

WATER:

THE IMPORTANCE OF WATER

With two thirds of the earth's surface covered by water and the human body consisting of 75 percent of it, it is evidently clear that water is one of the prime elements responsible for life on earth. Water circulates through the land just as it does through the human body, transporting, dissolving, replenishing nutrients and organic matter, while carrying away waste material. Further in the body, it regulates the activities of fluids, tissues, cells, lymph, blood and glandular secretions.

An average adult body contains 42 litres of water and with just a small loss of 2.7 litres he or she can suffer from dehydration, displaying symptoms of irritability, fatigue, nervousness, dizziness, weakness, headaches and consequently reach a state of pathology. Dr F. Batmanghelidj, in his book 'your body's many cries for water', gives a wonderful essay on water and its vital role in the health of a water 'starved' society. He writes: "Since the 'water' we drink provides for cell function and its volume requirements, the decrease in our daily water intake affects the efficiency of cell activity.....as a result chronic dehydration causes symptoms that equal disease..."

THE HISTORY OF WATER

Water has been used since antiquity as a symbol by which to express devotion and purity. Some cultures, like the ancient Greeks, went as far as to worship gods who were thought to live in and command the waters. Whole cities have been built by considering the location and availability of pure drinking water. The place of gathering was around the wells, which is perhaps the following trend in building fountains in the middle of piazzas.

Traditional and modern medicine have been making use of the psychological and physiological diverse properties of water, in all forms of hydrotherapy (composite Greek word: hydro, of water and therapy, . We all know of the simple, yet effective, calming qualities of a warm bath or the invigorating qualities of a cold shower. For centuries, numerous healing springs located all around the world have been recognised for their benefits. The famous Belgium spas in the Ardennes is a fine example. Historical records of these cold springs claim 'cures' since the fourteenth century. The hot Californian spas, the healing spas of Loutraki in Greece, the Dalhousie hot springs in the border of South Australia and Northern Territory, Moree in NSW, Hepburn mineral spas in Victoria are just a few examples.

OUR WATER TODAY

Contrary to the past, our recent developed technological society has become indifferent to this miracle of life. Our natural heritage (rivers, seas and oceans) has been exploited, mistreated and contaminated.

The population decline of the marine and riparian life, the appearance of green algae in the rivers and the stench and slime that comes as a result of putrefaction in the water, are clear signs of the depth and extent of disruption that has been caused to this intricate ecosystem (a composite Greek word: eco, home and systema, a combination of things or parts forming a complex or unitary whole). Government bodies and water authorities will

have us believe that it is 'safe' and we should not worry about this global alarm. Awareness and action lies entirely upon us, as we need to become our own educators, physicians and innovators. Socrates had once said: "an unexamined life is not worth living....", Jesus took it a step further: "seek, and you shall find.....the truth shall set you free..." So questioning everything and anything that anyone tells you until it makes sense, is of upmost importance. If it is the truth it will feel right, set you free and lead you on the road of discovery and recovery.

THE TRUTH ABOUT THE DRINKING WATER

Our drinking water today, far from being pure, contains some two hundred deadly commercial chemicals. Add to that bacteria, viruses, inorganic minerals (making the water hard) and you have a chemical cocktail that is unsuitable (if not deadly) for human consumption. John Archer in his book 'THE WATER YOU DRINK, HOW SAFE IS IT ?' refers to an estimate of 60,000 tonnes of fifty different chemicals being deliberately added annually to Australia's water. Some of these are:

chlorine: studies¹ indicate that chlorine is involved in heart disease, hardening of the arteries (arteriosclerosis), anaemia, high blood pressure, allergies and cancers² of the bladder, stomach, liver and rectum. Further, chlorine can destroy protein in the body and cause adverse effects on the skin and hair. The US COUNCIL of environmental quality states that "cancer risk among people drinking chlorinated water is 93% higher than among those whose water does not contain chlorine". Chlorine binds and reacts with many other chemicals, forming carcinogens like Trihalomethanes³ (THMs), with chloroform being the most common one. Furthermore, recent real life evidence in the tap water of Sydney shows that certain viruses and parasites, like giardia and cryptosporidium, are being resistant to chlorine and can survive the long journey from the sewage treatment to your tap. That makes chlorination a even more pointless and dangerous practice.

Giardia and cryptosporidium are protozoa (unicellular organisms) parasitic to the intestines of animals and humans. Once in the body, these parasites then multiply and cause the respective infections of giardiasis and cryptosporidiosis, which contribute or are associated to enteric (intestinal) diseases. Other than food, these parasites are transmitted from contaminated drinking water. These infested waters are today in most major cities which is a direct result of the unsuccessful treatment of recycled sewage effluent. These parasites initially venture their way into the sewage effluent, from Hospitals, abattoir and farms waste, which contain blood, intestines and faeces. While immunocompetent (the ability to develop an immune response) people may remain asymptomatic (presenting no symptoms) by ingestion of these parasites, immunocompromised (ie malnutrition Cancer and Aids) patients are at risk. U.S Health Officials estimate 900,000 people each year become ill, and possibly 900 die from waterborne disease⁴. Notable outbreaks occurred in Milwaukee, Wisconsin, in 1993 when over 400,000 people became ill after drinking water contaminated with the parasite. Symptoms associated with the infection of these parasites are, mild to profuse debilitating diarrhoea, lassitude, nausea, abdominal pain and vomiting with consequent loss of appetite and fever. The threat and danger of outbreaks similar to the dreaded great London epidemic in 1854 (where cholera due to contaminated water took the life of many unaware citizens) is now once again at our door step and unless drastic precautions are taken on these early signs we could be expecting disasters of great magnitude (in the apocalypse it states, that one third of the waters will be contaminated, could this be it?). For now it is about time that water authorities admit to their erroneous ways and start looking for alternatives to maintain and preserve water safety and quality. Water is a living substance and as such it needs the same treatment as all other living forms (poisons can not purify). Germany has been for long now pumping oxygen in its

rivers and lakes in an attempt to revitalise its nearly dead waters, while Switzerland is experimenting with ozone treatments.

aluminium sulphate: that is added to clarify water, has long been associated with memory loss, possibly Alzheimers disease and is believed to increase cardiovascular disease.

sodium fluoride: this is not a water treatment and was initially added as a supplement to 'assumably' prevent tooth decay⁵ in children. Its toxicity is high enough that in larger concentrations can be used as a pesticide and rat killer. In humans it can be damaging to the heart, lungs, liver, cause genetic mutations and have long term negative effects on enzyme production and the efficiency of the immune system. In the medical encyclopedia and dictionary by Miller-Keane, under fluoridation it refers that slight excesses of fluoride are poisonous and it can cause dental fluorosis (mottled discolouration of teeth) and when you look up further down under fluorosis, you can see clearly the irony of the system an enamel hypoplasia resulting from prolonged ingestion of drinking water containing high levels of fluoride". Tests carried out in Victoria in 1976 by the State Water Supply Commission indicated that fluoride is involved in the corrosion of the copper pipes, which causes more poisons leaching into the water. Copper at certain concentrations effects the uptake of essential zinc in the body and can bring on stomach pain, nausea and diarrhoea. Newer office blocks and high stories buildings are more risky, as taps are not regularly used, leaving fluorinated water standing in the copper pipes for longer periods of times, consequently allowing corrosion. As the debate about the safety of fluoride continuous, countries such as Switzerland, Belgium, Holland, Germany and Sweden have terminated its use due to its potential health hazard.

lead: is another chemical ingredient found in the water that imposes risks to the nervous, circulatory and digestive systems. It is a teratogen, a substance known to cause physical defects in the developing embryo. Chronic exposure, even in small doses, may have serious implications to your well being. Symptoms to be wary of are irritability, nervousness, weight loss, anaemia, stomach cramps, constipation and mental depression. The main source of lead in the water is the plumbing and its corrosion.

The list of chemicals continues: sodium silicofluoride slurry, sulphuric acid, sodium hypochlorite solution, calcium oxide, silt, rust, algae, debris, larvae, asbestos (mostly from corroding cement pipe lines), pesticides, herbicides, fertilisers (from agricultural run offs), moulds, fungi, industrial waste, toxic metals, amoebas, clay and silica have all found their way into the water. As if this is not enough, chemical reactions of the different constituents in our drinking chemical and sewage cocktail make things even worse.

Nitrates from fertilisers when brought in contact with chlorine and ammonia, can turn into nitrites. Nitrites once inside the body combine with amines and form nitrosamines which are highly carcinogenic. Nitrites can interfere with oxygen uptake and since babies are specifically sensitive to this aspect you could not fail to see a possible link between blue baby syndrome and the nitrite factor.

According to studies by the state of California, women who drink tap water have twice as many miscarriages and birth defects as those who have filtering devices or are drinking bottled water. Five studies arrived to the same conclusion, according to State Health, Director Kenneth Kizer. This connection now is such a common knowledge that it even appeared as a passing comment during the movie 'ONE THOUSAND ACRES'.

Inorganic minerals (minerals not suitable for human consumption) such as calcium

carbonate, have their effect. Unable to be assimilated they store in between joints, muscles, bones, nerves, inside arteries and become partners in many crippling dis-eases, such as arthritis, hardening of the arteries, gall stones, kidney stones, gout, tinnitus and perhaps even stroke and neuralgia. Dr Paul C. Bragg in his essay and book 'THE SHOCKING TRUTH ABOUT WATER' argues that the human brain and other body structures will become hardened largely through the use of "chemicalized and inorganically mineralised water".

Dr E. Banik, in his book 'THE CHOICE IS CLEAR', explains that inorganic minerals coat the crystalline lens of the eye with a fine film, resulting in cataracts. Glaucoma, the dreadful eye disease, can be another result of hard water. The tiny vessels film up with mineral deposits, which results in a build-up pressure in the eye.

WHAT CHOICES HAVE WE GOT?

Dr Batmanghelidj talks about the shrinking of the vital organs due to insufficient hydration. Dr Bragg postulates how inorganic minerals in water turns people into 'stones' and advises the use of pure water. John Archer alarms of the dangers and condition of public (sewage) water

You are what you drink so make sure what you drink is pure'

Ten years ago the prospect of drinking only purified or bottled water was a fiction, or a novelty for most people. Nowadays, it is becoming a necessity in maintaining and preserving good health. Finding pure water is becoming more than just food for thought and with our brain being 85 percent water, we better start thinking of the choices. It is my opinion and as well of others that tap water should not be drunk at all if other sources are available. However, if tap water is your only option, then boil the water for a few minutes, expose it to the sun for a while in a clear glass container and then aerate it by pouring it back and forth from one container to another. Keep in mind that boiling will only kill bacteria and that harmful chemicals and minerals will still remain in the water. Rain water it is no longer the best available option with today's pollution. Water is a hungry solvent and as the rain falls, it begins to collect hundreds of potentially harmful substances, such as radioactive isotopes and their degradation products of atomic fission including barium, caesium and strontium from world wide atomic experiments and "accidents" which travel around the atmosphere (<I style="mso-bidi-font-style: normal">refer to chart). In addition industrial and exhaust fumes including carbon monoxide, sulphuric acid and lead are collected. That is why the sky looks so clean after a good 'acid' rain.

Spring water contains those unwanted inorganic minerals and their purity is debatable if you consider the pollution of the soil. So use it sparingly or when nothing else is available. Don't be misled by claims about the value of inorganic minerals, the body cannot make use of any minerals unless they are derived from the plant kingdom (organic minerals). A well balanced diet will provide an abundance of organic minerals that water never could. In his book 'New Life Through Nutrition' nutritionist Dr Shelton Deal debates that we should not look to water as our source of minerals. As for the inexpensive supermarket filters they don't eliminate all impurities and toxins (not that it is claimed that they do).

Reverse osmosis is by far the most advanced technology for home installation available to the public. It is based on the process by which the human cells diffuse fluids between the intracellular and extracellular spaces, by separating and selectively preventing the passage of solute molecules (through a semipermeable membrane) and allowing the passage of the solvent H₂O. Through this process almost all harmful bacteria, minerals and toxins are eliminated. Professional installation and surveillance is necessary for if the

membrane is ruptured without your knowledge the final condition of the water could be worse than if it were not filtered.

Distilled water, contrary to the wide held view that it leaches organic essential minerals and micronutrients from your body, its emptiness works in your favour. It dissolves and eliminates harmful inorganic minerals and toxic waste accumulation. Once the organic nutrients have been absorbed by the cells they cannot be taken away. Is there an inherent intelligentsia behind all this? The answer is yes! after all, what is the animating factor behind all things? but far from being just an esoteric answer, the key lies in the inherent 'instructions' of the human body's filtering system. The kidneys make sure that nothing valuable will be lost, there is a constant recycling, so even if nutrients were to be 'stolen' they would be returned by the kidneys. Which explains the dark appearance of urine during times of inadequate hydration. Distillation is achieved by boiling the water, steam then rises and is collected in a condenser where it is stored and cooled. The problem in this process is that together with the steam, percentage of the pollutant gases such fluorine and chlorine are also evaporated over into the condenser. To overcome this problem scientists developed other methods like fragmented distillation and C.M.D method (Cold Molecular Distillation) amongst others. C.M.D water is available from companies⁶ specialising in this area and supply water for medical purposes, allergy affected chemical sensitive people, cancer and dialysis patients (were even small traces of contaminants can send the patient into shock) and generally to any one who is seeking good health. C.M.D water contains no solid matter and is solely consisting of two elements, Hydrogen and Oxygen.

THE AMOUNT OF WATER YOUR BODY NEEDS

Another important factor is the amount of water necessary for our body to function at its peak performance. Bearing in mind again that your body is about 75 percent water it is easy to understand that water must be your body's most essential daily ingredient. Your body loses each day about 2-3 liters of water through elimination, urination, perspiration and respiration. However, this may increase during illness, high performance, exercise, pregnancy and nursing. The beverages most people choose to consume are often counter-productive in promoting hydration. Coffee, tea, alcohol, soft and sugary drinks are all diuretics and will cause not only the loss of water they are dissolved in, but they will also draw water from the body's reserves. In normal conditions your body needs to replace the fluids it has lost throughout the day. Most of fluids should be replaced by drinking pure water. The rest you should get from fruit, vegetables and their juices. Attention must be given that the elderly and children are meeting their daily requirements. Dry mouth is not the only indication of dehydration, in fact it is the last sign. You need to acquire the habit to drink water even when you think you don't need it and eventually your true thirst mechanisms will be reawaken. Signs to look for that identify with dehydration are constipation, headaches, indigestion, weight gain, fluid retention, dark and pungent urine, and their associated pathologies colitis, kidney stones, bladder and urinary track infections to name only a few.

SUMMARY

Water is involved in all bodily functions: digestion, assimilation, elimination, respiration, maintaining temperature (homeostasis) integrity and the strength of all bodily structures. Today, the water is polluted with hundreds of toxins and impurities. Authorities only test for a small number of them. Your body, being primarily water, requires sufficient daily water replacement in order to function efficiently. Water treatments, that are aimed to render our drinking water bacteriologically safe, have been proven ineffective and the presence of certain pathogenic bacteria like giardia and cryptosporidium recently found in

Sydney water is just one of the many examples. Viewing the effects of individual chemicals, inorganic minerals and their by-products, you can see a link to today's major diseases. If you drink devitalised, impure water how can you expect vitality and health. Dehydration, due to the offensive taste of the water and the introduction of commercial sugar loaded beverages, has become another contributing factor to dis-ease. The advice of Dr Batmanghelidj to stop treating thirst with medications holds lots of merit. Mineral water may be wonderful to bathe in, however, the presence of inorganic minerals makes it undesirable. Tap water has been proven unsuitable even for showering⁷. In an article published in the magazine New Scientist, by Ian Anderson 18/9/86, he writes "Showers pose a risk to health". Pure water may become the medicine of the future. 'Oxygen enriched and free of radioactive and chemical compounds' may read on the label of our bottle water in the next millennium.... At this stage Reverse Osmosis and C.M.D water are our best available options.