Cobalamin/B12 Deficiency in Cats

Cobalamin Deficiency
- Can be associated with gastrointestinal disease in cats.
  - Decreased ileal absorption
  - Decreased pancreatic production of intrinsic factor (EPI)
- Weight loss, diarrhea, vomiting, anorexia, and thickened intestines. Megaloblastic anemia can occur.
- Definitive diagnoses in 22 cats included inflammatory bowel disease (IBD), intestinal lymphoma, cholangiohepatitis or cholangitis, and pancreatic inflammation.

Cobalamin Deficiency
- Serum cobalamin was particularly low in cats with intestinal lymphoma.
- Cats appear to respond more readily to treatment when cobalamin is also supplemented.

Vitamin B12 and Folate in SI Dz
- Folate is absorbed in proximal SI (jejunum)
- B12 is absorbed in the distal SI (ileum)
  - Binds intrinsic factor (IF) secreted by pancreas
- Patterns:
  - Both ↓: Generalized malabsorption
  - Folate ↓ B12 normal: Proximal SI defect
  - Folate normal, B12 ↓: Distal SI defect

Cats, EPI and Folate/B12
- Pancreas appears to synthesize intrinsic factor (IF) in cats
  - IF is necessary for B12 absorption
  - EPI may result in ↓ IF release —— ↓ B12
- Intestinal disease may accompany EPI
  - ↓ folate absorption
- EPI may mimic gen. malabsorption in cats