### Nutritional Risks
- N/V/D
- Abdominal Pain
- Anorexia
- Weight Loss
- Fever
- Kidney & gall stones
- Urinary tract infection
- Thromboembolic complications
- Colon cancer
- Decreased nutrient intake
- Malabsorption
- Medication side effects
- Oral ulcerations
- Taste changes
- Surgical resection
- Inflamed mucosa
- Blood loss/anemia
- Increased needs for healing
- Nutrient deficiencies:
  - Fe, Mg, Ca, Cu, Zn
  - Vitamin D
  - Vitamin A
  - Vitamin B₁₂
  - Folate

### Nutrition Support Considerations
Necessary during periods of exacerbation, nutritional deficiencies, decreased ability to ingest adequate nutrition, increased needs, and malabsorption.
- Formula choice depends on functional status of GI tract.
- Hydrolyzed formula may be tolerated.
- Formula should be initiated at full strength at 20 – 30 ml/hr and advance slowly to goal rate.
- Formulas with supplemental n-3 fatty acids, MCTs, glutamine, and arginine may assist with modifying inflammation. TPN support has not been shown to be advantageous over enteral nutrition. But for patients with extreme malabsorption or complications such as fistula, TPN may be necessary.

### Nutrition Interventions
- Instruct on adequate dietary energy and protein intake for weight maintenance and to replenish nutrient stores.
- Educate on foods to eat during exacerbation to prevent irritation:
  - Low fat, low fiber, well-cooked meats, lactose free, low oxalate, high antioxidants
- Encourage adequate fluid intake to avoid dehydration.
- Return to normal diet with a gradual increase in fiber during periods of remission.
- Suggest a multivitamin to meet all nutrient needs.

### Nutrition Monitoring & Evaluation
- Monitor weight
- Monitor nutrition-related lab values
- Evaluate adherence to diet plan
- Assess food and nutrition knowledge level of patient
- Evaluate behavioral outcomes and goals

### Medications
- Immunosuppressants
- Corticosteroids
- Aminosalicylates
- Antibiotics
- Biological Therapies
- Multivitamins

### Biochemical Tests
- Tests for Initial Diagnosis:
  - Endoscopy
  - Anti-Saccharomyces Cerevisiae Antibody Test (ASCA)
  - Biopsy
  - Tests for Exacerbation Stage:
    - C-Reactive Protein
  - CT Scans
  - Transport Proteins (due to inflammation, do not reflect nutritional status):
    - Albumin & Prealbumin
  - Hematology:
    - Hgb/Hct
    - MCV/MCH
    - TIBC
    - Ferritin
    - Transferrin
    - Vitamin B₁₂
    - Folate
    - Vitamin D
    - Phosphorous & Magnesium

### Follow-Up Goals
- Achieve understanding of foods known to cause diarrhea.
- Recognize symptoms that interfere with adequate oral intake, such as:
  - Anorexia, altered taste, pain, diarrhea, N&V
- Achieve understanding of:
  - Lab tests and significance of results.
  - Use and effect of the different medications available.
  - Possible medication side effects.
  - Nutritional deficiency management.

### Nutrition Rx
- 25 – 35 Kcal/kg
- 1.0 – 1.5 gm/kg protein
- 30 – 35 ml/kg fluids
- Low fat, low-fiber, high-protein, high-calorie diet
- Low fiber only during acute exacerbation
- Small, frequent meals and return to normal diet as tolerated
- Gradually increase fiber upon remission
- Vitamin & mineral supplements
- Avoid high oxalate foods
- Increase intake of antioxidant foods
- Include short-chain fatty acids and glutamine to prevent a decline in nutritional status.
- Weight maintenance once remission achieved