

INSTITUTE OF CURRENT WORLD AFFAIRS

ATW-3
Getting Back At Montezuma

Tepoztlan, Morelos
Mexico

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Mr. Richard H. Nolte
Institute of Current World Affairs
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New York, New York 10017
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Dear Mr. Nolte:

Of all the ills that plague journeyers to foreign countries, none is more famous than the "diarrhea of travelers," a disease of protean manifestations, unknown cause, and a profound capacity to make daily life miserable. Here in Mexico it is known as "turista," and Mexicans traveling in the United States experience it, too. Having had an episode of it about two months ago, I now feel qualified to attempt to describe its causes and treatment.

Medical doctors usually assume that micro-organisms are responsible for turista, and their therapies for it include drugs that wipe out or make life difficult for many bacteria that inhabit the intestines. Now, it is true that a few serious diseases are correlated with the presence in the bowel of specific, ill-intentioned micro-organisms: amebic dysentery and bacillary dysentery are examples. But in the vast majority of cases of turista, no specific organisms can be identified, and anti-microbial therapy seems to me to be inadvisable. It is especially unwise to use drugs that are intended only for the serious diseases. For many years a drug called iodochlorhydroxyquin, sold under the trade-name Entero-Vioform, has been recommended to travelers as a cure for turista both by travel guides and physicians, and tourists have consumed great quantities of it. But Entero-Vioform is a specific drug for amebic dysentery, has no effect on the routine diarrhea of travelers, and may cause digestive upsets and other toxic effects on its own.

Much confusion exists in the public mind about the relationship between health and intestinal micro-organisms (what microbiologists call the "intestinal flora"). Because the inside of the bowel, like all of the alimentary tract, is continuous with the outside of the body, it is "dirty" in the surgical sense, that is, contaminated with micro-organisms like the skin rather than sterile like the inside of the abdominal cavity. But the word "contaminated" suggests that the organisms are uninvited guests and do not really belong there. In fact, the normal intestinal flora are necessary for healthy bowel function, and proper digestion of food cannot take place without them. The exact nature of the symbiotic relationship between intestinal cells and intestinal flora is not known. We do know that if animals are raised in completely sterile environments so that no micro-organisms ever enter the alimentary tract, the intestines do not develop normally and are unable to assimilate nutrients properly.

Again, because the inside of the bowel is continuous with the outside of the body, the intestinal flora are closely related to the ambient flora of the environment, particularly to micro-organisms in local water and food. When one travels to a different place on the earth, micro-organisms change just as plants, animals, and people change, and the problem for the intestine is to achieve a new harmonious balance with different local flora. It is important to bear in mind that "different" does not mean "bad." Because Americans get turista in Mexico does not mean that Mexican water is impure or less pure than American water; all ordinary drinking water contains a healthy population of microbes. This is why Mexicans traveling in the United States are just as susceptible to the disease. Similarly, I can remember that when I first began to travel between my home in Philadelphia and my college in Boston I would sometimes have a day of intestinal disturbance on first arriving in either city.

I think this is about as far as one can pursue the subject of physical "causes" of turista: a change in the environmental flora poses a problem for the intestines because they need to be in a balanced, mutually beneficial relationship with local micro-organisms in order to digest and assimilate food properly. Upon major change of location on the earth, a period of imbalance is a normal event; it is the means by which a new balance is achieved. Diarrhea of travelers is the outward manifestation of this inward imbalance, an expression of the bowel's temporary unhappiness, so to speak. It is interesting, by the way, to hold the problem to the mirror and look at it from the point of view of the micro-organisms. They cannot be very happy,

either, because the arrival in their environment of a strange bowel poses analogous difficulties for them. It is thus in everybody's interest to accept the period of imbalance as a normal phase of change and get it over with as quickly and painlessly as possible. How?

A good first step is to remind oneself that the connections between consciousness and intestines are extensive, so much so that even the most mechanistic physicians admit that many diseases of the bowels have roots in the psyche. In fact, "diarrhea of unknown cause" is often correlated with anxiety; for example, it is a classic complaint in student infirmaries at the time of examinations. Most persons who travel in other countries experience increased anxiety as part of the change of location, and there is no doubt in my mind that this anxiety is a major factor in determining the severity of turista. When I was in the midst of my recent episode I observed a clear correlation between periods of increased anxiety and exacerbations of intestinal symptoms; my two traveling companions observed the same correlation in themselves.

Now, if the channels between consciousness and intestines can work in this way, they can also work in another way: they can transmit awareness of intestinal function to consciousness. And this awareness can be very useful to a person suffering from turista because it is the means of avoiding the worst manifestations of the disease. The trick is simply to pay attention to one's intestines and at the first sign of their unhappiness to take action. The action to be taken could not be simpler. At the first sign of intestinal dysfunction, fasting prevents the appearance of distressing symptoms. This is so because much of the discomfort of turista results from the presence of improperly digested food in the bowel and the effort imposed on the bowel by this food. Fasting enables the intestines to devote all of their energy to restoring a proper balance with the new flora.

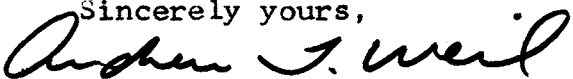
The first sign of intestinal distress may differ from person to person. In me, long before the onset of malaise or diarrhea, it was the gradual appearance of foul-tasting gas in my stomach. Whenever I ignored this early warning and ate, the condition progressed to the usual diarrhea; whenever I fasted (even for twelve hours), it disappeared. During periods of fasting I made an effort to keep my body well hydrated by drinking fluids (water and fresh fruit juices); I avoided all medications, and remained normally active. Usually, in 24 hours I was again able to begin eating local foods and tap water. Once I discovered this method, I was able to get through the period of adjustment in about ten

days with minimal discomfort. I now feel completely acclimatized to Mexican food and water and have had no intestinal disturbances in two months.

On the basis of my experience, I would recommend the following plan to travelers who are worried about turista:

- 1) If you are planning to stay in a foreign country for some time, it is worth getting used to the new flora as soon as possible. Therefore, it is best to avoid bottled water and start in at once. Local residents can tell you whether the water is drinkable and what problems, if any, they have with it. On the other hand, if you are planning to stay for only a week or two, it might not be worth it to you to make this effort.
- 2) Try to avoid major changes in dietary patterns upon arrival in a new location. Of course, you will be trying new foods. But, for instance, if you are unused to eating quantities of fresh fruit at home, do not start eating them when you arrive in a country where fruit abounds. Change what you eat slowly.
- 3) Remind yourself to expect disturbances in bowel function as a normal event. They may come sooner, they may come later, but if things are working properly, they will come. The happier you are about them, the sooner they will work themselves out.
- 4) Pay attention to bowel function and be alert for the earliest signs of change. When these signs appear, stop eating until they disappear and continue to fast until they are gone for at least half a day. Drink fluids during these periods (not caffeine beverages, which can stimulate the intestines). When starting to eat again, do not plunge right in to the heaviest local foods. Work up gradually from simpler, blander foods. If the signs of bowel disturbance reappear, repeat the process as often as necessary. Eventually, intestinal function will become normal.
- 5) Do not take medicines. Proper use of fasting will prevent the manifestations of turista from becoming so severe that they require medical treatment. Especially, avoid drugs like Entero-Vioform and strong antibiotics like tetracycline and neomycin; these chemicals have special uses in conditions unrelated to routine turista and make things harder for the bowel. If diarrhea persists, kaolin-pectin suspensions (like Kaopectate) are available everywhere and are effective if used sparingly.

I hope these suggestions will be helpful.

Sincerely yours,

 Andrew T. Weil