

DEHYDRATION: THE CAUSE OF MANY CHRONIC DISEASES

To reverse the diseases caused by dehydration, we need to drink sufficient water and include sea salt and minerals in our diet. People with diabetes, heart disease, rheumatoid pain, migraine and even cancer can benefit from this simple regimen.

Part 2 of 2

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The Signs of Dehydration

How does dehydration reveal itself? In four major ways: perceptive feelings, water-rationing programs, crisis calls of the body for water, and disease complications—and you know that disease complications mean that death could be part of that. Perception of thirst, feeling tired when you haven't done a good day's work, when you wake up first thing in the morning and you don't feel like getting out of the bed—these are signs that you're dehydrated. You had better drink some water straight away. In eight hours you have deprived your brain of energy, hydroelectricity, and that is how you feel tired because of dehydration.

Water is a "pick-me-up": within three to four minutes, it will get you out of bed. Feeling flushed and irritable, anxious, dejected, depressed, inadequate, heavy headed or having cravings or agoraphobia are all complications of dehydration. Depression is definitely a sign of dehydration.

The Body's Drought Management Programs

The true thirst signals of the human body are asthma, allergies, hypertension, old-age diabetes and autoimmune diseases. These are all produced by dehydration.

Alveoli need water. When you breathe in, you suck water from the periphery into the alveoli, and these microscopic droplets of water, when they coalesce, create a surface tension. This surface tension is a very powerful tension; it produces the constriction that we use in order to get rid of the air in the alveoli. Breathing depends on water, and that's why asthma is a sign of dehydration because, in order that you preserve water, histamine constricts the bronchioles, stimulates mucus formation directly and indirectly, and plugs the bronchus. Because alveoli are very delicate membranes, they cannot become dry. We lose about a quart of water, a litre of water, every 24 hours just through breathing. If the person, who is breathing constantly, doesn't have that water to replace what's lost, these alveoli become brittle and they break. That's how you create cystic fibrosis. In order that this doesn't happen, Nature has designed that you stop breathing. Unfortunately, we in medicine never understood this. Today there are 17 million asthmatics in America; in Britain and elsewhere, an equally proportional number. Yet all of these people can very easily relieve their asthma by increasing their water intake. I've written a book called *ABC of Asthma, Allergies & Lupus*, explaining that histamine is a water regulator: give it water and it won't cause you harm.

As I explained [see part one], histamine is a neurotransmitter. Water and salt are the best antihistamines there are, but in combination. If you give water by itself and don't give salt, you cause problems. If you give salt and not water, you cause problems. In fact, you need not only water and salt, which are the extracellular balancing factors, you also need other minerals

that are inside the cells to hold on to the water that seeps through.

Dehydration and Lack of Salt Cause Hypertension

In any water loss, 66 per cent of the water is lost from inside the cells, 26 per cent is taken from water volume held outside the cells, and eight per cent is taken from the actual vascular system. But since the vascular system is not a rigid system, the capillaries constrict and pick up the slack, and you don't sense the water loss. So when 66 per cent water loss inside the cell is beginning to produce symptoms, any of the tests you do will not reveal anything to you because the vascular system is a balanced system and it is regulated completely.

In order to prevent hypertension, you need water, you need salt to operate the reverse-osmosis system. In addition, you need calcium, magnesium, potassium, zinc and selenium, which are the intracellular minerals, to hold on to the water. Once you do that, no blood pressure will dare rise above one hundred and twenty. Give the body the right ingredients at the right time, and the need for all blood pressure medications will disappear.

Many people say that salt causes the body to hold water. That is not true. The correct ratio of water to salt will not hold water in the body. You need a quarter-teaspoon of salt per quart of water, which is a gram and a half of salt to a litre

of water. Now, when you go to the hospital, they give you nine grams of salt per litre of water; they're not giving you isotonic solution. But I'm giving you enough salt so that your body will retain that salt. You need to take sea salt, which contains the other 80 minerals. There are 80 trace minerals in sea salt that are not in table salt, but in the table salt you have iodine, which is essential; so if you only take sea salt, you don't take iodine. A lot of people can develop goitres, and an iodine supplement such as kelp will help; taking a vitamin supplement that contains iodine is essential.

Salt deficiency has actually been used as a means of torture. A person deprived of salt would die in agony very quickly.

Taking antihistamines on a constant basis will cause more disease, because when you don't honour histamine for what it needs—water, minerals and food—and you give the body antihistamine, you're only camouflaging the need but not satisfying the need, and so the disease will continue on. All of a sudden the antihistamine breaks barriers, and then you develop cancers and all sorts of things, and very quickly you can die. All these people who went to the most expensive clinics, spent thousands of dollars and were given a clean bill of health

came out of the hospital and 10 days later collapsed on the steps of their office or wherever and died because their blood tests never revealed dehydration, which is the foundation of disease.

Diabetes, Insulin and Water Regulation

You have two kinds of diabetes. Type-1 diabetes is the autoimmune kind in which interleukin-6 destroys the beta-cells, particularly in children because children's bodies do not have a great amount of water reserve. The body immediately goes into the next phase of reaction, which is autoimmune disease.

In the elderly, insulin-independent diabetes, type-2 diabetes (which now we are seeing among children as well as teenagers), is caused by dehydration. We should consider the pancreas to be a regulator of water balance in the different environments of the cell. It produces insulin, and, once the insulin gate is opened by insulin, sugar goes in and takes water with it; amino acids go in

and take water with them. Other minerals go in because of that gate and take water with them. Now, if you're in a dehydrated state, that is an embarrassment to the circulation because the circulation cannot afford to lose water to the cells: it has to draw water *out* of the cells.

The mechanism that brings water to the pancreas, prostaglandin E, which is a water regulator and one of the sub-hormones of the body, has

a direct impact on beta-cells and inhibits their insulin production and release. If you give water and you give salt, which are antihistamines, you nullify the effect of histamine, you don't produce prostaglandin E, and the hold on the insulin-producing mechanism will go away and you produce insulin. So, all people with type-2 diabetes can get relief very quickly if they begin to drink water and take salt and other minerals that the body needs. Does that make sense? I've seen quite a lot of dramatic results in people with severe diabetes, 600–700 milligrams per 100 cc: they're completely recovered; their sugar has come down to 80–90 milligrams. This is the mechanism involved in this system.

In type-1 diabetes, insulin-dependent diabetes, it is this interleukin-6 that destroys or "guts" the beta-cells of the pancreas, and insulin production is diminished. Now, even in this type of diabetes, if you give the person water you won't get the complications such as plaque formation and retinopathy that are associated with or acknowledged to be because of diabetes. All of those complications will not occur because they are actually dehydration produced, not diabetes produced. As for insulin production, insulin *need* will diminish. I had a person who was using 90 units of insulin; now he's using

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36 units of insulin in 24 hours. He had retinopathy, and that's gone. They wanted to amputate his legs, and that's no longer needed. He's totally recovered from the complications of diabetes, which are actually complications of dehydration itself.

Other "Dis-Eases" Caused by Dehydration

The emergency calls of the body for water are the main pains of the body. Early morning sickness of pregnancy is a sign of dehydration of the mother and the child, the foetus, because the foetus has no mechanism of telling its needs other than through the mother's system. Histamine, which is a growth hormone in infants, babies and intrauterine life, whether it's human or any another animal species, reflects its symptoms through the mother's system, and that's why a lot of women get early morning sickness of pregnancy. That's why a lot of women begin to retain salt and become oedematous—they retain a lot of fluid. If we increase water intake in these women, their early morning sickness of pregnancy will disappear. The infants grow much better in the intrauterine phase of growth and they're an average of an inch taller. The few I've seen are much taller than normal. Their hair is grown; they have a much more developed hair structure than the hair of the average child.

Dyspeptic pain or "heartburn" is a sign of dehydration. I treated 3,000 peptic ulcer disease sufferers in the [Iranian] prison with water, and that's where I came to the conclusion that these people were thirsty. In order to prove that, I needed to find out why the pharmaceutical industry wants to block this pain with antihistamine, Tagamet®, Zantac® and so on—histamine-2 blocking agents. So I went to the library and started researching histamine, and the answer was there. It had been there all the time—but the pharmaceutical industry wasn't going to share it with the doctors, and the doctors weren't going to do research.

When I wrote my article "Pain: A Need for Paradigm Change" and presented it as a guest lecturer at a cancer conference in 1987, explaining the role of histamine, the Scientific Secretariat of the 3rd Interscience World Conference on Inflammation [1989] invited me to make my presentation there, which I did. So, histamine is actually a pain-producing system directly and indirectly through its subordinate systems, and that is why we have dyspeptic pain and why the pharmaceutical industry uses Tagamet and Zantac to block it. The pain includes

migraine headaches, anginal pain, rheumatoid joint pain, back pain, fibromyalgic pain, colitis pain, false appendicitis pain.

I have seen a number of people who came to me in the prison with typical appendicitis symptoms, but they didn't have a temperature or nausea, so I gave them two glasses of water because by then I knew that the pain was a sign of dehydration. In three minutes, their "appendix" pain disappeared. These people would normally end up on a surgeon's table and have their appendix taken out.

How does pain arise? The intracellular pH of the body should be 7.4, and the only way we can achieve that is by drinking enough water and taking enough salt and minerals to make the body alkaline and get rid of the excess acidity through the production of urine. So, when

we produce yellowish urine, it means that the body is getting rid of some of its acid. Ideally, the urine should be even less of an intense colour than yellow, but when we produce orange urine it means that the body is truly dehydrated and somewhere it's going to "sing". The way it "sings" is very easy: when the body is alkaline, the cells are happy; when it becomes acidic gradually, the toxic waste builds up. There is a chemical substance called *prekallikrein*, which is very sensitive to pH fluctuation. When pH becomes acidic—when it drops to 6.7, 6.5—free *kallikrein* is converted to *kinin*; and since there are nerve endings in the area, the kinin in the nerve endings is the element that causes the pain. So, that is how pain is produced in a dehydrated environment in the body.

Now, this drought-management program of the body rotates drought or hydration, so certain areas of the body are dehydrated and certain

other areas are hydrated. That's why in rheumatoid joint pain you get these migrating pains: one day it's this arm or this hand that hurts; another day it's the other arm or hand that hurts, or it's the hip or the knee, and so on. This is the migration of dehydration, and that's how you get the pain.

The Cholesterol "Problem" and Water

Complications of dehydration raise cholesterol. Obesity is the first complication of dehydration. Raised cholesterol, heart failure, chronic fatigue, cancers, neurological disorders, strokes and so on are all produced by dehydration. In the fourth dimension of time, when you're talking about dehydration you must

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include time elements because the body is a chemical plant. You pour ingredients into it and it produces an outcome, whether it's thought, perception, knowledge or physical activity. Now, gradually change the ingredients that you put into the body and in the fourth dimension of time your plant will not be the same original plant as on day one; it will be a new chemical plant, and it may have disease processes already established in it or beginning to be established. So, reversing a situation needs a lot of understanding because you can't capture all that's lost in time.

When you eat food and do not drink water beforehand, the gastro-intestinal tract scrambles and draws water out of the circulation, water it has to spare, and the circulation goes around and borrows water from the rest of the tissue and puts just barely enough water into the gastro-intestinal tract to break down the food and dissolve it, liquify it and circulate it in the portal system to take it to the liver. In the liver,

you need a lot of water to operate the hydrolytic properties of physiological metabolic processes, and so more water is used there. This concentrated blood goes to the right side of the heart and it's pushed into the circulation to the lungs. In the lungs, you lose further water through breathing.

Now, highly acidic, concentrated blood reaches the left side of the heart and is pumped into the circulation. The first area that this concentrated, acidic blood attacks within the arterial system is the heart itself. It will compromise the membrane: it's acidic, so it burns the membrane. Capillaries are already constricted because of dehydration, and this blood pressure rushing through this compromised membrane produces abrasions and tears. Unless something covers these abrasions and tears, the blood will go under the membrane through the tear and will peel it off and throw it as an embolus down the circulation to the brain or to the heart itself. Nature has designed low-density cholesterol to come and cover the area of damage here, smooth over the tear and make it impermeable so that it will heal underneath. We see this cholesterol and we do an "LAPD" phenomenon: as soon as something is reported, you have to prove that you haven't done it yourself.

The medical community automatically assumes that cholesterol is the cause of the problem, so it gives patients medication to lower the cholesterol, which is sheer nonsense. The reason is that doctors measure the level of cholesterol in the blood that we take out of the veins of the body; we never measure the blood cholesterol in the blood from the arterial system. Nowhere in the history of medicine is there one record of

cholesterol ever having blocked the venous system. Yet if, because of its slower circulation, the cholesterol is sticky and sticks to the walls of the veins, then all the veins of the body should be blocked, and they're not.

This is another fraudulent statement of the pharmaceutical industry, and it's a four-billion-dollar fraud in America: getting people to take so-called *statins*. With flowery language, the industry explains that this is the cause of the problem. It's not, and human beings are being used as guinea pigs or "cash cows" for the pharmaceutical industry. We need to wake up to this phenomenon.

Although the heart circulates all the blood, nonetheless the arterial system of the heart is compromised because of dehydration. The brain is 85 per cent water. If you look at a single nerve cross-section, in the axon you will see waterways—structures called *microtubules*. These microtubules are perforated

and they drain water from the cytoplasm. They have an environment around them of solutions of lower viscosity. This is where material is floated down the stream. The microtube itself acts as a rail system, and the transporter protein carries these vesicles down the stream into the nerve endings. In order for this transport system to be efficient, we need water in the nervous system. That's why the brain is

85 per cent water: it has the reverse-osmosis program completely, constantly supplying this water. If we have enough water, the diffusion process will help. This means of transport is called *fast axonal transport* through waterways in the nerves. This fast axonal transport still takes weeks and months from the source of supply to the terminal where it's being used. So, dehydration is a problem in the elderly that is slowed down because of this process.

Using Water to Prevent Cancer

Cancer is my field of research, on top of the other things, and in 1987 I presented the guest lecture for a cancer conference. The tumour biology unit of King's College Hospital at the University of London evaluated my writings and realised that what I was saying made a lot of sense, so the chief of the department went to the editor of *Anticancer Research* and said that this is new information. This man was an eminent researcher in cancer, with 70 original papers to his name, and using water to prevent cancer was an entirely novel piece of information to him. It took him about a year to understand what I was saying; I had to stay with him and guide him through the channels of understanding. Anyway, I was asked to go to a conference and explain it

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to the other cancer researchers who were invited—eminent cancer researchers from Europe, America and elsewhere. I explained that pain is a sign of dehydration, and my guest lecture, "Pain: A Need for Paradigm Change", explained that dehydration is the origin of pain and disease, including cancer, in the human body.

Cancer cells are primitive and genetically selfish. They are anaerobic; they have low oxygen needs. They reveal stem-cell characteristics in some cell-culture media. In other words, this is a primitive cell that can once again become something else; it can develop into an organ or another thing. This is the mechanism when the body is dehydrated and the cells become reduced to their primitive form, and from that primitive form a new life is supposed to occur.

Cancer production depends on a multifactorial system dysfunction; in other words, many systems have to fail before cancer occurs. There's DNA damage, reduced efficiency of the DNA repair system, receptor-bound regulation and immune system suppression. There are four main chemical pathways that prevent cancer in the body. In dehydration, all of them become damaged, and this is how it occurs. When there isn't enough water to wash the hydrogen ion outside of the cell, to take it out of the cell, this hydrogen ion can damage the "fine print" of the DNA system.

In dehydration, we lose tryptophan; it becomes an antioxidant. Yet tryptophan is part of a tripod enzyme, lysine-tryptophan-lysine, that is involved in a DNA quality-control system. So, in dehydration, quality control that recognises DNA misprints, cuts and splices and corrects the DNA misprints becomes disrupted because of tryptophan deficiency.

In the body, every cell is in a watery environment and depends for the transfer of messenger systems on a watery environment that would sit on the receptors and stimulate the cells, so it is a means of transport and communication in the cell by means of the receptors. In society, we have these dishes and electromagnetic pulses to give you all the information in television and radio and telephone communications. In the body, communication is in a watery environment. So, when the body is in a dehydrated state, not only does the waterway in the cell membrane close but it also begins to lose its receptor systems. This is because if there is not enough circulation to bring the messenger proteins to the receptors then the cells don't need to make the

receptors, and that's how the mechanism begins.

Histamine increases calcium release because calcium atoms, when they bond and bind together, trap one unit of ATP [adenosine triphosphate], one unit of energy. Nature has designed it so that histamine breaks this bond and releases the ATP. So, you get a lot of loose calcium in dehydration because when the energy of hydrolysis is not there, when the energy of hydroelectricity is not there, another source of energy has to be made available, and the calcium bondage releases its energy in the endoplasmic reticulum or in the bone structure.

As it happens, excess calcium activates the proteases and receptors are destroyed. Protein kinase C, which is a protein kinase that activates growth normally, responds to messenger systems. This protein kinase is broken down and it becomes protein kinase M, which is an autonomous protein; once it is triggered into activity, nothing stops it. A normal cell has receptors which know where their boundaries are in a receptor-bound regulated system; but in a cell that is becoming cancerous, these boundaries are not recognised. That is why cancer cells overgrow one another, and you get lumps because of protein kinase M.

The body is a multifactorial system, and if it has gone the route of destroying its receptors we find that in that area the cells have become autonomous. They have inherited a selfishness that makes them replicate constantly, but they don't have the receptors to stop boundaries. That is how cancer begins to develop and grow.

The other element is immune system suppression. Histamine,

once it is secreted, activates its receptors. Now, the suppressor cells to helper cells ratio in the bone marrow is two to one; in other words, as soon as histamine is released in dehydration, the bone marrow becomes suppressed. Another thing is that interleukin-1 is stimulated and interleukin-2 is inhibited. Interleukin-2 is essential in defending the body against bacteria, against cancer, against any offending agent, because it stimulates interferon production. The scientific community has tried to use interferon to defend against cancer.

Now, the role of interferon is very interesting. Interferon stimulates indoleamine dioxygenase, which breaks down tryptophan and indoleamines and produces oxygen, ozone, superoxide anion and hydrogen peroxide.

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To an anaerobic cell, oxygen is the kiss of death. When dehydration inhibits interferon production, in effect you are not producing the oxygen that is needed. This superoxide anion is actually designed to oxygenate areas of inflammatory environment that do not get oxygen because of the stagnant situation, so the cells that are defending or repairing will get oxygen manufactured for them on the spot by the action of interferon. In cancer production, this is stopped because of lack of water.

Water As a Cure for Cancer

Dr Lorraine Day is an orthopaedic surgeon, for 15 years the chief of orthopaedic surgery at San Francisco General Hospital. She had the lifestyle of a surgeon, drank a lot of coffee, operated a lot, and never drank water—15 years of maybe three glasses of water in a year. All of a sudden she developed a cancer in her breast, and this thing grew very quickly. She was on her deathbed. She had changed her lifestyle and started taking an alternative approach to treatment of cancer because she knew that the normal treatments wouldn't work as she had used them [on patients]. She knew that chemotherapy is a poisonous system as she had used it before [on patients] but it never worked, so she wasn't going to use it for herself.

Dr Day stopped practising medicine and went into alternative medicine, but whatever she had wasn't working. She was totally bedridden; her husband was giving her bedpans. She told me this last weekend: "I started praying to God and said, 'I did whatever I could, God. Please guide me! What am I supposed to do? I know that you don't want me to die, but tell me what to do.'" A friend of hers bought a copy of my book. Someone had [already] given her a copy of my book. She'd read it and thrown it aside, saying, "It doesn't apply to me." But this time that she prayed to God and the book was presented to her again, all of a sudden she woke up and said, "Maybe this is it." She started reading and realised that it applied to her. That same night she drank 15 glasses of water, and she gradually started improving. (I'm not saying to go out and drink 15 glasses of water. For God's sake, don't do that!) Dr Day changed her lifestyle and got better and better. Within four months she was totally cancer free, although she'd had secondary cancers under her arm, in her liver and elsewhere. She had been dying. The doctors had given her no more than two weeks. So water is a magical treatment or medication for diseases.

A young man I know, Andrew Bowman, had a classic case of dehydration. He developed allergies at the age of eight years, diabetes at 14, neuropathy at twenty-six. He

had asthma at the same time as he had allergies, but needed treatment when he was twenty-three. He had immune system suppression and several bouts of infectious mononucleosis—and, of course, when one gets infectious "mono", once is enough but he had it three or four times. He had a lump on his left flank; they took it and biopsied it and it was positive for lymphoma. He had a gallium test and the lymphoma was all over his body; he just glowed with lymphoma tissue. They offered him the orthodox treatment and said they would give him a total body X-ray. They "fried" him. He was burned, second- and third-degree burns, and he refused to do the treatment any more. Nonetheless, the cancer was growing there. They told him to go and put his affairs in order because he had no more time; they gave him three months.

He was going through Wilkes-Barre, Pennsylvania, and he met Bob Butts, who is a proponent of the water cure in northeast Pennsylvania and has spent hundreds of thousands of dollars educating people about dehydration. He took Andrew Bowman under his wing and told him to drink water. Andrew contacted me, and I told him what to do. In November 1995, a few months later, he was totally free of lymphoma. He is still free of lymphoma. He hasn't looked back on lymphoma. For his diabetes, which is the only remnant of the symptoms of his dehydration, he was taking 96 units of insulin; he's now taking 36 units. His eye problems disappeared. His leg problems disappeared and he didn't need an amputation.

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Practical Use of Water to Maintain Good Health

So, water is an unknown quantity that God has revealed for mankind in trouble, in times of need, when we are being enslaved by the pharmaceutical industry and the ignorance of my colleagues in the medical community.

The treatment process is very simple: prevent dehydration first. You need water on a regular basis. You need salt on a regular basis. You need daily exercise because your brain chemistry depends on how you move your muscles. When you use your muscles, you burn the branched-chain amino acids, which are competitors to tryptophan passage across the blood-brain barrier. Once you burn those, your body chemistry will begin to function normally. The calf muscles are your secondary hearts for venous circulation. That is why you need to exercise every day.

You need a balanced vegetable and protein diet, a ratio

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of 20 to 80: 80 per cent vegetables and fruits, not very much starch, and 20 per cent protein. Do this and take the right amounts of water and cut out sodas, and I can assure you, I guarantee, no disease will occur in you for a long time.

You need your water before your food. First thing in the morning when you wake up, drink two glasses of water to offset the overnight dehydration. Then you need a glass of water half an hour *before* food, because if you expect to digest the food then you'd better have the water beforehand. You also need a glass of water two-and-a-half hours *after* food, to wrap up the process of digestion and hydrate the areas that lost water to the circulation. For every quart or litre of water, you need a quarter-teaspoon of salt.

You also need the other minerals in order to regulate the volume of water

that is held inside the cells. You need a balanced protein diet—eggs are very good, cottage cheese is excellent—to give you all the amino acids and balanced structure. To reverse any of the diseases produced by dehydration, it is essential to supplement the body adequately with intracellular minerals. The diet must be high in potassium, calcium, magnesium, zinc, selenium and manganese content.

This is a very simple solution to cure any of the modern diseases that we have come across. ∞

About the Author:

Fereydoon Batmanghelidj, MD, was born in Tehran, Iran, in 1931 and died in Virginia, USA, in 2004. He received his formal medical training at St Mary's Hospital Medical School of London University and practised in the UK before returning to Iran, where he played a key role in the development of hospitals and medical centres.

During the Iranian Revolution, he was a political prisoner and he treated fellow inmates with the only medicine available: water. After his release from prison in 1982, he escaped from Iran and migrated to the USA.

Dr Batmanghelidj devoted most of his medical life to researching the cause and cure of different ailments in the human body. He had a number of books, videos, audiotapes and medical research series published. He was best known for his book *Your Body's Many Cries for Water* (1992, 1997; reviewed in NEXUS 3/01; see WaterCure.com).

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