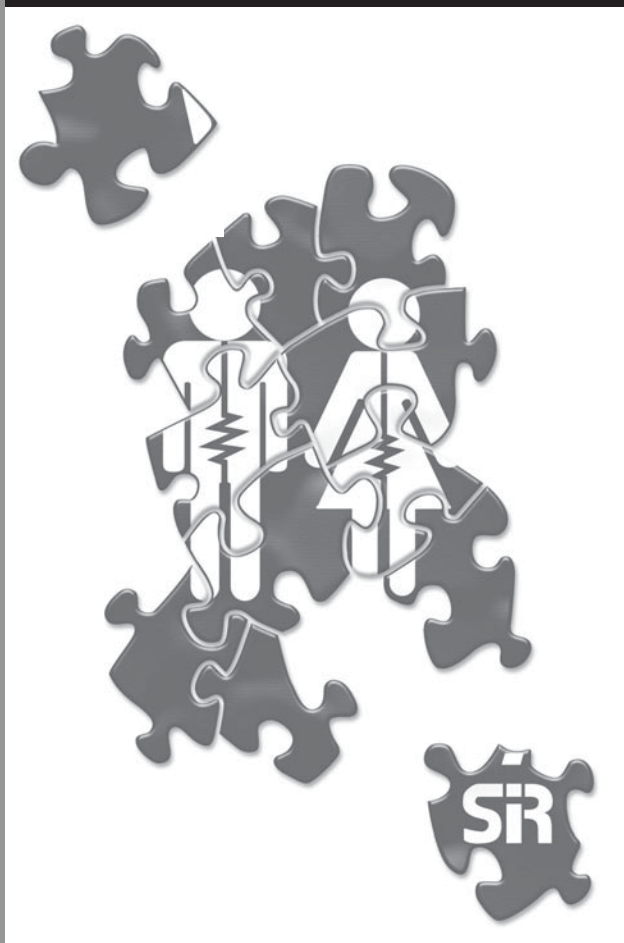


THE

# INSIDE TRACT

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# DIARRHEA AND DIET

Mary Flesher, Clinical Dietitian  
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## What is diarrhea?

Diarrhea is defined as the frequent passage of watery, loose stools, accompanied by an excessive loss of fluid and electrolytes. Another standard definition of diarrhea is passing more than three liquid bowel movements daily, or more than one litre of stool from an ileostomy or colostomy per day. Diarrhea occurs because the contents of the gastrointestinal tract are moving too rapidly, causing less fluid and nutrients to be absorbed.

## What causes diarrhea?

Diarrhea is classified into four categories: osmotic, secretory, exudative, or rapid intestinal transit diarrhea.

Osmotic diarrhea is caused by the presence of solutes in the gastrointestinal tract that are poorly absorbed and produce an osmotic effect. The osmotic effect is the movement of water from low solute concentration to high solute concentration. The causes of osmotic diarrhea may be lactose intolerance, fat malabsorption, dumping syndrome after gastric surgery, or certain medications (i.e. hypertonic or sorbitol-containing liquid medications).

Secretory diarrhea occurs when there is an over secretion of water and salts in the intestine, which is caused by bacterial toxins (*Clostridium difficile*, *E. coli*, etc.), caffeine, viruses, or increased bile acids following an ileal resection.

Exudative diarrhea is associated with damage to the intestinal mucosa, leading to the release or oozing of mucus, blood, and plasma proteins from cells as result of inflammation or injury. This increases the fluid content of feces and is present in ulcerative colitis, Crohn's disease, or radiation enteritis.

Finally, rapid intestinal transit diarrhea is defined as an increase in propulsive activity in the colon. When the colon contracts more intensely than normal, food is passed more quickly through the digestive system and less water is absorbed back into the body, making the stool too watery. Causes of this type of diarrhea are irritable bowel syndrome, surgical bypass, gastric and intestinal resections, antibiotics, or stress.

## How can diarrhea be prevented?

Prevention of diarrhea depends on the underlying cause. If medications are causing a person to experience diarrhea, an alternative form (i.e. tablet instead of sorbitol-containing liquid) or type of medication should be explored, especially when diarrhea is chronic. Some people who are malnourished or on bowel rest, may experience diarrhea for the first few days when starting to eat again because the bowel wall's ability to function decreases when it is not used and resumes normal function slowly. Consult your physician to determine the underlying cause and treatment for your diarrhea, especially if there is any associated pain, blood, or distension.

## Dietary Recommendations for Diarrhea:

1. Drink 8-10 cups of fluid per day, like water, broth, half-strength juice, weak tea, or electrolyte replacement drinks.
2. Eat small frequent meals slowly during the day.
3. Try sources of soluble fibre to help firm up stool.
4. Limit fried or fatty foods since these can worsen diarrhea.
5. Some high fibre foods may contribute to diarrhea.
6. Foods with lots of sugar may worsen diarrhea, such as regular pop, candy, large quantities of juice, and chocolate milk.
7. Some people may become temporarily lactose intolerant when experiencing diarrhea (so can benefit from lower lactose choices, such as cheese, yoghurt, Lactaid® milk or Lactaid® pills).
8. Consult your physician to determine if an anti-diarrheal medication is suitable for you.



# DIARRHEA AND DIET

## *The following foods may be better tolerated:*

### **Fruits and Vegetables**

Applesauce, apples, bananas, peaches, apricots, canned pears, grapefruit, potatoes, melons, squash

### **Breads and Cereals**

Oatmeal, oat bran, white rice, plain noodles, white bread/bagels, crackers, cream of wheat, arrowroot cookies

### **Protein foods**

Cheese (especially low fat), yoghurt, eggs, lean fish, beef, pork, skinless poultry

## *Foods to limit:*

### **Fruits and Vegetables**

Prunes, prune juice, berries, dates, any dried fruit, figs, rhubarb, green beans, wax beans, peas, Brussels sprouts, corn, broccoli

### **Breads and Cereals**

Whole wheat, bran products, Shreddies, Mini Wheat, Raisin Wheat, Shredded Wheat, Bran Flakes, bulgur, Wheatabix, All Bran, Bran Buds, barley, Red River, Wheat germ, Muslix

### **Protein foods**

Dried beans, dried peas, lentils, nuts and seeds, and fried meats, fish, and poultry

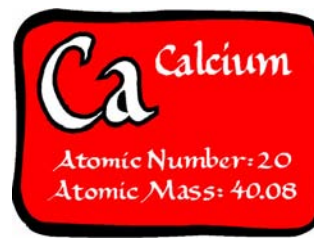
## **Aloe Vera**

Aloe vera gel or mucilage are used internally and externally for wound healing, and for their cathartic effect. It has also been claimed to possess anti-inflammatory properties although this has not been well supported in studies. Because of its cathartic effect, especially as aloe latex or juice, caution should be used in people who have frequent bowel movements already.

SOURCE: "The Honest Herbal" by V.E. Tyler

## **Calcium Protects Against Traveller's Diarrhea**

According to researchers in the Netherlands, getting enough calcium in your diet – in any form – may protect you from traveller's diarrhea. Their findings were reported in the August 2003 issue of *Gastroenterology*.



The leading cause of infectious diarrhea is contamination of food and drinking water with the type of *Escherichia coli* bacteria that attacks the gut. Countries like Asia, Africa, or South America offer the highest risk, especially to children.

In their study, animals fed a high calcium diet had less severe diarrhea and lost less weight after being infected with *E. coli* than did those fed a low-calcium diet. Similar studies in 32 humans, using a less virulent strain of *E. coli*, and using either dietary calcium or supplements, showed equally promising results.

Calcium also protected the rats studied from diarrhea caused by *Salmonella*, another bacteria that commonly causes food poisoning, and it may also protect against cholera, a deadly form of epidemic diarrhea.

However, calcium is not protective against *Listeria*, a bacteria associated with food poisoning outbreaks caused by contaminated dairy products, or *Staphylococcus*, often transmitted by food handlers who have infected wounds on their hands.

Even if you don't use calcium as a defence against traveller's diarrhea, taking calcium once you are infected helps recovery from symptoms of diarrhea.

*continued from page 11 - IBS & HRT - References*

### **References:**

1. Jones, R., *et al.* (1992) Irritable bowel syndrome in the general population. *British Medical Journal*. 302:87-90
2. Chang, L., *et al.* (2002) Gender differences in Irritable Bowel Syndrome. *Gastroenterology*. 123:1686-1701
3. Rodriguez, G., *et al.* (2000) Detection of colorectal tumor and inflammatory bowel disease during follow-up of patients with initial diagnosis of irritable bowel syndrome. *Scandinavian Journal of Gastroenterology*. 35(3):306-11
4. Ruigómez, A., *et al.* (2003) Is hormone replacement therapy associated with an increased risk of irritable bowel syndrome? *Maturitas* 44(2):133-40