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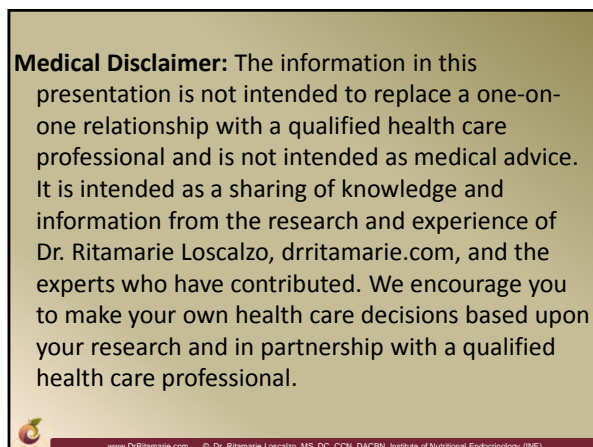
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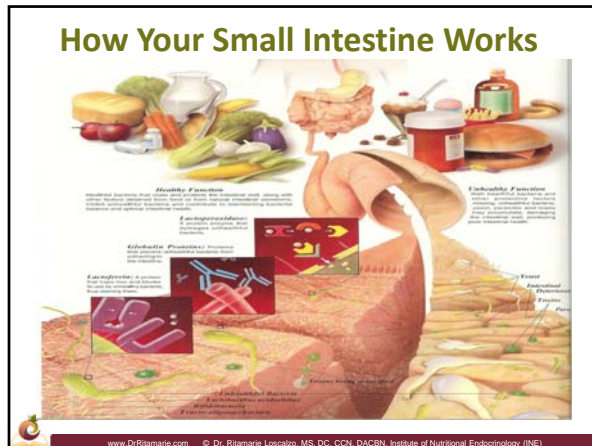
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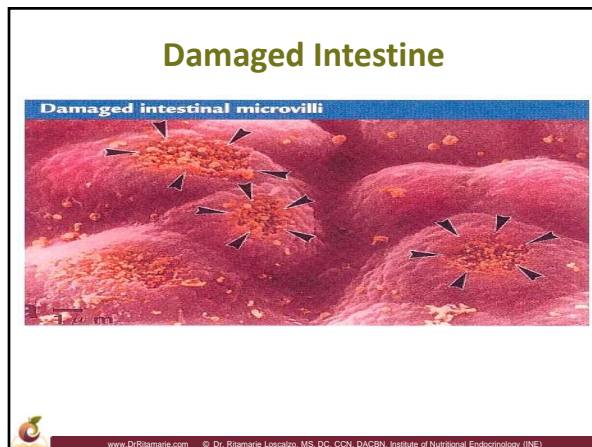
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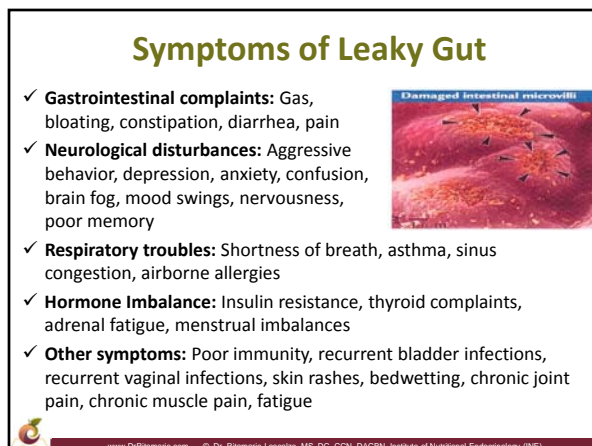
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## Causes of Leaky Gut

- ✓ **Infection:** Toxins released by organisms
- ✓ **Toxins:** Alcohol, caffeine, heavy metal toxicity, food additives and preservatives
- ✓ **Medications:** NSAIDs, aspirin, antibiotics, birth control pills, steroids, measles vaccine
- ✓ **Diet**
- ✓ **Eating under stress**
- ✓ **Pancreatic insufficiency**
- ✓ **Insufficient chewing**
- ✓ **Poor food combining**



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## Leaky Gut Functional Assessment

- ✓ Mental and emotional state
- ✓ Chewing
- ✓ Stomach acid
- ✓ Mucosal lining
- ✓ Liver/gall bladder function
- ✓ Pancreatic enzymes
- ✓ Gut flora
- ✓ Elimination



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## Leaky Gut Assessment

<ul style="list-style-type: none"> <li>✓ Constipation and/or diarrhea</li> <li>✓ Abdominal pain or bloating</li> <li>✓ Mucus or blood in stool</li> <li>✓ Food allergies, sensitivities or intolerance</li> <li>✓ Ulcerative colitis, Crohn's disease, or celiac disease</li> <li>✓ Alcohol consumption makes you sick</li> <li>✓ History of antibiotic use</li> <li>✓ Use of non-steroidal anti-inflammatory drugs (Aspirin, Tylenol, Motrin)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Depression</li> <li>✓ Hormone imbalance</li> <li>✓ Brain fog</li> <li>✓ Confusion, poor memory, or mood swings</li> <li>✓ Joint pain or swelling, arthritis</li> <li>✓ Chronic or frequent fatigue</li> <li>✓ Sinus or nasal congestion</li> <li>✓ Chronic or frequent inflammation</li> <li>✓ Eczema, skin rashes, or hives</li> <li>✓ Asthma, hayfever, or airborne allergies</li> </ul>
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**\*\*Red indicates systemic symptoms**



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### Leaky Gut Lab Tests

- ✓ **Intestinal Permeability:** <http://www.cyrexlabs.com/>
- ✓ **Stool Test:** normal flora, pathogens, inflammation – Genova, Metamatrix, Diagnos-Techs, BioHealth
- ✓ **Gluten Test:**
  - Stool Antibodies: <http://www.enterolab.com/>
  - Blood Antibodies Complete: <http://www.cyrexlabs.com/>



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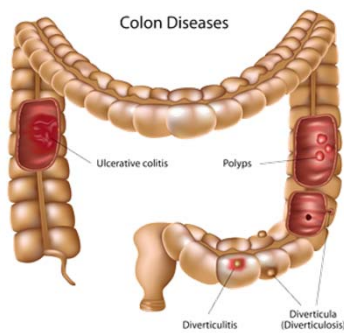
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### Large Intestine Diseases



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### Inflammatory Bowel Diseases

**Chronic inflammation along the GI tract,  
Usually autoimmune**

- ✓ Ulcerative Colitis
- ✓ Crohn's
- ✓ Microscopic Colitis
  - Collagenous colitis
  - Lymphocytic colitis



Healthy Colon



Ulcerative Colitis



Crohn's Disease



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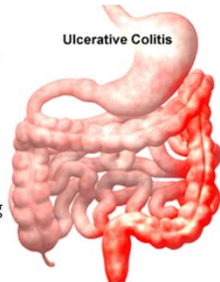
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### Ulcerative Colitis

✓ **Location:** Most common on the left side of the large intestine:  
descending colon, sigmoid, and rectum

✓ **Characteristics:**

- Inflammation and ulceration on the surface of intestinal lining
- Thinning of the mucosa
- Blood and mucous in the stools
- Diarrhea
- Cyclic abdominal pain and cramping
- Rectal pain
- Weight loss, fever, fatigue



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### Crohn's Disease

✓ **Location:** Anywhere in GI tract, most commonly in ileocecal area (about 50%). Other locations: large intestine (about 20%), small intestine alone (about 30%), stomach (rarely), mouth and esophagus (very rare)

✓ **Characteristics:**

- Inflammation deep into the lining
- Thickening of the mucosa
- Serious pain
- Lots of diarrhea
- Weight loss, fever, fatigue
- Rectal bleeding (less than UC)



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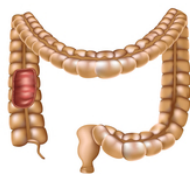
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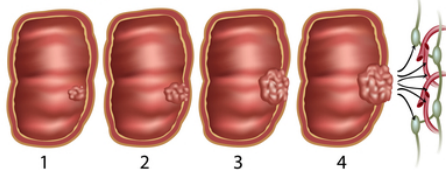
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### Colon Cancer



The stages of  
colon cancer



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