

# **Rochester Gastroenterology Associates, LLP**

**December 2009 Just So You Know**

## **Keys to Digestive Health**

**Tarun Kothari M.D., F.A.C.G., F.A.C.P.**

Human Digestive system is an intricate one though it functions in a very simplistic way. Let's review what constitutes the system and what and how each component works. Mouth to Anus and in between, Esophagus, Stomach, Small and Large intestines are one long tube functioning in perfect harmony. They accept food, mix it, break it down into various components, digest it and finally after absorbing back the nutrients and calories, expel the waste products through colon as stool. This process is helped by 3 other organs which are part of the Digestive system i.e. Liver, Gall Bladder and Pancreas. Liver and Pancreas produce digestive juices that reach the intestine through small tubes called ducts. The Gall Bladder stores the liver's digestive juices until they are needed in the intestine. Parts of the nervous and circulatory systems also play a major role in the digestive system.

Let us review the various common diseases inflicting man kind and understanding of it leads to keys to **Digestive Health**

Gastro esophageal reflux disease usually manifests itself as day and/or night time Heart Burn. This occurs more so at night due to reduced production of saliva which is a potent antacid, gravity from supine posture and reduced motility in esophagus with poor clearance. Presence of Hiatal Hernia promotes reflux and regurgitation. Chronic un- treated reflux disease can lead to Barrett's epithelium that in turn can promote malignancy. Life style changes like avoiding large meals at least 3 hours before bedtime, chocolate, mint, fatty foods, excessive caffeine, alcohol and nicotine can prevent these unpleasant symptoms. Weight loss program in an obese individual is very helpful. Barrett's esophagus requires periodic endoscopic surveillance usually every 3 years.

Incidence of peptic ulcer disease is decreasing due to early diagnosis and treatment of Helicobacter Pylori, bacteria found in the stomach that can become pathologic. As many as 80% of ulcers are associated with Helicobacter Pylori, a spiral shaped bacterium that lives in the acidic environment of the stomach. It causes Gastritis, ulcers and may cause

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certain type of stomach cancers. Treatment is simple- 2 antibiotics with proton pump inhibitor taken twice a day for 7-10 days can cure the disease 90-95% of the time. Again healthy life style, smoking cessation, and avoiding NSAIDs like Advil and Aleve is of paramount importance.

Patients can be intolerant to certain food like Gluten or wheat products and dairy, which causes diarrhea, skin rash, weight loss, hair loss, abnormal liver functions etc. These can be diagnosed by simple blood and breath tests and treated with a Gluten or Lactose free diet. This is called Celiac disease or Sprue and Lactose Intolerance.

Capsule Endoscopy is a procedure that uses a miniature capsule with a built in camera to record 2 images per second through the digestive tract. This technique is used to detect small bowel diseases in the area of the intestines that cannot be reached by conventional upper endoscopy or colonoscopy.

Patients suffering from abdominal cramps, diarrhea, constipation, weight loss, arthritis like symptoms with or without rectal bleeding may have inflammation of the small or large intestine or both. This is a serious condition requiring medical attention, accurate diagnosis and treatment. Another condition that may mimic the Inflammatory Bowel disease is called Irritable Bowel Syndrome. Simple principles of healthy eating, high fiber food, regular exercise, weight control, avoiding harmful agents like nicotine and excessive alcohol is of paramount importance.

Diverticular disease affects the colon. Diverticulosis occurs when pouches form in the colon. These pouches bulge out like weak spots in a tire. High Fiber diet is recommended. Diverticulitis occurs when these pouches become inflamed. Fever, severe abdominal pains, nausea, vomiting and change in bowel habits are usual symptoms. Treatment includes bowel rest with liquid diet and antibiotics. Failure of medical treatment or complications may lead to surgery.

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Colon cancer/polyp screening program began with President Clinton signing the bill on his last day. This program now widely accepted by all insurances has significantly reduced the colon cancer mortality. Early diagnosis by regular screening colonoscopy is the key. All polyps eventually lead to colon cancer within 1 to 7 years depending upon its histological type; hence all polyps should be removed or sampled followed by surveillance programs well out lined in clinical practice guidelines. Screening begins at age 50 except for African American where age is 45 due to high risk. Family history of Colonic neoplasm will lead to screening exam earlier usually 10 years before the youngest index case.

Pancreatitis or inflammation of the pancreas is caused by either alcohol, gallstones, high fat in the blood like hyperlipidemia, medication induced like diuretics, certain blood pressure medications, steroids etc or genetics. Treatment is directed to causation.

Probiotics are dietary supplements of live microorganism when taken in an adequate amount contribute to a healthy digestive system. It improves intestinal microbial balance thus inhibiting pathogens and toxin producing bacteria.

Incidence of Viral hepatitis seems to be increasing mainly due to improved diagnostic tests and awareness of the disease. Hepatitis B and C are clinically important because 50% of patients will develop chronic hepatitis and 25 % of those will go on to develop cirrhosis of liver and then the risk of liver cancer increases significantly. High-risk individuals (Intra venous drug use, exposure to syringes and needles, past blood transfusions, sexual contact with persons infected with viral hepatitis etc.) should have screening for hepatitis in their primary care physician office by having simple blood tests. Treatment is now well established for both forms of Hepatitis B and C with cure rate approaching 50% to 90%.

**Keys to Digestive health** is healthy life style, cessation of smoking and alcohol, red meat and fatty food in moderation, regular exercises, weight

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control, preventive colon polyp and hepatitis screens at appropriate age and risk groups, use of probiotics when taking antibiotics or suffering from colitis or IBS, seeking medical attention when red flags are present like rectal bleeding, anemia, weight loss, fever, recurrent abdominal pains, difficulty swallowing solids or liquids, excessive diarrhea or constipation. Most of all understanding your own digestive system is the Key.