

By Leslie Korn

Center for Traditional Medicine
P.O. Box 1526
Cambridge, MA 02238

TRAVEL

STAYING HEALTHY NATURALLY IN THE THIRD WORLD



The uncovered Zapotec and Mixtec ruins of Mitla are surrounded by encroaching urbanisation in Oaxaca in southern Mexico.

Planning a trip to India to study yoga? Embarking on a safari in Kenya? Or maybe joining a work brigade in Nicaragua? And suddenly your friends and colleagues are bartering you with terrifying tales of *turista* and other exotic diseases whose names you've never heard before and you begin to wonder, is it possible to stay healthy naturally while traveling in the Third World?

The answer is a resounding yes! And if you are already holistic in your approach to health and attentive to diet and

nutrition, then you're ahead of most travelers in your ability to maintain health or to recover quickly and easily from many encounters with diseases common in Asia, Africa, or Central and South America. The key to maintaining health in the tropical world is the same as in the temperate climates: prevention. (Many of the health problems of the Third World were once common in modern industrialized countries, but better sanitation and water systems helped eliminate them.) The following are a few important guidelines for preventing some of the health

problems most often associated with traveling to the Third World.

Bring your own food on airplanes.

Nuts, seeds, and dried fruits provide quick energy; prunes stimulate peristalsis. Vegetables such as celery, cucumber, and lettuce prevent dehydration.

Drink a glass of water for every hour

in flight and while traveling in higher altitudes. Dehydration takes place quickly on airplanes and at altitudes over 5,000 feet, and may lead to dry, cracked skin, headaches, and sinus congestion.

Increase vitamin C intake. Vitamin C detoxifies and strengthens the immune system, and has been used to lessen the

effects of insect bites, snake bites, and scorpion stings. Studies suggest that a deficiency in vitamin C increases both the multiplication and invasive power of the amoebic parasite *E. histolytica*.

Take papain/bromelain tablets before protein meals. Papain and bromelain are proteolytic (protein-digesting) enzymes derived from papaya and pineapple. The enzymes aid digestion and protect against infection from intestinal worms. In fresh papaya, the papain is located under the skin of the unripe fruit and when scored, will ooze out. Apply this topically to skin infections, bee stings, and toothaches. Because papain liberates histamines from tissues, some people are allergic to it both internally and topically, so use with care. Bromelain is found in the ripe pineapple, the highest concentration located in the core. In addition to its value in digestion and in preventing dysentery, pineapple is rich in calcium (use for leg cramps), dissolves mucus, and is an active diuretic.

Boil all water for a minimum of 10 minutes unless you are assured of its purity. Drinking water may be purified by boiling, and in rural areas, let the contents of water settle to the bottom before pouring off into another container. Use only purified water ice cubes.

Soak all fruits and vegetables in a combination of one capful of Chlorox per gallon of water. After 10 minutes transfer the food to a gallon of purified water (no Chlorox) and let soak for 10 minutes. Dry and use. This procedure will kill parasites and cysts which are often present on vegetables grown with manure. Additionally, it will reduce the level of pesticides which are present on the fruit or vegetables.

Carry a little stove, pot, and condiments to cook some of your own foods.

If, in spite of all your preventive measures, you develop diarrhea and it lasts longer than 2-3 days, with symptoms of cramping and fever, then chances are you are fighting a bacterial, amoebic, or parasitic infection. It is often possible to self-diagnose and self-treat, based on your symptoms, but if you do not improve within 2-3 days it is essential to consult a health worker or physician.

If you become ill, consider the following.

Ask what diseases are prevalent in

LESLIE KORN has a masters in public health from Harvard University, where she did research in medicinal tropical plants, and a masters in cross-cultural health from Lesley College. She currently directs the Center for Traditional Medicine in Cambridge, Mass.

MEDICINAL PROPERTIES OF COMMON TROPICAL FRUITS AND VEGETABLES

Aloe Vera	The Mexican Indians call this plant the "Wand of Heaven" and plant it next to their homes to prevent illness. The gel is applied to burns and used internally to alleviate constipation. Recent research in Saudi Arabia points to its use in lowering blood sugar.
Apples	Rich in malic acid, which restores healthy intestinal flora and dissolves gall stones. Cider contains methyl-aldehyde, a powerful antiseptic and is used traditionally in India to prevent cholera.
Avocados	Rich source of protein, vitamins A and B. The skin is roasted and pulverized and one tsp. taken daily to eliminate intestinal worms.
Bananas	Rich in pectin, which draws bacteria from the intestines and regulates bowel flow.
Cabbage	The fresh juice is antibacterial against <i>E. coli</i> and staphylococcus.
Chamomile	A nervine, which aids insomnia, reduces anxiety and nightmares. It activates gastric juices and increases appetite.
Cinnamon	Alleviates nausea, gas, cramping, and diarrhea.
Cloves	Clove tea is a traditional Indian remedy for diarrhea. The whole clove or oil is placed on a toothache to reduce pain.
Coconut	A nearly complete protein, rich in B vitamins. The fresh meat is used to kill tapeworm.
Fenugreek	Rich in potassium, phosphate, lecithin, and iron. Beneficial for allergies.
Garlic	Antibacterial, antifungal, and antithrombotic.
Ginger	Reduces travel and sea sickness, stimulates blood circulation. Drink a tea of the fresh root during fever.
Grapes	Rich in iron; a laxative. Decreases the amount of uric acid in the system and is helpful in treating gout and kidney stones.
Guavas	Rich in vitamin C. The fruit is used to kill amoebas; the leaves are boiled for dysentery.
Honey	Antibacterial. Use topically for bee stings and wounds and internally for dysentery, hepatitis, and rehydration.
Lemon/Limes	Rich in vitamin C. Use with honey for cleansing the liver during hepatitis. Kills bacteria when applied to seafood. Disinfects wounds and reduces the itch of insect bites and stings.
Licorice	Native to India and Pakistan, contains Glycyrrhizin, which induces sodium retention and extracellular fluids and is therefore useful in preventing thirst. Valuable for coughs, diarrhea, and urinary infections. Recent research shows extracts are useful in treating herpes. Should be avoided by people with hypertension or cardiac problems, or who are pregnant.
Mango	Native to India and found all over the tropical world, mango has been called "God's nectar." A tea from the leaves promotes circulation. Dry and pulverize the seed and take internally for intestinal worms.
Olive Oil	Apply to insect stings and jellyfish, man-o-war, and hairy caterpillar bites.
Onions	Contains sulphide of Allyl, an antiseptic. In China, onion tea is used for fever, dysentery, headaches, and cholera.
Pomegranate	Contains the alkaloid punicic acid, an antihelminthic.
Sourcery	Rich in vitamin C, reduces blood pressure, a diuretic.
Tamarind	Strong diuretic. Rich in iron, zinc, and other acids.

COMMON CAUSES OF INTESTINAL ILLNESS

Infective Agent	Source	Symptoms	Natural Remedy
<i>Shigella</i> (<i>Bacterial dysentery</i>)	fecal-oral route (swallowing bacteria present in food or water infected by human feces)	Incubation is 24-48 hours; sudden onset, abdominal pain, nausea, vomiting, fever, blood-stained mucus in stools	garlic, acidophilus, miso, rehydration therapy
<i>Giardia lamblia</i> (<i>Parasite</i>)	fecal-oral route	yellow-frothy diarrhea, no blood, anorexia, cramps, a lot of gas, weight loss	Giardia often clears up on its own; treat the same as Shigella.
<i>E. histolytica</i> (<i>Amoebic dysentery</i>)	amoebic cysts present in water or food	gradual onset, 6-8 evacuations per day, bloody stools, no fever, tight abdominal sensation after meals	garlic, acidophilus, miso, guavas, onions
<i>Ascaris</i> (<i>Roundworm</i>)	fecal-oral, generally vegetables grown in infected manure	indigestion, dry cough, weakness; sometimes worms may be seen in stool	All forms of intestinal worms: papain/bromelain, papaya, pineapple, garlic, fresh pumpkin seeds, coconut
<i>Strongyloides</i> (<i>Pinworm</i>)	contaminated soil	itching around the anus, radiating pain in the stomach, diarrhea	
<i>Trichuris</i> (<i>Whipworm</i>)	contaminated soil or vegetables	diarrhea, weight loss, indigestion	
<i>Ancylostoma duodenale</i> / <i>Necator americanus</i> (<i>Hookworm</i>)	these two varieties are picked up through the skin, especially barefeet from contaminated soil	diarrhea, cough, nausea, anorexia, may cause anemia	

your locale. Is there cholera or typhoid, dysentery, or hepatitis? Keep in mind that many diseases have an incubation period of 3 days to 2-3 weeks, so if you are traveling you may bring a virus from one area to another.

Have a fecal sample analyzed at a local laboratory. Unlike in the U.S., it is not necessary to have a physician's note to have a fecal analysis performed in most Third World countries. It is often necessary to analyze two or more samples and since local laboratories are familiar with local strains of bacteria and viruses, have it analyzed where you are.

There are traditional healers and herbalists all over the world, and many have particular specialties. Refer to the list of centers in Resources at the end of this article, either before you arrive or if you become ill. They will be able to put you in contact with local, reputable, natural healers.

Eat garlic. Garlic is a natural remedy for treating infections due to bacteria or parasites. Albert Schweitzer is said to have used garlic in Africa to treat amoebic dysentery and laboratory tests have shown garlic juice diluted to one part in 125,000 inhibits the growth of staphylococcus, streptococcus, vibrio cholera, and the bacillus associated with dysentery. Garlic is also effective when applied topically to fungus and skin infections.

Eat miso. Carry packets of freeze-

dried miso, or a container of regular miso so you can replenish intestinal flora if you become ill. Umeboshi in its various forms is also helpful.

One of the greatest dangers of diarrheal disease is dehydration. Dehydration poses the greatest threat to infants and young children, but anyone can become dehydrated, especially when malnourished or chronically ill. As soon as diarrhea begins you must start oral rehydration therapy. Oral Rehydration Salts (ORS) are available in most health centers and pharmacies in the less developed world, but if you are unable to obtain the prepared packets you may make your own. The recipe is:

- 1 quart boiled water (with ½ cup orange or lemon juice if available)
- 2 tablespoons honey
- ¼ teaspoon sea salt
- ¼ teaspoon baking soda (optional)

Drink two glasses after each elimination and up to 3 quarts a day. Infants should continue to be breastfed and fed up to a quart of the solution daily. Children receive 2 quarts daily. When it is possible to eat food, choose foods that are rich in potassium such as mashed bananas, papaya, coconut, and orange juice. Brown rice and cinnamon provide bulk and protein and the cinnamon acts as an astringent, helping to cleanse the intestinal tract and reduce gas. Continue to

THE TRAVELER'S SURVIVAL KIT

Vitamin C

Slippery elm bark powder
(for diarrhea and bronchial congestion)

Senna pods
(constipation)

Lactobacillus acidophilus

Sunblock 15

Aloe vera gel

Clove oil

Oil of citronella
(insect repellent)

Tincture of valerian
(insomnia, anxiety, pain)

Papain/bromelain tablets

Dried miso-soup packets

Cayenne pepper
(stops bleeding)

Cornstarch
(irritated chafing, diaper rash)

Snakebite kit

Thermometer

Dental floss

Bandages

Ace bandage

drink the rehydration fluids as long as diarrhea persists.

Many drugs are available over-the-counter in Third World countries; many are useless and even dangerous. The oft-prescribed drug Lomotil (diphenoxylate and atropine) is one such drug. Lomotil slows intestinal spasms but does nothing about the cause of the diarrhea. If the spasms are painful, take 20 drops of tincture of valerian. In children, Lomotil may stop normal intestinal contractions and result in serious or fatal respiratory depression.

Another commonly available medication, Entero-Vioform (iodochlorhydroxyquin) has been banned by many countries yet remains on the shelves of others. Entero-Vioform is an anti-diarrheal drug which has been linked to sub-acute-myelo-neuropathy, which can cause paralysis and blindness. Under no circumstances should you take this drug.

Another drug which is commonly used in the Third World is Flagyl, or metronidazole. It is prescribed in the U.S. for trichomonas and throughout the world for amoebiasis. Side effects may include nausea, headaches, and diarrhea. The drug should never be used by pregnant women or people with a history of blood

disease. Animal studies have pointed to the mutagenic effect of Flagyl in doses equivalent to those given to women for trichomonas. Though long-term human drug trials have not shown an increase in cancer among women using this drug, it remains clear that this is a powerful drug and should be used with great caution, if at all, for trichomonas or amoebic dysentery.

By following many of these simple, hygienic procedures, you will have increased protection against many of the infectious diseases common in the Third World. Keep in mind your reasons for travel and of prime importance is the challenge to harmonize with the people,

culture, and environment. Culture shock is a real phenomenon which may manifest as irritability, disorientation, and depression. Travel slowly, sleep a lot, eat lightly and drink plenty of juices and purified water. Illness is often a transitional state that requires that we slow down and take stock of our movements. Though you may be traveling through areas which are economically poor, they are often culturally rich and shake us out of our insularity and chauvinism. Thus, when the local population takes a break at mid-day, for food and rest, join in the custom, for as the old adage goes: when in Rome . . . and it remains good healthy advice. □

RESOURCES

Centers

The following World Health Organization collaborating Centers for Traditional Medicine conduct research and act as liaisons with traditional healers around the world. Consult them for referrals to local healers and for information about indigenous plants.

INDIA

Professor M.Y. Lele
University of Ayurveda
Dhanwantari Mandir
Jamnagar 361 001

Dr. P. J. Deshpande
Dept. of Ayurveda
Banarus Hindu University
Varanasi, U.P.

AFRICA

Dr. O. Ampofo
Center for Scientific Research in
Plant Medicine

Mampong-Akwapim, Ghana

Professor M. Kuomare
Director, Institute for Research
in Pharmacopoeia

B.P. 1746

Bamako, Mali

Professor A. Sofowora
Dept. of Pharmacognosy
University of Ife
Ife-Ife, Nigeria

Professore A. Tella
College of Medicine
University of Lagos
Lagos, Nigeria

MEXICO

Professor Xvier Lozoya
Mexican Institute for Research on
Medicinal Plants
Calle Argentina No. 1
C.P. 62790, Xochitepec
Morelos, Mexico

CHINA

Dr. Jiang Tingliang
Institute of Chinese Materia Medica
Academy of Traditional Chinese
Medicine, Beijing

Institute of Acupuncture and
Moxibustion, Beijing

Nanjing College of Traditional
Chinese Medicine, Nanjing

Dr. Cao Xiaoding
Acupuncture Research Laboratory
First Medical College, Shanghai

Dr. Chen Hanping
Shanghai College of Traditional
Medicine, Shanghai

MIDDLE EAST

Dr. Ahmed El Safi
Traditional Medicine Research Institute
Medical Research Council
P.O. Box 1304
Khartoum, Sudan

Information

Professor Kao
Institute for Advanced Research in
Asian Science and Medicine
450 Clarkson Ave.
Brooklyn, NY 11203

The IARASM has compiled an international directory of acupuncturists, which may be obtained by writing to them at the above address.

Dr. Norman Farnsworth
Program for Collaborative Research in
the Pharmaceutical Sciences
University of Illinois at Chicago
Box 6998
Chicago, IL 60680

Home of the database NAPRALERT, a computerized listing of the world literature on medicinal plants, including ethnomedical profiles and plant names in every language. Six months before you

travel, write and request information on your locale or plants of interest. Also publishes International Traditional Medicine Newsletter, with the latest research on healing and medicinal plants from around the world.

Center for Traditional Medicine
P.O. Box 1526
Cambridge, MA 02138
(617) 489-3806

Offers training, workshops, and fitness adventure vacations in holistic tropical medicine, traditional healing, and internships in rural Mexico near Puerto Vallarta.

Vaccine Certificate Requirements For
International Travel and Health
Advice To Travelers

WHO Publications
Geneva, Switzerland

Provides up-to-date information on requirements for entry into countries and which diseases are prevalent.

International Health Care Service
440 East 69th St.
New York, NY 10021
(212) 472-4284

Offers pre-travel counseling, immunizations, and post-travel counseling. Staffed by a team of infectious disease physicians.

Where There Is No Doctor
Hesperian Foundation
Box 1692
Palo Alto, CA 94302

A lucid handbook for traveling and staying healthy where there is no medical help available. Available for \$8.00 in several languages.

Staying Healthy in Asia
Edited by Ann Harkins
Volunteers in Asia Publications
Box 4543
Stanford, CA 94305

Compact, general health information. Allopathically oriented.