-fermentable in the digestive tract (will not produce gas) and absorbs water into the large intestine, thus stimulating the bowel to form a soft, bulky stool, which prevents "straining." It has also been shown to be useful in lowering LDL (low-density lipoproteins correlated to heart disease) cholesterol in patients with mild to moderate hypercholesterolemia.

Colex's psyllium seed husks yield bulk forming, insoluble fiber which speeds gastrointestinal transit time. In addition, psyllium contributes further high gel-forming, water holding properties.

Ground flax seed provides high gum mucilage, which makes flax seeds one of the best known natural laxatives. The soluble fibers of flax seed soothe, moisten, and protect intestinal mucosa, buffer excess acid, help prevent flatulence and stool odor, and sweeten breath. In addition, flax fiber stabilizes blood glucose levels and lowers serum cholesterol. Flax seed contains all

major, most minor, and some trace minerals, vitamins A, E, D, B_1, B_2, and C, along with various proteins and essential fatty acid-rich oils.

Colex Minerals

Mineral-deficient diets are discouragingly common in modern societies. Three factors have contributed to widespread mineral deficiency. Industrialized farming makes a practice of growing crops year after year on soil without replacing the dozens of trace minerals lost to absorption and incorporation into plants. Only nitrogen, phosphorous, and potassium (NPK) are replaced, which may improve yield but not replenish exhausted earth. The commercial produce we consume does not contain the valuable minerals as they otherwise would naturally be found in mineral-rich soil.

Also, minerals are invariably lost through milling, heating, leaching, and oxidation. Chelated minerals, those bound to proteins and carbohydrates of natural foods are the kind most readily absorbed by the body, and are lost during the above mentioned rigorous processing methods.

Further complicating an already compromised mineral intake in the average diet is the increased use of certain fiber supplements such as bran, during food processing. Mineral-deficient fiber is added back into nutrient-depleted, processed food. Some of these fiber supplements are particularly rich in phytic acid, a hexaphosphate form of myo-inositol. Phytic acid binds valuable divalent cations such as the minerals calcium, magnesium, and zinc thereby preventing their absorption and use by the body. Therefore, even though fiber supplementation may be done with the best of intentions, the result compromises the benefits of fiber, and compounds the problem of mineral deficiency.

An effective solution to mineral deficiency is to increase the consumption of whole, natural foods and to decrease the consumption of processed foods and fast foods. One should also beware of phytic acid in fiber supplements which leaches additional minerals from the body. Naturally chelated trace minerals are added to Colex.

Colex Phytonutrients

The spectrum of herbs used in Colex not only gently stimulate regularity, but provide important phyto (plant-based) nutrients, which contribute vitaminic effects to the digestive tract.

Colex Organic Sulfur

Methylated organic sulfur (sulfonyl - MSM) is one of the most abundant chemical complexes in the body. It is supplied in abundance in fresh, natural, raw foods, but is readily destroyed or dissipated by food processing. MSM in Colex supports the health of the digestive tract mucosa and provides important protection against pathogens and parasites.

Colex Adsorbers

Activated charcoal and desiccated sea plankton provide an enormous surface area for toxin adsorption as well as increasing the efficiency of nutrient uptake. One teaspoon of these natural materials has the surface area of a football field.

Additionally these compounds desiccate the outer membranes of parasites, helping in their explusion.

Colex Antioxidant

Wysong Oxherphol™ is a natural antioxidant complex consisting of vitamins, herbal oleoresins, organic acids and natural chelators. Oxherphol helps prevent the production of oxidative free radicals within the digestive tract food matrix. It thus spares the intestinal mucosa from consequent damage and helps prevent absorption of oxidation products into the blood stream.

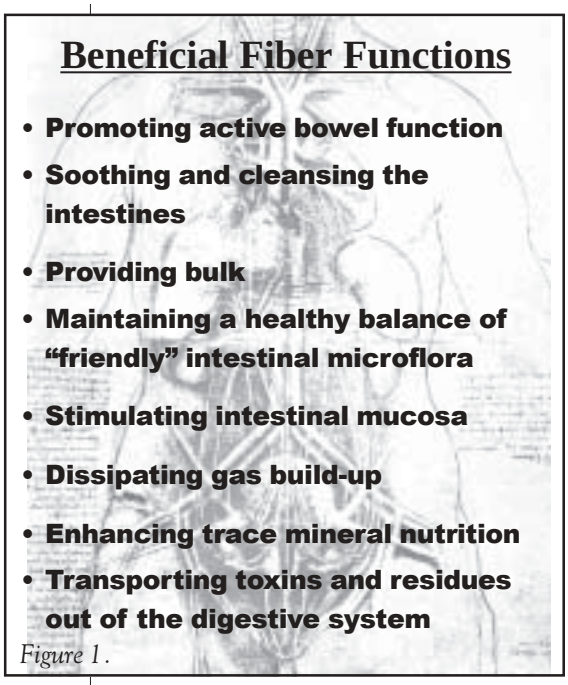

Figure 1.

Probiotics and Oligosaccharides

Intestinal/colon health is inextricably linked to the kinds of microorganisms predominating within the gastrointestinal tract. Friendly probiotic organisms can synthesize vitamins, detoxify, produce enzymes to enhance digestion, promote regularity and destroy or inhibit disease-causing organisms.

Colex contains a spectrum of probiotic organisms to shift the balance away from disease promoting organisms. Additionally, special short chain carbohydrates called mannanoligosaccharides and fructooligosaccharides in Colex provide the fuel these organisms thrive on to flourish in the digestive tract (swee Probiotics monograph).

Using Colex

Colex is intended for periodic use to assist in the gentle elimination of residue, parasites and toxins from the gastrointestinal tract as well as to coax the

return of normal bowel rhythms. A gradual, progressive intake of Colex is especially prudent since individual tolerances vary. A sudden, excessive intake may lead to intestinal gas, bloating, cramps, and diarrhea in some – while others may experience less distressing side effects.

When taking Colex follow label directions, gradually change the diet to natural whole raw foods, follow the guidelines offered in the Wysong Optimal Health Program, and be sure to increase consumption of water to 4-10 glasses of pure water daily.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

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