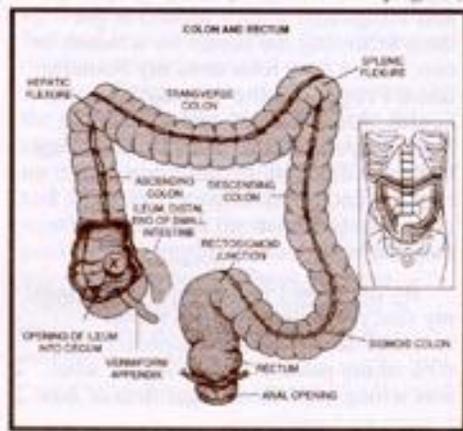


## CERTIFIED ADVANCED HERBALISM COURSE - SESSION 15: The Intestinal System

The intestinal system eliminates solid waste products from the body and reabsorbs water. It is composed of the colon (also known as the large intestine or lower bowel) and the rectum.



When the colon cannot function properly, an accumulation of toxins can build up in the lymph system, the bloodstream and the intestines. This can lead to a myriad of intestinal concerns, including colitis, constipation, hemorrhoids, diverticulitis, Crohn's disease and irritable bowel syndrome. Other intestinal system concerns include diarrhea and dehydration.

### Examining the Intestinal System

The intestinal system focuses almost exclusively on the colon. The high fat, low-fiber diet common to most Americans wreaks havoc on this organ.

### The Role of the Colon

The main functions of the colon are the elimination of waste and the reabsorption of water. The colon is the primary organ for eliminating cellular waste and digestive waste byproducts. A healthy, well-functioning colon is essential for good digestion and the proper absorption of nutrients.

The colon extracts water and sends it back into the bloodstream. This is vital because the body needs a great deal of water to be able to create and secrete two gallons of digestive fluids every day.

Sometimes food and waste matter pass through the colon more quickly than normal due to conditions like the presence of excessive bacteria, emotional stress or the use of prescription drugs. This results in diarrhea, which can cause severe dehydration of body cells. Large amount of water should be taken to offset this loss.

Constipation, the halting of the eliminative process, plagues untold millions of Americans. This can be caused by stress, poor dietary habits (including the lack of fiber) and a sedentary lifestyle.

### Anatomy of the Colon

The first section of the colon is called the cecum. The junction between the ileum of the small intestine and the cecum of the large intestine is the ileocecal valve. This valve prevents the back-flow of waste into the small intestine.

The colon has three sections divided by pronounced flexures, or bends, where it makes near-right-angle changes of direction. Above the pouch of the cecum, the ascending colon rises vertically for almost 18 inches. At the top, the ascending colon bends, and the transverse colon begins. The transverse colon travels horizontally for about two feet at navel height, then turns down again. This two-foot section is the descending colon. The remaining several inches is the rectum, which carries waste out of the body.

Just below the entrance to the ileum (the end of the small intestine), a sac-like tube dangles from the cecum. This is the appendix. The appendix is only 3-6 inches long and one-third of an inch in diameter, so it can easily become clogged with stray pieces of food or waste and get infected; this condition is known as appendicitis.

### Colon Health

Several factors promote good colon health. These include adequate dietary fiber, adequate water intake, regular exercise and a healthy balance of favorable bacteria in the gastrointestinal tract.

Adequate fiber intake provides the colon with bulk to facilitate the process of peristalsis – the involuntary contraction of intestinal muscles to move food through the intestines. Fiber decreases bowel transit time. It also absorbs toxins in the intestinal tract, allowing the bowel to eliminate them from the body.

Water is needed to maintain the healthy mucous lining of the intestines. This lining lubricates the food and waste as they travel through the colon. Water also helps keep the stool soft and pliable for easy elimination. Hard, dry stools cause strain on the colon. If the body does not get adequate water, the colon will absorb more water from the food and waste there, increasing the chance that toxins will also be absorbed, and causing stools that are dry and difficult to pass.

Regular exercise stimulates the action of the colon. Milk aerobic exercise, such as walking, is especially good. Any type of exercise that involves bending of the abdomen may also be helpful in promoting colon health.

A very important component of colon health is the balance of intestinal bacteria or "flora." More than 400 types of bacteria reside in your gastrointestinal (GI) tract; some are beneficial to your health, or "friendly," and some are deleterious to your health, or "unfriendly."

The two main types of friendly bacteria are *Lactobacillus acidophilus* (or simply "acidophilus") and "bifidus," a name referring to several strains of bifido-bacteria. These bacteria assist in the final breakdown of food, produce B-vitamins, and keep the populations of unfriendly bacteria in check. A decrease in the population of friendly bacteria may greatly reduce the amount of certain B-vitamins available to the body.

Recent research suggests that insufficient amounts of the B-vitamin folate in the diet may increase the risk for colon cancer. Friendly bacteria can be destroyed easily by antibiotics, stress, alcohol, caffeine, high-meat/high-fat diets and high-sugar/low-fiber diets. Low levels of stomach acid also promote the growth of harmful bacteria. Probiotics, or supplements containing living bacteria, reintroduce beneficial bacteria to the GI tract. Studies show that they may also hamper the intestinal tract's cholesterol absorption, thereby decreasing cholesterol levels. As a side benefit to women, a 1992 study found in the *Annals of Internal Medicine* suggests that acidophilus may reduce the recurrence of candida infections.

### Did You Know?

- The average adult colon is about 6 feet long.
- It takes anywhere from 12-36 hours for food and waste to be processed and eliminated
- Billions of bacteria (more than 400 types) live in the gastrointestinal tract.
- *E. Coli*, the bacteria found occasionally in under-cooked beef and famous for the serious illness it can cause, lives in the colon and helps break down food substances.

### Digestive System Analysis

If you have four or more of the following indications, you may consider nutritional aid to the intestinal system.

- Body odor and/or bad breath
- Eat meat more than 3 times a week
- Recent or frequent use of antibiotics
- Skin/complexion problems
- Regular consumption of dairy products
- Feeling low, uninterested or depressed
- Lack of a balanced diet
- Slow recovery from illness
- Less than 2 bowel movements per day
- High-fat diet
- Low-fiber diet
- Food/chemical sensitivities
- Recurrent yeast/fungal infections
- Easily irritated or angered
- Don't get enough exercise
- Respiratory, sinus or allergy problems

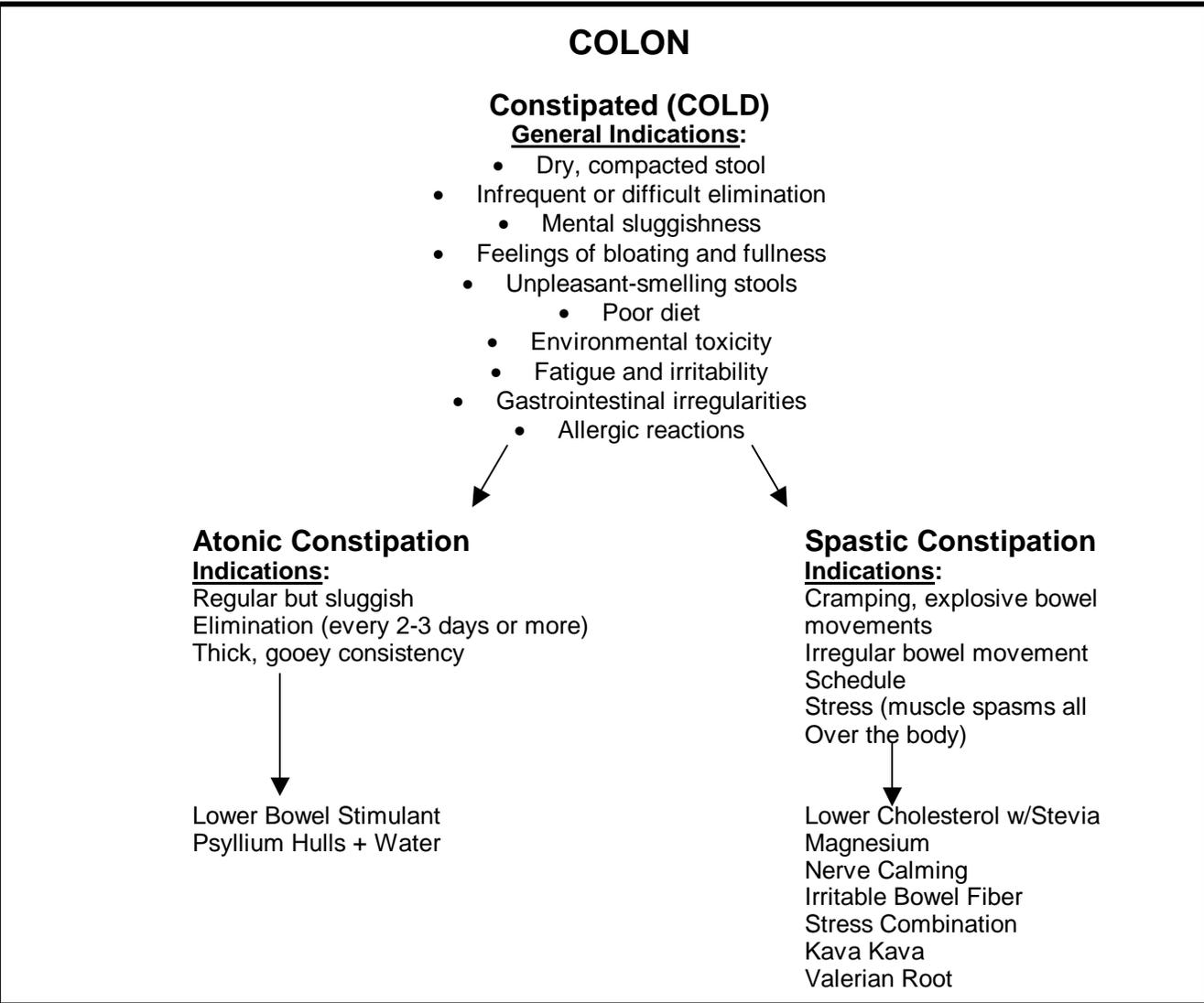
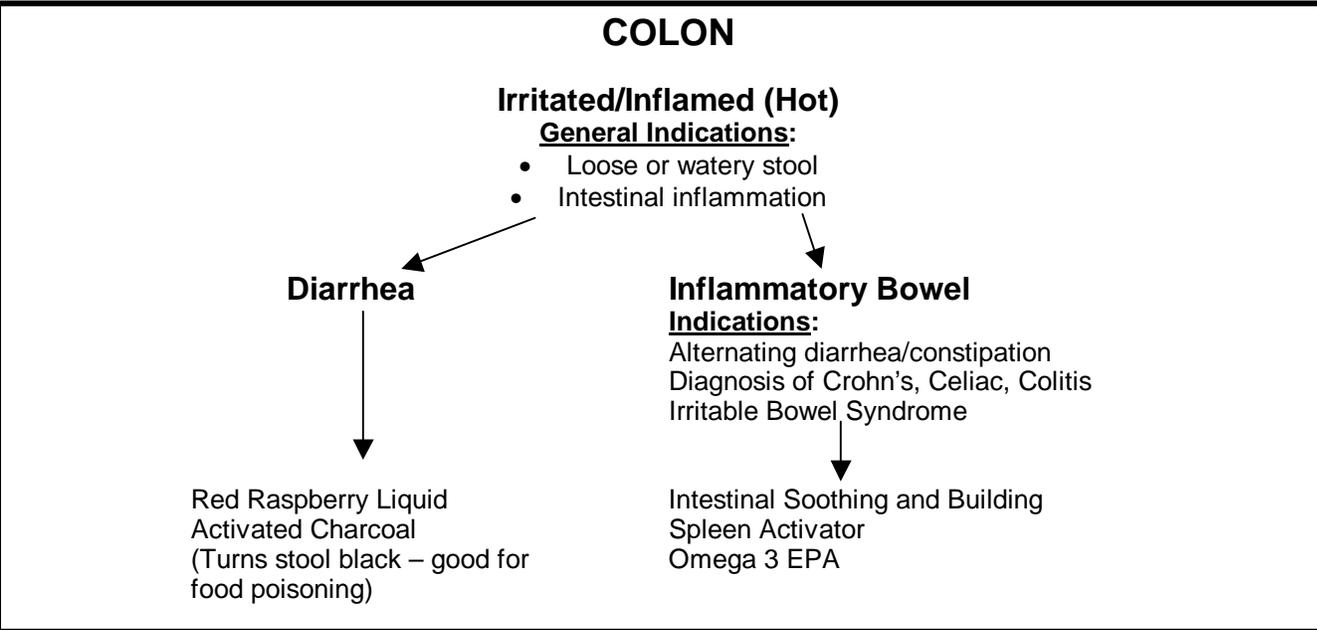
### Digestive System Suggestions

- Eat high-fiber fruits and vegetables and wholesome grains.
- Drink at least 64 oz. of water daily.
- Avoid excess white flour.
- Eat yogurt and other fermented foods.
- Avoid frequent use of stimulant laxatives.

## Intestinal System Products

The following products are listed with ingredients only as not to sell any particular product line. These ingredients can be purchased at any store you wish.

- **Bowel Detoxifier** – Promotes healthy, regular elimination of waste from the colon. Provides betaine HCL, pepsin, pancreatin, and bile salts to aid digestion in the upper GI tract. Also contains psyllium hulls, kelp plant, bentonite clay, charcoal and chlorophyll to provide needed fiber, encourage the proper flow of waste and detoxify the colon.
- **Activated Charcoal** – Charcoal is highly absorbent. Activated Charcoal can help in cases of poisoning or severe diarrhea as it absorbs irritants and toxins in the digestive tract. It may also help lower cholesterol levels.
- **Bifidophilus** – Bifidophilus contains over 1 billion Bifidobacterium longum per capsule to rebuild the population and friendly bacteria in the colon. It also contains 2.5 billion acidophilus bacteria.
- **Intestinal Soothing and Building** – A combination of slippery elm, marshmallow, plantain, chamomile, rose hips and bugleweed. This combination was designed to soothe and tone the digestive tract. It helps reduce irritation and relieve inflammation in the stomach, small intestine and colon.
- **Spleen Activator** – This combination combines Chinese herbs that “warm the center,” meaning they increase the energy of the stomach and aid the digestive process. This combination is a tonic for those with chronically weak digestion that leaves them thin and pale. It contains Panax ginseng, astragalus, atracylodes rhizome, hoelen discorea, lotus seed and 12 other Chinese herbs.
- **Lower Bowel Stimulant** – Works as a laxative and can help eliminate parasites from the body. Helps cleanse and tone the colon. Contains cascara sagrada, buckthorn, licorice, capsicum, ginger, barberry, turkey rhubarb, couch grass and red clover.
- **Psyllium Hulls** – Psyllium hulls have the natural ability to absorb incredible quantities of water. Psyllium forms a mucilaginous gel when mixed with liquids; this gel adds bulk to food and waste traveling through the colon. In a study conducted by James W. Anderson, M.D., volunteers who added one heaping teaspoon of psyllium twice daily to their diets averaged a 4.7 percent drop in cholesterol after 24-26 weeks, while LDL (bad) cholesterol dropped 6.6 percent. Contains psyllium hulls, licorice root and hibiscus.
- **Lower Cholesterol w/Stevia** – The recommended dietary allowance for fiber is 30 grams per day. Most Americans get far less than this. This combination contains fiber from five different sources: psyllium hulls, apple fiber, acacia gum, guar gum and oat bran. Each serving offers 3.8 grams total dietary fiber (3.2 grams soluble and 0.6 grams insoluble). Fiber adds bulk to the stool and promotes bowel movement and removal of toxins and excess cholesterol from the body. Drink plenty of water.
- **Magnesium** – This essential mineral can act as a laxative for a spastic colon. Some over-the-counter laxatives contain magnesium.
- **Nerve Calming** – A combination of herbs and essential B-complex vitamins, which nourishes the nerves to help the body cope with stress. Contains generous amounts of vitamin C, B-complex vitamins, plus schizandra fruit, choline bitartrate, wheat germ, inositol, PABA, bee pollen, citrus bioflavonoids, hops flowers, passion flower and valerian root to help reduce tension, stress and insomnia.
- **Parasite Cleaning** – Parasite cleansing promotes the elimination of parasites and yeast from the digestive and intestinal tracts. Contains pumpkin, caprylic acid, and eucalyptus. Drink plenty of water.
- **Liquid Black Walnut** – Traditionally used as a nutritional aid for the intestinal system, black walnut provides you with the same laxative action as cascara sagrada, but it works more subtly. Due to its astringent qualities, black walnut has the power to help your body protect itself from harmful agents such as parasites.



## COLON

### Parasites

#### Indications:

- Severe diarrhea after foreign travel
- Chronic diarrhea after drinking untreated water
- Chronic, unresolved health problems
  - Constant hunger
  - Unsatisfied appetite
  - Itchy rectum



Parasite Cleansing  
Bifidophilus – take with cleansing  
Liquid Black Walnut (children)  
L-Reuteri

## CERTIFIED ADVANCED HERBALISM COURSE - SESSION 15 – QUESTION & ANSWERS

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

FAX: \_\_\_\_\_

E-MAIL: \_\_\_\_\_

Please be sure to fill out the information above, complete the test and e-mail or fax it back to us at 425-955-4639 (US) or at +353 1 647 5705 (EU) or e-mail it to us at [joyful@best.com](mailto:joyful@best.com) (US) or at [answers@med-herbs.com](mailto:answers@med-herbs.com) (EU). We will grade your question & answer session and will let you know if we have any questions or concerns.

1. What is the job of the colon?
2. Name two things that are important in maintaining a healthy colon.
3. What prevents the back-flow of waste between the colon and small intestine?
4. What are some indications this system is weak and may need nutritional aid?
5. Who can I help? List five people who exhibit the above indications and who may benefit from nutritional aid to the intestinal system.
6. Experiment: Add 6 tablespoons water to each of three glass containers. Add 1 tablespoon of red sesame oil to container #1. Add the contents of four fat grabbing products to containers #2 and #3. Shake or stir containers #2 and #3 for 30 seconds; let stand two minutes. Add 1 tablespoon of red sesame oil to container #3. Shake all containers vigorously for 15 seconds, then let stand at least one minute and observe. In container #1, the oil and water should separate rapidly with the oil on top. In container #2, a greenish gel should form throughout, similar to what happens when a fat grabbing product and water mix in the stomach. In container #3, the orange-reddish color should be present throughout because the red oil has been “grabbed” by the green fat grabbing product to give the solution a uniform orange color. Please write down your thoughts