

Patient information from the BMJ Group

Diarrhoea in adults

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Diarrhoea in adults

Diarrhoea is usually caused by an infection. It often clears up on its own after a few days. There are medicines you can take to shorten the attack. They can also help with symptoms such as watery stools and stomach cramps.

We've brought together the best research about diarrhoea in adults and weighed up the evidence about how to treat it. You can use our information to talk to your doctor or pharmacist and decide which treatments are best for you.

To read about treatments for children, see [Diarrhoea in children](#) .

What is diarrhoea?

If you have diarrhoea you have loose, watery stools and you need to go to the toilet far more often than normal.

Doctors say you have diarrhoea if you have watery stools and you need to go to the toilet more than three times in a day. ^[1]

You may also have other symptoms like vomiting or stomach cramps. ^[2]

This information looks at diarrhoea that's caused by an infection with a [virus](#) or [bacteria](#) . ^[3] ^[4] You can pick up viruses or bacteria from contaminated food or drink.



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You can catch diarrhoea from contaminated food or drink.

You can also catch diarrhoea from another person who has it. This happens when you touch something that is contaminated with traces of their stool (for example, the person's hand) and then put your hand in your mouth (for example, when you eat).

If you have diarrhoea that's caused by a virus, it will probably get better on its own in a few days. But diarrhoea can also be caused by bacteria or another problem with your bowels, such as [irritable bowel syndrome](#).^[2] ^[5] If your diarrhoea lasts longer than a few days, or if you're too ill to eat or drink, it's important to **see a doctor**.^[2] ^[5]

Who gets diarrhoea?

You have a higher risk of catching diarrhoea if you:^[6]

- Have been travelling in a developing country (see [Travellers' diarrhoea](#))
- Look after young children
- Eat unsafe foods, such as raw meat, raw eggs, or shellfish, and unpasteurised milk or fruit juices
- Eat food that has been cooked in a kitchen that isn't clean
- Drink untreated water from a lake or stream
- Swim in lakes or streams
- Have contact with infected animals (such as farm animals or pets)
- Have contact with an infected person
- Work as a carer
- Work in a job where you handle food.

Diarrhoea caused by a virus

Viruses are one cause of diarrhoea.^[3] ^[4] Diarrhoea caused by a virus often breaks out in families, schools, or communities.^[2]

[Antibiotics](#) don't work against viruses.

Diarrhoea caused by bacteria

Some bacteria also cause diarrhoea. We've looked at the common types.^[2] ^[3] ^[4]

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Campylobacter

This is the most common cause of bacterial diarrhoea in England and Wales. You catch it by eating undercooked meat (especially poultry), by handling raw meat or poultry, or by drinking unpasteurised milk or untreated water. You can also catch it from pets that have diarrhoea. It can occasionally be passed from person to person. ^[7]

Salmonella

You can catch *Salmonella* from contaminated food or from another person who has it. ^[8]

Shigella

Diarrhoea caused by *Shigella* is also called **bacillary dysentery**. You can catch *Shigella* from drinking contaminated water or from eating food that has been washed in contaminated water (like salad or fruit). You can also catch it from another person. *Shigella* is one cause of [travellers' diarrhoea](#). ^[9]

E. coli (Escherichia coli)

These bacteria live naturally in the intestines of people and animals. They're usually harmless. However, some types of *E. coli* can make you ill. You can catch *E. coli* from contaminated food, from other people who have *E. coli*, or through contact with infected animals. ^[10] *E. coli* is the most common cause of [travellers' diarrhoea](#). ^[11]

What are the symptoms of diarrhoea?

The main symptom of diarrhoea is having loose, watery stools. You also need to go to the toilet more often than normal.

You may also get: ^[2]

- Vomiting
- Stomach cramps
- A fever.

Because you lose water in your stools when you have diarrhoea, your body may not have enough fluid (you get **dehydrated**). Symptoms of dehydration include:

- Feeling thirsty
- Not needing to urinate as often
- Having dark-coloured urine

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- Having dry skin
- Feeling sleepy.

You need to make sure you drink plenty of fluids if you have diarrhoea. Your doctor or pharmacist may recommend **rehydration salts** that you add to drinking water. These are designed to help replace the fluid and mineral salts that your body has lost.

How common is diarrhoea?

Diarrhoea is very common. Each year in the UK, about 1 in 5 people get diarrhoea at some point. ^[12]

Between 2 in 10 and 5 in 10 people travelling to a foreign country get diarrhoea. ^[11] To read more, see [Travellers' diarrhoea](#) .

What treatments work for diarrhoea?

Most of the time, diarrhoea goes away on its own in a few days. However, medicines can help your symptoms. They can also make the attack clear up more quickly.

The information here looks at diarrhoea in adults. Some of the treatments we talk about aren't recommended for children. To read about treatments for children, see [Diarrhoea in children](#) .

Key messages for treating diarrhoea

- Have **plenty to drink** so you don't lose too much water (get **dehydrated**). You can buy special **rehydration salts** from a pharmacy, but there isn't enough research to say if they work better than just water or soft drinks.
- We don't know if avoiding certain foods, such as milk and other dairy products, will help you recover any faster.
- **Medicines** that slow down your bowel movements can make your symptoms better. They can also help you get rid of diarrhoea more quickly.
- A medicine called **bismuth** (Pepto-Bismol) can help your symptoms by coating the inside of your bowels and killing bacteria. But it may not work as well as medicines that slow down bowel movements.
- **Antibiotics** can help if your diarrhoea is caused by **bacteria** . But these drugs have side effects. If your diarrhoea is caused by a **virus** , antibiotics won't help.
- It's important to **wash your hands** thoroughly after using the toilet and before preparing food. By doing this, you may stop diarrhoea spreading to other people.

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- See a doctor if your diarrhoea doesn't settle in a few days. It's especially important to see a doctor if you've recently been abroad, feel generally ill, or you have blood in your stools.

We've looked closely at the research and ranked the treatments into categories, according to whether they work.

Treatment Group 1

Treatments for diarrhoea

Treatments that are likely to work

- [Medicines that slow down bowel movements](#)
- [Bismuth](#)

Treatments that work, but whose harms may outweigh benefits

- [Antibiotics](#)

Treatments that need further study

- [Rehydration salts](#)
- [Watching what you eat](#)

Other treatments

We haven't looked at the research on kaolin in as much detail as we've looked at the research on most of the treatments we cover. But we've included some information because you may have heard of it or be interested in it.

- [Kaolin](#)

What will happen to me?

Diarrhoea isn't usually serious. Most people get better on their own without any problems.

The main risk is losing too much water (getting **dehydrated**). So it's important to **drink plenty of fluids**. You're more likely to get dehydrated if you're elderly. ^[13]

Your doctor or pharmacist may recommend you take **rehydration salts**, which you add to drinking water. These help replace the fluid and mineral salts that your body has lost.

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If you have vomiting as well as diarrhoea, you're more likely to become dehydrated. So it's even more important that you drink plenty of fluids. Drinking often, in small sips, may help.

Some people who get very dehydrated may need to go to hospital.

If your diarrhoea **doesn't clear up in a few days**, you should **see a doctor**. You may need **antibiotics**, or tests to find out what is causing your diarrhoea.

If you are **too ill to eat or drink**, see your doctor as soon as you can. ^[5] ^[2]

You should also see a doctor if: ^[5]

- You have a **fever**
- There is blood in your stools
- You feel very ill
- You've been travelling abroad
- You've just come out of hospital
- You have another medical condition
- You work as a carer
- You work in a job where you handle food.

You can help prevent diarrhoea by washing your hands after using the toilet, before preparing food, and before eating. ^[14]

One large review of the research (a **systematic review**) found that washing your hands can reduce your chances of getting diarrhoea by as much as 30 percent. ^[14]

Treatments:

Medicines that slow down bowel movements

In this section

These medicines are also known as **antimotility drugs**. They work by slowing down the action of your bowels. They include:

- loperamide (brand name Imodium)
- co-phenotrope (Lomotil).

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You can buy loperamide yourself from a pharmacist. You can also buy co-phenotrope over the counter, but it should only be used for people over 16.

Some good-quality studies have found that loperamide helps diarrhoea clear up more quickly. In some studies, people who took it were better after a day.^[15] ^[16] Loperamide can help people who get diarrhoea when travelling as well as people who get it at home. Two studies found it helped to reduce the need to go to the toilet so often and to clear up diarrhoea more quickly.^[17] ^[18]

A review of six studies found that people with traveller's diarrhoea who took loperamide along with antibiotics recovered more quickly - most commonly within a day or two - than people who took antibiotics alone.^[19] But the studies were designed quite differently and we don't know if they compared like with like. We also do not know if the benefits would apply to people who are not travelling.

Taking co-phenotrope for diarrhoea can also help you go to the toilet less often.^[20] But in the studies we looked at, people's diarrhoea didn't clear up any faster.

Side effects

You may get constipated if you take loperamide. In one of the studies, a quarter of people taking loperamide got constipation, compared with 7 in 100 people taking a dummy treatment (a placebo) for comparison.^[15]

Some people get other side effects from loperamide. These include dizziness, drowsiness, or a dry mouth.^[21] ^[22]

You **shouldn't take loperamide** if you have a fever, or if there's blood or mucus in your stools.^[21] If you have these symptoms, **see a doctor**.

You should **stop taking loperamide and see your doctor straight away** if you have any of these side effects, which could be serious:^[21] ^[22]

- A bloated abdomen
- Constipation
- Loss of appetite
- Severe stomach pain with nausea and vomiting
- A rash.

The research on co-phenotrope didn't mention side effects. But we do know that if you take it regularly you can become dependent on it.^[22] Being dependent means you get unpleasant withdrawal symptoms when you stop taking it. It can also react with other drugs, so it's important to check with your doctor or pharmacist before you take it.

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Stop taking co-phenotrope straight away and see your doctor if you have any of these symptoms:^[22]

- Severe nausea and vomiting
- Severe stomach pain
- A bloated abdomen
- Loss of appetite
- Severe drowsiness
- Palpitations (a fast, irregular heartbeat)
- Swelling
- A rash
- Dry skin, nose, or mouth
- Difficulty breathing
- Seizures.

Bismuth

In this section

Bismuth is a chemical that is sometimes used to treat diarrhoea. The brand name for bismuth is Pepto-Bismol. It's sometimes sold as a cure for indigestion. You can buy it yourself from a pharmacist. It comes as a liquid. But you have to take quite a lot for it to help diarrhoea. In one study, people took 30 millilitres every half hour for eight doses.^[23] This might put some people off.

Bismuth is designed to coat the inside of your bowels and help to kill bacteria. Two studies found it helped people with travellers' diarrhoea. It reduced the number of times people needed to go to the toilet, and cleared up diarrhoea faster.^[23] ^[24] But bismuth doesn't seem to work as well as [loperamide](#).^[25] ^[26]

Side effects from bismuth are rare and not usually serious. Your tongue may change colour and you may get black stools. In one study, 2 in 10 people got a black tongue and 7 in 10 got black stools.^[24] But these side effects go away when you stop taking bismuth.^[27]

People who are allergic to aspirin and women who are pregnant shouldn't take bismuth. ^[11]

Antibiotics

In this section

Antibiotics are drugs that kill bacteria. There's quite a lot of research to show that antibiotics work as a treatment for diarrhoea. But not all diarrhoea is caused by bacteria, so antibiotics aren't the right treatment for everyone.

Most people with diarrhoea don't need antibiotics. Your doctor may do tests to see what kind of diarrhoea you have. If tests show that your diarrhoea is caused by bacteria, and if it's severe or doesn't settle on its own, your doctor may suggest antibiotics.

Some antibiotics used to treat diarrhoea are:

- ciprofloxacin (Ciproxin)
- levofloxacin (Tavanic)
- ofloxacin (Tarivid).

We found five good-quality studies that show antibiotics can help you get better more quickly. ^{[1] [28] [29] [30] [31]} And you probably won't need to go to the toilet as often in the meantime. ^{[1] [28] [30] [31]} Antibiotics can also help you recover from a fever. ^{[29] [31]}

There's also good research to show that antibiotics can help you recover more quickly from diarrhoea if you're travelling abroad. ^{[32] [33] [34]} In one study, people who took antibiotics got better in about a day, on average. ^[35] People who didn't take antibiotics took about three days to recover.

Two studies found that taking antibiotics with another treatment called [loperamide](#) works faster than taking antibiotics on their own. ^{[17] [36]} But two other studies found that antibiotics on their own worked just as well as the combination. ^{[37] [38]}

However, antibiotics can have side effects. Some of the side effects may be similar to the symptoms you want treated (such as nausea, a stomach ache, or diarrhoea). The side effects that people in studies have reported include: ^{[28] [34] [22]}

- Diarrhoea
- Feeling sick
- Muscle aches

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- A headache
- A stomach ache
- A rash
- Trouble sleeping
- Feeling dizzy
- Feeling tired.

These side effects aren't usually serious. In studies, not many people stopped taking their antibiotics because of side effects. And the side effects usually go away when you stop taking the drug. ^[32]

Most doctors are careful not to prescribe antibiotics unless they think you really need them. This is because antibiotics may not work as well in the future if they are used too much. Bacteria can become **resistant** to them. ^[28] ^[32]

Rehydration salts

In this section

Diarrhoea can make your body lose water (you get **dehydrated**). So make sure you drink plenty of water or soft drinks. Your doctor or pharmacist may also recommend rehydration salts that you add to drinking water. These are designed to help replace the fluids and mineral salts your body may have lost.

You can buy these as sachets of powder or tablets. Some have flavours or sweeteners to make them easier to drink. Some brand names are Dioralyte, Electrolade, and Rapolyte.

Rehydration salts are often recommended for children with diarrhoea. But, for adults, there hasn't been any research to tell us whether drinking water with rehydration salts works any better than drinking regular water or soft drinks.

Watching what you eat

In this section

Some people prefer to eat simple, non-fatty food, like bread, and avoid dairy products if they have diarrhoea. But we don't know whether being careful about what you eat makes any difference. There hasn't been enough research to say. Two studies found that people who ate simpler food didn't get better any faster than those who ate what they wanted.

^[39] ^[40]

Kaolin

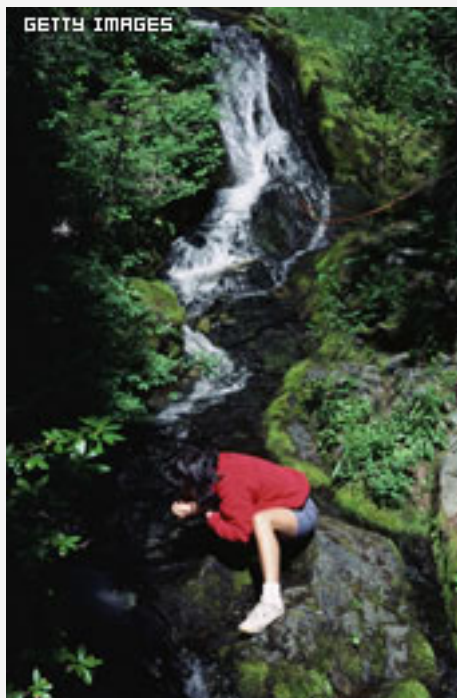
In this section

Kaolin (KLN) is a medicine sometimes used for diarrhoea. It is designed to stick to substances that might irritate your gut (intestines). You can buy it from a pharmacist without a prescription, and it comes as a liquid you swallow. But kaolin is not recommended for short (acute) attacks of diarrhoea. You should have a doctor's diagnosis for the cause of your diarrhoea before you take kaolin. ^[22]

Further informations:

Travellers' diarrhoea

If you're travelling in a developing country, you have a higher risk of catching diarrhoea. ^[11] This is because tap water isn't always safe to drink in some countries. And developing countries don't always have the facilities or clean water needed to keep kitchens or toilets as clean as we're used to.



There's a risk of getting diarrhoea if you drink contaminated water.

There are things you can do to protect yourself when you're in a developing country. ^[5]

- Don't drink tap water. Don't even brush your teeth in it or use it to make ice. Instead, drink bottled water (with an unbroken seal), fizzy drinks, hot coffee, or tea. Don't drink liquids served with ice in them.

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- Avoid unpasteurised milk or dairy products.
- Avoid raw fruits and vegetables unless you can peel them yourself.
- Don't eat raw or rare meat and fish.
- Don't eat meat or shellfish that isn't hot when it's served.
- Don't eat food from street vendors.
- Wash your hands after going to the toilet and before eating.

But if you do get travellers' diarrhoea, there are medicines that can help treat it quickly, such as medicines that slow down your bowel movements (for example, Imodium) and products containing bismuth (Pepto-Bismol). To learn more, see [What treatments work for diarrhoea?](#)

Glossary:

viruses

Viruses are microbes (tiny organisms) that need the cells of humans or other animals to exist. They use the machinery of cells to reproduce. Then they spread to other cells in the body.

bacteria

Bacteria are tiny organisms. There are lots of different types. Some are harmful and can cause disease. But some bacteria live in your body without causing any harm.

irritable bowel syndrome

Irritable bowel syndrome (IBS) is a common condition that causes symptoms such as stomach pain, bloating, diarrhoea and constipation. Although IBS can cause long-term discomfort, it does not usually lead to serious health problems.

antibiotics

These medicines are used to help your immune system fight infection. There are a number of different types of antibiotics that work in different ways to get rid of bacteria, parasites, and other infectious agents. Antibiotics do not work against viruses.

fever

If you have a fever, your body temperature is above 37 degrees Celsius (98.6 degrees Fahrenheit). With a fever you often get other symptoms, such as shivering, headache or sweating. A fever is usually caused by an infection.

systematic reviews

A systematic review is a thorough look through published research on a particular topic. Only studies that have been carried out to a high standard are included. A systematic review may or may not include a meta-analysis, which is when the results from individual studies are put together.

constipated

When you're constipated, you have difficulty passing stools (faeces). Your bowel movements may be dry and hard. You may have fewer bowel movements than usual, and it may be a strain when you try to go.

placebo

A placebo is a 'pretend' or dummy treatment that contains no active substances. A placebo is often given to half the people taking part in medical research trials, for comparison with the 'real' treatment. It is made to look and taste identical to the drug treatment being tested, so that people in the studies do not know if they are getting the placebo or the 'real' treatment. Researchers often talk about the 'placebo effect'. This is where patients feel better after having a placebo treatment because they expect to feel better. Tests may indicate that they actually are better. In the same way, people can also get side effects after having a placebo treatment. Drug treatments can also have a 'placebo effect'. This is why, to get a true picture of how well a drug works, it is important to compare it against a placebo treatment.

withdrawal symptoms

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Withdrawal symptoms are when you get unpleasant physical or mental symptoms because you stopped taking a drug you were physically dependent on. You can become physically dependent on a drug if it alters the level of certain chemicals in your body. This makes your body produce less of those chemicals or change how it responds to them. Also, some drugs work in a similar way to chemicals that naturally occur in your body. This may mean your body stops making its natural versions. If either of those things happens, your body will need the drug to function normally and you will feel or become ill if you suddenly stop taking the drug. You can get withdrawal symptoms from some prescription medicines, as well as some illegal drugs.

Sources for the information on this leaflet:

1. Bouree P, Chaput JC, Krainik F, et al. Double-blind controlled study of the efficacy of nifuroxazide versus placebo in the treatment of acute diarrhea in adults. *Gastroenterologie Clinique et Biologique*. 1989; 13: 469-472.
2. Thielman NM, Guerrant R. Acute infectious diarrhea. *New England Journal of Medicine*. 2004; 350: 38-47.
3. De Wit MA, Koopmans MP, Kortbeek LM, et al. Etiology of gastroenteritis in sentinel general practices in The Netherlands. *Clinical Infectious Diseases*. 2001; 33: 280-288.
4. Jiang ZD, Lowe B, Vernekar MP, et al. Prevalence of enteric pathogens among international travelers with diarrhea acquired in Kenya (Mombasa), India (Goa), or Jamaica (Montego Bay). *Journal of Infectious Diseases*. 2002; 185: 497-502.
5. National Institute of Diabetes and Digestive and Kidney Diseases. Diarrhea. January 2011. Available at <http://digestive.niddk.nih.gov/ddiseases/pubs/diarrhea> (accessed on 21 January 2014).
6. Guerrant RL, Van Gilder T, Steiner TS, et al. Practice guidelines for the management of infectious diarrhea. *Clinical Infectious Diseases*. 2001; 32: 331-351.
7. Public Health England. Infectious diseases: campylobacter. Available at http://www.hpa.org.uk/infections/topics_az/campylobacter (accessed on 21 January 2014).
8. Public Health England. Infectious diseases: salmonella. Available at http://www.hpa.org.uk/infections/topics_az/salmonella (accessed on 21 January 2014).
9. Public Health England. Infectious diseases: shigella. Available at http://www.hpa.org.uk/infections/topics_az/shigella (accessed on 21 January 2014).
10. Public Health England. Infectious diseases: Escherichia coli. Available at http://www.hpa.org.uk/infections/topics_az/ecoli (accessed on 21 January 2014).
11. Centers for Disease Control and Prevention. Travelers' diarrhea. November 2006. Available at http://www.cdc.gov/ncidod/dbmd/diseaseinfo/travelersdiarrhea_g.htm (accessed on 21 January 2014).
12. Wheeler JG, Sethi D, Cowdon JM et al. Study of infectious intestinal disease in England: rates in the community, presenting to general practice, and reported to national surveillance. *British Medical Journal*. 1999; 318: 1046-1050.
13. Lew JF, Glass RI, Gangarosa RE, et al. Diarrheal deaths in the United States 1979 through 1987. *Clinical Infectious Diseases*. 2004; 39: 468-471.
14. Ejemot RI, Ehiri JE, Meremikwu MM, et al. Hand washing for preventing diarrhoea (Cochrane review). In: *The Cochrane Library*. Wiley, Chichester, UK.
15. Hughes IW. First line treatment in acute non-dysenteric diarrhoea: clinical comparison of loperamide oxide, loperamide and placebo. *British Journal of Clinical Practitioners*. 1995; 49: 181-185.
16. Van den Eynden B, Spaepen W. New approaches to the treatment of patients with acute, nonspecific diarrhea: a comparison of the effects of loperamide and loperamide oxide. *Current Therapeutic Research*. 1995; 56: 1132-1141.
17. Ericsson CD, DuPont HL, Mathewson JJ. Treatment of traveler's diarrhea with sulfamethoxazole and trimethoprim and loperamide. *Journal of the American Medical Association*. 1990; 263: 257-261.
18. Van Loon FPL, Bennish ML, Speelman P, et al. Double blind trial of loperamide for treating acute watery diarrhoea in expatriates in Bangladesh. *Gut*. 1989; 30: 492-495.

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19. Riddle MS, Arnold S, Tribble DR, et al. Effect of adjunctive loperamide in combination with antibiotics on treatment outcomes in traveler's diarrhea: a systematic review and meta-analysis. *Clinical Infectious Diseases*. 2008; 47: 1007-1014.
20. Lustman F, Walters EG, Shroff NE, et al. Diphenoxylate hydrochloride (Lomotil) in the treatment of acute diarrhoea. *British Journal of Clinical Practice*. 1987; 41: 648-651.
21. U.S. National Library of Medicine. Medline Plus: loperamide. December 2013. Available at <http://www.nlm.nih.gov/medlineplus/druginfo/meds/a682280.html> (accessed on 21 January 2014).
22. British National Formulary. Acute diarrhoea. Section 1.4. British Medical Association and Royal Pharmaceutical Society of Great Britain. Also available at <http://bnf.org> (accessed on 21 January 2014).
23. DuPont HL, Sullivan P, Pickering LK, et al. Symptomatic treatment of diarrhea with bismuth subsalicylate among students attending a Mexican university. *Gastroenterology*. 1977; 73: 715-718.
24. Steffen R, Mathewson JJ, Ericsson CD, et al. Travelers' diarrhea in West Africa and Mexico: fecal transport systems and liquid bismuth subsalicylate for self-therapy. *Journal of Infectious Diseases*. 1988; 157: 1008-1013.
25. Johnson PC, Ericsson CD, DuPont HL, et al. Comparison of loperamide with bismuth subsalicylate for the treatment of acute travelers' diarrhea. *Journal of the American Medical Association*. 1986; 255: 757-760.
26. DuPont HL, Flores Sanchez J, Ericsson CD, et al. Comparative efficacy of loperamide hydrochloride and bismuth subsalicylate in the management of acute diarrhea. *American Journal of Medicine*. 1990; 88: 15-19.
27. U.S. National Library of Medicine. Medline Plus: bismuth subsalicylate. December 2013. Available at <http://www.nlm.nih.gov/medlineplus/druginfo/meds/a607040.html> (accessed on 21 January 2014).
28. Goodman LJ, Trenholme GM, Kaplan RL, et al. Empiric antimicrobial therapy of domestically acquired acute diarrhea in urban adults. *Archives of Internal Medicine*. 1990; 150: 541-546.
29. Noguerado A, Garcia-Polo I, Isasia T, et al. Early single dose therapy with ofloxacin for empirical treatment of acute gastroenteritis: a randomised, placebo-controlled double-blind clinical trial. *Journal of Antimicrobial Chemotherapy*. 1995; 36: 665-672.
30. Dryden MS, Gabb RJ, Wright SK. Empirical treatment of severe acute community-acquired gastroenteritis with ciprofloxacin. *Clinical Infectious Diseases*. 1996; 22: 1019-1025.
31. Troselj-Vukic B, Poljak I, Milotic R, et al. Efficacy of pefloxacin in the treatment of patients with acute infectious diarrhoea. *Clinical Drug Investigation*. 2003; 23: 591-596.
32. de Bruyn G, Hahn S, Borwick A. Antibiotic treatment for travellers' diarrhoea (Cochrane review). In: *The Cochrane Library*. Wiley, Chichester, UK.
33. Steffen R, Sack DA, Riopel L, et al. Therapy of travelers' with rifaximin on various continents. *American Journal of Gastroenterology*. 2003; 98: 1073-1078.
34. Wiström J, Gentry LO, Palmgren AC, et al. Ecological effects of short-term ciprofloxacin treatment of travellers' diarrhoea. *Journal of Antimicrobial Chemotherapy*. 1992; 30: 693-706.
35. Mattila L, Peltola H, Siitonen A, et al. Short-term treatment of traveler's with norfloxacin: a double-blind, placebo-controlled study during two seasons. *Clinical Infectious Diseases*. 1993; 17: 779-782.
36. Ericsson CD, DuPont HL, Mathewson JJ. Single dose ofloxacin plus loperamide compared with single dose or three days of ofloxacin in the treatment of travelers' diarrhea. *Journal of Travel Medicine*. 1997; 4: 3-7.
37. Taylor DN, Sanchez JL, Candler W, et al. Treatment of travelers' diarrhea: ciprofloxacin plus loperamide compared with ciprofloxacin alone. *Annals of Internal Medicine*. 1991; 114: 731-734.
38. Petruccioli BP, Murphy GS, Sanchez JL, et al. Treatment of traveler's diarrhea with ciprofloxacin and loperamide. *Journal of Infectious Diseases*. 1992; 165: 557-560.

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39. Huang DB, Awasthi M, Le BM, et al. The role of diet in the treatment of travellers: a pilot study. *Clinical Infectious Diseases*. 2004; 39: 468-471.

40. Lamers HJ, Jamin RH, Zaat JO, et al. Dietary advice for acute diarrhoea in general practice: a pilot study. *British Journal of General Practice*. 1998; 48: 1819-1823.

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