Water and Your Health

The water that is here today was here when the world was first being formed. The same water will be here when the Earth finally dies. New water is not being created, just recycled. It can only change its form as it goes through all the various stages it must to complete its own cycle. Our air, land, sea and fresh water supplies have become dramatically and increasingly polluted, especially during the last hundred years. Critics say that even spring water is an unknown quantity and that even though many spring sources are located in rural areas, they may also be near municipal garbage dumps that have been used as toxic waste dumps not to mention the threat of agricultural chemical runoff. Rural areas traditionally have a higher use of pesticides, herbicides and fertilizers, which in turn contaminate ground water. At this point in time a clean, abundant water supply is a major concern to every country on the Earth. Do you think the situation is going to get better when the population of the Earth doubles by 2050? In the meantime, filtered water sales grow every year.

Our bodies are mostly made up of water; seventy percent of all body tissues, twenty percent of bone, eighty to ninety percent of blood and eighty-five percent of our brain is made of water. Maybe it's time we understood a little of how the body uses water and what can happen when we don't get enough.

Many different symptoms occur if we do not drink enough water. Most of us think that you just get thirsty, but that is just the tip of a very large iceberg. By the time you are thirsty you are already dehydrated. If you ignore the thirst message enough times over the years, your body will stop giving you this message as you are not acting on it anyway. When this finally happens, you will not be able to tell if you are hungry or thirsty and most people opt for food instead of the water they need.

Conversely, if you start to drink enough water for your weight and activity level, within two months on average, you will discover that your sense of thirst has been re-established and weight loss has occurred as a result of decreased food intake and improved protein absorption. I have witnessed this hundreds of times in my practice. Another example of what can result when dehydration occurs can be seen in many cases of apparent arthritis. The real problem is that the cartilage in the joints, which contains large amounts of water dehydrates, causing inflammation, stiffness, pain and burning in the joints as the bones settle onto one another and start to rub. All these are classical signs of various kinds of arthritis.

Instead of addressing the root cause of the problem by drinking two to three liters of pure water a day; many of us resort to anti-inflammatories and various pharmaceutical medications, which can compound the problem by dulling the

inflammatory reaction. Most of us will feel at the time that the problem has been addressed successfully, but in fact, we are setting the stage for a downward spiral into chronic and unnecessary pain and suffering.

In many cases of gastritis or gastric upset, where there is a substantial amount of pain when eating, such as the pain associated with ulcers, by simply drinking enough water, these symptoms can often be alleviated. Whenever the body comes under the stress of dehydration several different actions automatically happen inside the body. The kidneys, which need water in order to function properly, are no longer able to do their job effectively. This puts much greater stress on the liver, leading to more toxemia or autointoxication of the body as time goes on.

Another sign of water dehydration is water retention. Contrary to popular belief, when you seek treatment for water retention, sometimes one of the worse things you can use is a diuretic. Your body often retains water because it is dehydrated, and so it tries to hold onto water in inappropriate compartments like your hands, feet and intracellular fluids. Modern research has found that dehydration creates water retention and often all we need to do is to simply drink more fluids as long as there are no kidney complaints involved.

Often people drink other liquids such as soft drinks, carbonated beverages, or tea and coffee, which have strong diuretic properties. We then have the mistaken belief that we are getting enough fluids. This is only making a big problem even larger. Add to the equation that the average North American diet consists primarily of sugars and proteins, and you have a recipe for health disaster. It takes a huge amount of water to properly digest proteins. Without enough water, proteins are not able to go through a process called hydrolysis, which allows us to properly utilize the protein we eat. It is speculated that this undigested protein then starts to slowly clog the capillaries, reducing circulation. It has been speculated by researchers that this could be the cause of gangrene in diabetics as water levels are chronically low in many diabetics as the body tries to reduce sugar levels by eliminating it through the kidneys.

A healthy diet should consist of eighty percent alkaline and twenty percent acid forming food. The average North American diet has reversed this, so we have too much acid forming foods in our diet and not enough water to help our kidneys work properly to control these levels. Some researchers have speculated that even the 8 glasses a day that we have all grown up hearing about may be too much. They say we should get the rest from diet. Don't these people know what the average North American eats? **Fat, sugar, protein and junk foods!** How much water is there in a bag of Taco chips?

Realizing that we can go sixty days without food, but only three days without water gives us an idea just how important water is for survival. In order to fulfill

our bodily needs, a general rule of thumb is to drink half our body weight in ounces (e.g. if you weigh one hundred pounds, you should drink fifty ounces). Since your digestive enzymes are diluted when you drink while eating, drink before you eat or wait for an hour afterwards before drinking. When you drink at any other time or combine water with food, the water is treated like food and digested instead of absorbed as it is meant to be.

The average household uses over nine hundred liters of water per day, and only twenty percent of that is used for drinking or cooking. In order to flush one ton of water waste, we use one thousand tons of water. As a result, municipal water purification plants are over taxed in the attempt to maintain water quality. This leads us to municipal methods of water purification. The water coming out of our taps could have potentially dangerous health risks. We have all heard of various cities that have had health scares in the past years from bacterial contamination. Most of us are not aware that the real danger is chlorine in our drinking supply.

Chlorination has been studied in depth since the early 1950s, at which point scientists linked chlorine with atherosclerosis in chickens. Part of this effect could be as a direct result of chlorine's ability to destroy vitamin E.

Vitamin E has been shown to protect us from kidney disease, high blood pressure, diabetic complications, headaches, menstrual pains, hot flushes due to menopause, and carbon monoxide toxicity due to smoking and car exhaust. With selenium, it influences enzyme reactions that prevent tumor growth and helps to detoxify many drugs and chemicals. Vitamin E strongly enhances immune function, and it helps to protect every cell membrane. It is preferentially oxidized rather than the essential fatty acids found in the cell wall. Even if chlorinated drinking water only destroyed the vitamin E in our bodies, that alone is cause for concern. The much larger concern is potentially more dangerous than this single issue.

Many new chemicals are being introduced into the environment every year. As a result, there is a strong possibility that new and deadly interactions with chlorine can occur as eventually every thing ends up in the water. Cities are using even larger amounts of chlorine in their drinking water because of the increased use of nitrates and phosphates in fertilizers, which pollute ground water run-off, which in turn supports the growth of bacteria and algae in water supplies.

Chlorine cross-links with other organic chemicals in the water supply, creating new and lethal combinations. Chlorine has long been known to be one of the most friendly of chemicals. It will combine with almost anything. **This is the major concern we should all have.** There can be potentially dozens of deadly combinations that can be created, just with the addition of chlorine. Studies report that an estimated ten to twelve thousand cases of rectal and bladder

cancer each year appear to be attributable to by-products created when chlorine is used to disinfect water in city supplies.

Studies also show that the amount of chlorine we absorb through showers and laundry is at least as great, and could be as much as six times higher than what we get from drinking water. Chlorine is released in the form of chloroform gas whenever the tap is running.

Chlorine is not a foolproof disinfectant. It does kill most bacteria, but is far less effective against parasites and viruses, including giardia and cryptosporidium.

Heavy metal pollution is common in city water. Lead, copper and aluminum levels often vary during the day in water supplies, but even small amounts can cause major health problems. All the various trihalomethanes, naphthalene's, PCBs, chlorinated solvents as well as parasites, such as giardia and cryptosporidium are chlorine resistant.

In general, there are different methods of purifying water, but reverse osmosis is thought to be one of the best sources of filtered water. It reduces parts per million (ppm) of contaminants to 250 ppm and lower. Its treatment method forces water through specialized screens of 0.05 microns or smaller, trapping contaminants (heavy metals and chemicals) but leaving the solute minerals.

As the world population increases, adequate supplies of and access to good quality drinking water will become an issue that every person in the world will have to deal with. It will no longer be a problem just in the third world, but throughout the world. The United States and Canada are even now realizing this fact. Oil will not be the only resource we will have to worry about.