

The Aging Digestive System

shows significant senescence in old age:

less saliva

‡ food less flavorful, harder swallowing

~half of those over 65 yrs wear dentures

gastric mucosa secretes less acid

‡ reduces absorption of Calcium iron, zinc and folic acid

gastric mucosa secretes less intrinsic factor

‡ reduces absorption of vitamin B12

‡ leads to pernicious anemia

Heartburn becomes more common

most common digestive complaint of older people is
constipation

‡ due to:

less muscle tone

weaker colon peristalsis

reduced sensitivity to neurotransmitters

less fiber & water in diet

less exercise

activity of liver, gall bladder and pancreas are reduced
only slightly in old age

Digestive Problems

1. Choking

food in air passages
usually meats, hot dogs, grapes, carrots, hard
candy, popcorn, peanut butter
may not be able to make a sound
DON'T hit on back

2. Vomiting

symptom of many diseases
waves of reverse peristalsis
if severe may empty duodenum as well
rest and drink small amounts of fluids
guard against massive fluid loss

3. Bulimia

self induced vomiting
may cause damage and infection of esophagus,
pharynx, or salivary glands
erosion of teeth, more dental caries
esophagus may rupture or tear

4. Diarrhea

frequent loose watery stool
intestinal contents moving too fast for fluid
absorption to occur
main danger is fluid loss
also upsets acid/base balance

5. Constipation

caused by:
lifestyle † inadequate water input
lack of physical activity
side effect of medication

controlled by increase in fiber, prunes, laxatives
† attracts water † softens stool

Colonic Irrigation

- alternative medical practice
- potentially harmful
- unnecessary
- can rupture the intestine

frequent use of laxatives and enemas:

- can lead to dependency
- upset body's fluid balance

mineral oil

- can interfere with absorption of fat soluble vitamins

6. Belching

results from swallowed air

carbonated drinks and chewing gums can contribute

occasionally can be a sign of a more serious

disorder: gall bladder pain, colonic distress

eat slowly, chew thoroughly

relax while eating

7. Hiccups

repeated spasms of diaphragm

may be triggered by eating or drinking too fast

8. Gas

large intestine generates 7-10 L of gas/day and

normally we expel ~500ml of gas/day

the rest is reabsorbed

most is odorless

1% are "volatile" gasses

high carb foods known to produce excess gas

9. Heartburn (& gastroesophageal reflux disease)

cardiac sphincter doesn't close properly

affects 50% of US, esp white males

eat or drink too much

clothing too tight

cure: eat small meals
 drink liquids 1 hr before or 1 hr after meal
 don't lie down or bend over
 lose weight if overweight
 don't smoke
 use antacids but sparingly

10. Peptic Ulcers

a lesion of stomach or duodenum caused by acids or pepsin

‡ duodenal ulcers are the most common

perforated ulcer extend through entire wall of GI tract

caused by:

bacterial infection, *Helicobacter pylori*, is important cause of most ulcers

‡ in all patients with duodenal ulcers

‡ in 80% of patients with gastric ulcers

probably disrupt mucosal barrier

use of some antiinflammatory drugs

disorders that cause excessive gastric secretions

reduced mucosal defense

diet therapy used to be main cure, now antibiotics

also advised to stop smoking and avoid alcohol and caffeine

11. Celiac Disease

chronic disorder in which the mucosa of small intestine is

damaged by ingestio fo certain cereal grains, eg. wheat,

barley, rye, & oats

disease 1st reported in second century by Aretaeus of

Cappadochia

these grains have large amounts of a protein, =gluten,

causes loss of villi & brush border, and increased numbers of

WBC's

leads to inadequate intestinal absorption

symptoms: diarrhea, weight loss, abdominal distension and

bloating and weakness

due to genetic and environmental factors

patients with such sensitivity must adhere to gluten-free diet

substitute: corn, millet, buckwheat, sorghum & rice

