

Nutrition and Diseases of the Stomach

1. What are the mechanisms by which the manifestations of dumping syndrome are produced?

Hypovolemia (low blood volume) - pulling fluid ---> blood volume drops.
 Hypoglycemia 1-3 hrs later - quickly absorb CHO monosaccharides. --> over stimulate the pancreas --> pancreas over-compensates.

2. Suppose a dumping syndrome patient is 5 pounds below weight. What nutrients and categories of foods would you increase in the diet to ensure that no more body weight will be lost?

- **Whole protein** tolerated - 20% kcal
- Moderate fat - 30-40% kcal
- MCT maybe (hard to cook with and no taste)
- Do **not** consume osmotically active foods.
- Want **very few simple sugars & no free a.a.**
- Stay away from beverages with high osmolality. (i.e., coca-cola, koolaid, OJ; frozen deserts are tricky)
- Lactose intolerance varies
- Pectin (soluble fiber) add to food to slow movement
- small meals
- individualize the diet
- Limit liquids with meals (dry meal helps a lot; less fluid so it won't go quickly to small intestine.)
- **B12 shot or sub-lingual.**
- Ca. Fe. Zn. trace minerals, Mg
- Thiamin?

3. What is the etiology of gastric ulcers and how is this related to the medical nutrition therapy used today?

Aspirin and other NSAIDs, H. pylori infection, and stress -----> erosion through muscularis mucosa into submucosa or muscularis propria

4. What is the recommended medical nutrition therapy for peptic ulcer disease?

- Medical Management:
 - reduce or withdraw use of NSAIDs,
 - use antibiotics, sucralfate, antacids,
 - Acid secretion suppression with proton pump inhibitors or H2-receptor blockers.
- Avoid tobacco products.
- Decrease consumption of alcohol,spices, particularly red and black peppers, coffee and caffeine

- Increased intake of n-3 and n-6 fatty acids which may have a protective effect.
- Good dietary/nutritional status helps decrease H. pylori.