



DIARRHEA

WHAT IS DIARRHEA?

Diarrhea is an increase in the water content, frequency, and volume of bowel movements. It is frequent in people with HIV disease.

Diarrhea can be a serious problem. Mild cases disappear within a few days. Severe cases can cause serious dehydration or nutritional problems.

IS DIARRHEA DANGEROUS?

The greatest risk of diarrhea is dehydration. You can lose up to a gallon of water each day. Along with the water, you lose minerals (electrolytes) that are important for normal body functions. The main electrolytes are sodium and potassium.

Severe dehydration can cause the body to go into shock and is potentially fatal. Dehydration is more serious for infants and children than for adults. **Anyone with diarrhea should drink plenty of clear liquids.** Tea, chicken broth, ginger ale, or soda are good choices. These are better than plain water, which does not replace any electrolytes.

Diarrhea that continues over a long period of time can cause poor absorption of nutrients. This can lead to wasting (see Fact Sheet 519).

Diarrhea can be dangerous. Be sure your health care provider knows if your diarrhea lasts more than a few days.

WHAT CAUSES DIARRHEA?

It can be difficult to find out what is causing diarrhea. Diarrhea is sometimes caused by an infection in the stomach or intestines. It can also be caused by an inability to digest milk products (lactose intolerance), by problems with the pancreas, or by emotional stress. Bacteria, parasites, fungi, or viruses can cause the infection.

- **Parasites:** The parasites cryptosporidium or microsporidium used to cause diarrhea in many people with HIV. The use of combination antiretroviral therapy has greatly reduced the rates of these problems.

- **Antiretroviral Medications:** These can cause diarrhea. This is often true with nelfinavir (Viracept), ritonavir (Norvir), Kaletra (lopinavir plus ritonavir), ddI (Videx), foscarnet (Foscavir), tipranavir (Aptivus) and interferon alfa (Roferon or Intron).

- **Other causes:** Taking antibiotics can kill off "good" bacteria in your gut and may cause diarrhea. Diarrhea can also be caused by an inability to digest milk products (lactose

intolerance), by problems with the pancreas, or by emotional stress.

HOW DO I KNOW WHAT IS CAUSING MY DIARRHEA?

Your health care provider will ask you what you have been eating and drinking recently, and whether you have been traveling. Samples of your bowel movement (or "stool") may be tested for signs of bacteria or parasites. Your health care provider may repeat this test if nothing shows up the first time. In some cases your blood or urine will also be tested.

If these tests do not show the cause of diarrhea, your health care provider may look inside your digestive tract with a special tool or scope. The name of this procedure depends on where the health care provider is looking. "Endoscopy" is a general term that means "to look inside." A colonoscopy is a procedure where the health care provider examines the colon, and so on. The cause of about one third of all cases of diarrhea cannot be determined.

HOW IS DIARRHEA TREATED?

1. CHANGE WHAT YOU EAT: Some foods can cause diarrhea, and others can help stop it.

Don't eat:

- dairy products (milk or cheeses)
- greasy or fried food
- fatty foods including butter, margarine, oils, or nuts
- spicy foods
- foods high in "insoluble" fiber. This includes raw fruits or vegetables, whole wheat bread, corn, or any fruit or vegetable skins or seeds.

Do eat:

- bananas
- plain white rice
- applesauce
- oatmeal or cream of wheat toasted white bread or plain crackers
- plain macaroni or noodles
- boiled eggs
- oatmeal
- mashed potatoes
- yogurt (This is a dairy product, but it's partially "digested" by the bacteria used to make it.)

2. DRUG TREATMENTS: A new treatment for HIV-associated diarrhea is crofelemer. It is in a Phase III trial (see fact sheet 105.) Different medications are used to treat different types of diarrhea. Your health care provider may not be

able to prescribe a medication without some idea of what is causing your diarrhea.

You do not need a prescription for **over-the-counter** treatments. Some of these work very well for diarrhea, including:

- The amino acid L-glutamine
- Pepto-Bismol (Bismuth subsalicylate)
- Kaopectate (attapulgite)
- Imodium AD (loperamide)

Some other products that are usually sold to treat constipation can also help with diarrhea. These products contain "soluble" fiber that adds bulk and absorbs water. This includes products like Metamucil, Citrucel, or other products that contain psyllium.

3. ALTERNATIVE THERAPIES FOR DIARRHEA

Acidophilus capsules (which contain helpful bacteria) can help restore normal digestion, especially when you are taking antibiotics. Some types of yogurt contain "live cultures" of acidophilus that work the same way.

Peppermint, ginger, and nutmeg are believed to help with digestive problems. Peppermint or ginger tea, or ginger ale would be good choices for "clear liquids." Try adding nutmeg to your food or drinks.

Studies have shown that calcium supplements helped relieve diarrhea in people taking nelfinavir (Viracept). This might work for diarrhea caused by other medications.

THE BOTTOM LINE

Diarrhea is a common problem for people with HIV. It is usually caused by an infection in the digestive system. Stress, some medications, or problems digesting milk products can also cause diarrhea.

The most serious result is dehydration. This is more of a problem for children than for adults. If you have diarrhea, you should drink plenty of clear liquids.

Some simple changes in your food can help with diarrhea. So can some over the counter medications or acidophilus.

Be sure you tell your health care provider if your diarrhea lasts more than a few days.

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