

## FOOD AND WATER PRECAUTIONS WHILE OVERSEAS



### WATER

You should consider all water contaminated unless you are certain that it is purified or comes from a pure source and is not in any way contaminated between the source and you. You purify water in one of two ways.

#### *1. Boiling.*

This is the most reliable way to purify water. Water should be brought to a full rolling boil for 1 minute (3 minutes if you are at an altitude above 1000 meters) and then kept in a covered container until used.

#### *2. Chemical disinfection.*

Iodine is best here. Iodine tablets (tetraglycine hydroperiodide) should be used according to the manufacturer's instructions. If the water is cloudy it should be filtered to remove the larger pieces of sediment and the number of iodine tablets should be doubled. If the water is cold it should be warmed and the contact time should be extended. If the water cannot be warmed the number of tablets should be doubled.

Tincture of iodine can be used instead of tablets. You should be sure that it is 2% iodine. You put 2-3 drops in a liter of water (10 if the water is cloudy or cold) or 1 drop per glass. You must let it stand a minimum of 30 minutes before drinking. There are filter-like devices on the market that will safely eradicate all viruses and bacteria, using iodine as the active ingredient. They are not really filters--murky water should be filtered through a cloth before being used in these devices. These can usually be bought at outdoor/sports/expedition shops.

Chlorine can be used instead of iodine but it is less reliable than iodine, especially in killing giardia and amoebic cysts. There are chlorine tablets (called Halazone in Canada) or liquid chlorine (bleach) can be used. Use the tablets as directed. If using bleach, you put 2 drops in a liter of water and let stand 30 minutes.

If you do not like the taste of chemically treated water you can put in a squeeze of lemon or lime, add a pinch of salt, or pour the water back and forth between 2 vessels to mix air with it.

Ultraviolet light also can be used. "Steripen" is a device that is easily portable and quite useful when travelling.

If you are unable to do any of the above, water from the tap that is uncomfortably hot to touch could be safe to drink.

Coffee or tea or other beverages made with boiled water are considered safe.

Any canned or *carbonated* bottled beverage is safe to drink but you should observe the can or bottle being opened and you should wipe off the top of the can before drinking. Don't accept a bottle that has been submerged in water in a cooler since contaminated water can seep under the cap.

Remove ice cubes from your drinks unless you know they have been made from purified water.

### MILK

Be sure that any milk you consume is pasteurized. Look for this on the label. If it does not say so, or if you get milk from the neighbour's cow or goat, you pasteurize it yourself by bringing the milk to 65 degrees Celsius for 5 minutes. Since it is difficult to be exact about this in most situations you can approximate it by bringing the milk just to the boiling point and then removing it from the heat. By the time it has cooled it will have been at 65 degrees or above for at least 5 minutes.

Powdered milk is safe, as long as it is made up with purified water! Similarly, ultra heat treated (UHT) milk, that does not need to be refrigerated, is safe.

Do not eat ice cream or other dairy products, including cheese, unless you can be certain that they have been made from pasteurized milk. Yogourt is generally considered safe since it is so full of bacteria that it is difficult to become contaminated.

Avoid mayonnaise unless you are sure it has been refrigerated continuously. Never eat raw eggs.

### FRUITS AND VEGETABLES

Peel it or cook it or forget it. Avoid recontaminating cooked foods with your own dirty hands. Ideally, you should be the one to peel the raw fruit or vegetables and the food should be hot from just having been cooked. Do not eat reheated food. It is not considered safe to eat such things as lettuce even after several washings in purified water or various cleansers. The only time you should eat salads is if you have grown the vegetables yourself and know for sure that manure, human or animal, has not been used as fertilizer. Watermelon is usually not safe to eat.

The safest to eat vegetables is to cook or peel them. Many people, though, end up eating raw unpeeled vegetables, such as lettuce, after they have been away for a while, claiming they miss the crunch and the taste of these. If this is what you choose to do, you should adhere to the following instructions in order to minimize your chances of picking up a problem:

Wash the vegetables in soap and water and then rinse them with purified water. Then soak the vegetables for at least 30 minutes in purified water to which iodine or chlorine has been added using three times the amount of iodine or chlorine used to purify water for drinking. Iodine is best. Potassium permanganate can also be used to soak the vegetables but it is less reliable than either iodine or chlorine.



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**MEAT AND SEAFOOD**

Eat only well cooked meat or seafood. Nothing medium or rare. Avoid meat that has been cooked and then just kept warm before serving; eg, shawarma sandwiches in the Middle East. If you know for certain that the meat is adequately inspected then you can eat it as you do at home, but you must be sure.

THE ABOVE FOOD RULES SHOULD STILL BE FOLLOWED FOR MEALS ON PLANES LEAVING COUNTRIES IN WHICH THE RULES APPLY.

**TIPS ON STREET FOOD VENDOR SAFETY**

- Don't stop at the first vendor you see: scout them first
- Look at the general cleanliness of the person cooking the food. Are there major food stains on his clothes? Are his hands clean?
- Look at the cleanliness of the area. Is food covered? Are flies buzzing around? Is there food on the ground that can attract insects and rodents? Is it near a gutter where rats can congregate?
- Check to see if locals are eating from the vendor
- Determine how uncooked foods are being stored. Is food being maintained hot?
- Look to see where utensils are placed when not in use
- Suss out the vendor's source of water. Is clean water being used for raw foods, dishes and hands?
- Avoid pre-cooked foods waiting to be reheated and sold. Always ask for food to be cooked in front of you from the raw stage and never look away during preparation
- Make sure cooked food is separated from non-cooked foods
- Use your senses: smell it, look at the colour and texture, then take a small bite and if it tastes off spit it out

**TRAVELLER'S DIARRHEA**

This is the most frequent health problem of travellers to developing countries. It is caused by a variety of infectious agents, usually acquired by dietary indiscretion. It is characterized by frequent (average 4 or 5) unformed bowel movements, often along with cramps, nausea, bloating, malaise and fever. It usually begins abruptly and is usually self-limited, lasting an average of 3 or 4 days.

When diarrhea starts it is important to stop eating solid foods. If you have liquid stools, eat a liquid diet. It is very important to drink lots of liquids. Water, salt, sugar and potassium are essential. You should, therefore, drink things such as broths, soups, fruit juices, and soft drinks in quantities of 3 or more litres a day. If you cannot tolerate these well you should take them in sips. You should avoid dairy products and alcohol at this stage.

Packets of rehydration salts, to be mixed with purified water, can be bought in many parts of the world. Powdered Gatorade is available here in Canada and you could think of taking this along with you. These are a suitable and palatable way of getting the essential ingredients mentioned above. You can make up your own rehydration fluid as well. You add 2 tbsp (1 hand scoop) of sugar, 1/4 tsp (1 three-finger pinch) of salt, 1/4 tsp of bicarbonate of soda (or another 1/4

tsp of salt if bicarb is not available) and 1/2 cup of orange juice or a squeeze of lemon to 1 litre of purified water to make up the solution.

When you have soft stools and your bowel movements are less frequent eat a soft diet such as bananas, rice, apple sauce, toast (or crackers), noodles and potatoes that are not fried. When your bowel movements improve even more and are more or less regular for you a regular diet can be started again, but keep the quantities small at first.

If your bowel movements are unpredictable and you have to teach a class or take a bus or attend a meeting, and if the diarrhea is not associated with blood in the stools or high fever, you can start to take some anti-motility agent such as Loperamide (Imodium®) (available over the counter) or Lomotil. Loperamide is taken as 2 capsules right away and then 1 after each loose bowel movement to a maximum of 8 capsules a day. You should not use this for more than 48 hours, however. If your symptoms persist this long you should seek medical attention.

If you develop severe diarrhea; ie, if you have 3 to 5 unformed stools in a day, especially if they are explosive or watery, you could start taking an antibiotic. Cholera is one of the causes of such diarrhea. Studies have shown that this, together with Loperamide (taken as 2 capsules right away and then 1 every 6 hours as needed), can shorten the length of time the diarrhea lasts to a matter of hours only. If there is blood in your bowel movements it is best to get medical advice first. *If the severe diarrhea is also associated with a fever or blood in the bowel movements you should use the antibiotic alone, not with Loperamide.* If there is no fever or blood use both.

The best antibiotics to use are one of the following: Ciprofloxacin 500 mg; Noroxin 400 mg; Ofloxacin 300 mg; Doxycycline 100 mg; Levofloxacin (Levaquin) 500 mg; Trimethoprim/Sulphamethoxazole (TMP/SMX) Double Strength tablets or TMP alone 200 mg. All of these are taken twice a day for 3 days except Levofloxacin or Cipro XL 1000 which are both taken only once a day for 3 days. Yet another choice is Azithromycin 1000 mg once only. These provide a cure in most cases.

Antibiotics should not be used as prophylaxis of diarrhea, but only as treatment. You should avoid unnecessary exposure to the sun when you are taking either TMP/SMX or Doxycycline. TMP/SMX cannot be used by people allergic to Sulpha. Ciprofloxacin and Noroxin cannot be used by children under the age of 15.

The only medication that could be recommended for PREVENTION of traveller's diarrhea is Pepto-Bismal, 2 tablets four times a day. This will turn the tongue and stools black and could cause some nausea and ringing in the ears. It is best to check with the pharmacist to see how this could interact with any other medication being taken.

You should seek medical attention if there is a high fever with shaking chills, large amounts of blood in the stools, signs of dehydration (dry mouth, rapid pulse, dark coloured urine, reduced amounts of urine) or if the diarrhea does not resolve with the above measures.



### OTHER DO'S AND DONT'S FOR TROPICAL TRAVEL

Do not swim in still fresh water such as ponds or lakes unless you are sure there is no bilharzia (schistosomiasis). This parasite is transmitted to people via a snail and is most prevalent in Brazil, Egypt and most of sub-Saharan Africa, southern China, the Philippines and SE

Asia. If you must swim in still fresh water get out of your bathing suit immediately afterwards and towel dry thoroughly. There is no danger of acquiring this disease in a swimming pool, though.

Use only purified water for drinking or brushing teeth. Unpurified water can be used for cooking if it is going to be heated to boiling during the cooking. You can bathe in unpurified water as long as it does not come from a stagnant pond. If water from such a source is to be used for bathing you should let it stand for 24 hours before bathing in it. Keep your mouth closed in the shower.

When swimming in salt water avoid swimming at the mouth of a river. There is effluent there. There are also big fish (sharks!) that come to feed on the smaller fish that feed there.

Dry well after bathing, before dressing. Pay special attention to areas where skin rubs on skin such as between the toes, the groin, armpits and under the breasts. Baby powder in these areas helps to absorb moisture and prevent yeast and fungus infections. Expose these areas to the air often (but be discreet!).

Avoid having your skin contact the ground outside. Do not, therefore, walk barefoot outside or lie on the ground unless there is something between you and the earth. This is to avoid getting hookworm. This rule applies on the beach, too, especially if you think the beach is also the toilet for animals and/or people.

Wash your hands often, especially before eating, after the toilet and after being out in public places. You can use any water to wash in but do not use public towels to dry your hands, let them air dry. Carry hand sanitizer with you and use it often. Keep your hands out of your mouth and eyes to avoid inoculating yourself with germs.

Wash cuts and scrapes early and often with soap and water. If redness appears around the wound use an antiseptic wash such as Dettol. If the redness worsens use as well a topical antibiotic cream such as Polysporin. Medical attention is the next step.

If bitten by an animal that could be rabid (only warm-blooded animals) immediately wash the bite thoroughly with soap and water. If the animal was obviously rabid seek medical attention as quickly as possible, but don't panic since you have at least 5 days to get the necessary injections. If it is possible, observe the animal for 10 days to see if it comes down with rabies and then seek treatment if it does. This is rarely possible, however. If in doubt, seek treatment.

It takes up to 2 weeks for the body to acclimatize to heat after leaving a temperate climate. To avoid heat stroke wear loose fitting cotton clothes that let the air circulate across your skin. Drink enough liquid to keep your urine light yellow to colourless. Eat a little extra salt at your meals to help your body replace that is lost in perspiration. (We need salt. It is too much salt that contributes to high blood pressure.)

All snakes must be considered poisonous. They want to find you even less than you them. Most are nocturnal so when walking outside at night carry a flashlight and walk with heavy footfalls to warn of your presence. Avoid reaching under rocks, logs etc. or up onto branches or rock faces unless you are sure it is clear.

Shake out your clothes and shoes before putting them on. Scorpions and other insects may be lurking there. (Scorpions cause a painful sting. The sting is not fatal to an adult.) Iron clothes that have dried outside.

Protect your food from flies. When preparing or eating a meal return quickly to the fridge food items that must be kept cold.

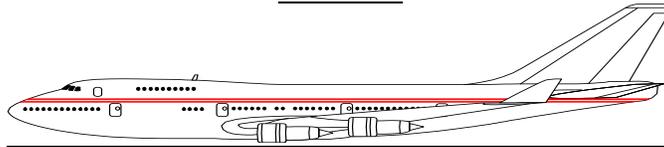
Protect yourself from mosquito bites, especially in the cooler hours of the day, particularly early morning and late afternoon. Mosquitoes are found most often in dark areas such as closets and bathrooms, behind curtains and under beds. Use insect repellent, wear long sleeves and pants, sleep under a net or in an enclosed place. This applies even if there is no malaria where you are. Mosquitos carry other illnesses, such as Dengue (which is increasing in incidence in tropical countries) and Encephalitis. More information on the use of insect repellants can be found at [http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/info/repell\\_e.html](http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/info/repell_e.html)

Drive defensively. Try to anticipate the unexpected. Believe the stories you hear about the driving no matter how incredible they sound! Wear a helmet on your bicycle or motorbike. Use seatbelts even though this may not be the law or the common practice. Do not drink and drive or get into a vehicle that is being driven by someone who has been drinking. This rule is often disregarded overseas. Don't be influenced by this.

Go slowly, quite literally, at first when you reach a higher altitude. It takes the body a few days to acclimatize to the lower oxygen levels at higher altitudes. Drink more liquids at these altitudes. The sun (UV risk) is stronger up there, too.

Studies show that when we travel, because of anonymity and a sense of adventure, we do things we wouldn't do at home. Remember HIV precautions!

### JET LAG



The best way to prevent jet lag is to set your watch to destination time a few hours before boarding the plane here at home and then conducting your activities accordingly. For instance, when flying from Canada to Europe, when flights usually leave in the evening, you should plan to get up early the day of the flight. Have a light meal before getting on the plane but once on the plane you should immediately try to go to sleep. A mild tranquilizer helps here if you're someone who has trouble going to sleep in such circumstances. Don't have the dinner on the plane. Don't have an alcoholic drink, either. Ask to be awakened for breakfast and then stay awake until a reasonable bedtime in Europe.

When flying east to west you can have the meals as they are served on the plane. The struggle here is to stay awake until a reasonable hour once you've reached your destination.

Always limit alcohol on flights since it worsens the dehydration caused by the already dry cabin air. It is best to limit caffeine (coffee, tea, chocolate and cola) as well. Drink lots of water or other non-alcoholic beverages, though.

Daylight, even that found on rainy or cloudy days, is the best device to help our bodies reset the biological clock. If it is impossible to get actual daylight then very bright indoor light will do. One theory holds that for those travelling eastward over 6 or fewer time zones try to get morning sunlight for the first few days after arrival. For those travelling westward over 6 or fewer time zones expose yourself to the late afternoon daylight for the first few days. If crossing more than 6 time zones eastward get the daylight in the middle of the day and avoid it in the morning, if more

*than 6 time zones westward* be outside in the middle of the day and avoid late afternoon light. If travelling over *12 time zones* you have the choice of shifting your biological clock either forward or backward but studies have shown that it is easier to delay the clock (as in travelling eastward) than to advance it.

There is recent evidence that MELATONIN is safe and useful to overcome jetlag. It has been described as “the chemical equivalent of darkness”. When flying *eastward* take 3-6 mg in the late afternoon (when it’s getting dark at your destination) 1 to 3 days before the flight and for 4 days at bedtime after the flight. When flying *westward* do not take any before the flight and take 3-6 mg at bedtime for 4 days after the flight.

GRAVOL is helpful in inducing sleep if you have trouble. An inflatable neck-yoke pillow is also very helpful when trying to sleep sitting up on the plane.

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