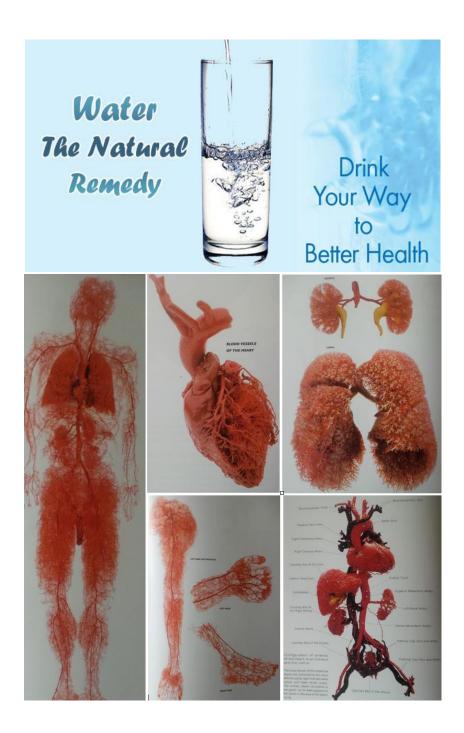
WATER IS WHAT YOU NEED TO IMPROVE YOUR OVERALL HEALTH AND AVOID MAJOR HEALTH COMPLICATIONS – Did you know that many health issues are the results of chronic unintentional dehydration, and that taking medications worsen the conditions? Are you confused about how much water to drink and what is considered water? Water is vital to your survival and your life. It is involved in all functions of the body. This article will help you to understand the subject of water and the human body, and why it is the best natural remedy for many ailments and illnesses – June 1, 2015 by Justine Vo, CHR Health Centre Inc. – www.CHRcentre.com



## **DID YOU KNOW?**

**1. Our body is made of 70 to 75% of water** – Like the earth, most parts of the body including muscles, tissues, veins, vessels, nerves, and organs need about 75% of water to be flexible and functioning. Certain softer structures such as the brain and the lungs need 85 to 90% of water content to perform healthily. Even the bones need 30% of water to be strong, flexible, and shock-absorbing. The body has about 100,000 miles of veins and vessels that contain blood which is normally about 94% water when the body is fully hydrated. See the above picture of the body blood vessels network.

2. Under normal conditions, our body eliminates ½ of our body weight (lbs) in ounces through respiration, perspiration and elimination (urination, defecation) – For example, if we weigh 120 lbs, we will eliminate 60 oz of water daily. That's 2 litres, or 4 bottles of 16 oz/500 ml. "Drink at least 2 litres a day" is just a common rule of thumb to avoid dehydration. To replenish our body and to keep it flowing, flexible and functioning, we need to drink at least the amount of water which we lose every day.

**3.** Our body loses more water under "heat", "cold" or "dry" conditions, and with physical activities – In hot summer weather, or under other type of heat such as sauna and yoga, our body loses about 4 oz of water every 20 minutes through perspiration from the pores of the skin to cool the body that has been warmed from the inside. In cold winter weather or dry condition (such as on the plane), we lose 4 oz every 20 minutes through respiration, increased urine production due to blood vessels constriction, and perspiration under warm clothing. We lose an additional 8 oz every 30 minutes if we perform physical activities. Winter activities such as skiing, snowboarding and ice skating increase water loss because of the increased rate of cold and dry air deep breathing. So imagine the additional amount of water you need to take in if you run in hot summer weather, perform Zumba in hot yoga, or outdoor sports in winter cold weather, in addition to our normal daily intake. Do not neglect to replenish the body with natural water as needed.

**4.** Tea, coffee, alcohol, beer, manufactured beverages, and certain prescriptive medications contain dehydrating substances such as caffeine and alcohol which cause water loss – Caffeine can cause urinary frequency because it irritates the bladder, resulting in spasms of the bladder wall that are perceived by the person as an urge to urinate. Alcohol, via its effect of inhibiting water conservation, can also result in frequent urges to urinate. Depending on the type of drinks and the amount of caffeine or alcohol, we may lose 8 to 16 oz of water for every 8 oz caffeine drinks or alcohol consumed. Fruit juice and fruit drinks have too many carbohydrates which can be harmful and are considered about 30% water. Drink natural water immediately after each consumption of tea, coffee, alcohol or manufactured beverage to replenish the water loss. Remember that this water is in addition to our normal daily intake.

**5.** Hot drinks including decaffeinated tea or coffee, herbal tea, and hot water also cause water loss – The body loses water after drinking hot beverages through perspiration from the pore of the skin to cool the body that has been warmed from the inside. My patients who drink herbal tea or hot water as their habitual source of water experienced symptoms of dehydration including muscle cramps, stiff joints, constipation, headaches, dehydrated skin and facial wrinkles. Insufficient intake of water and continued/increased intake of hot drinks – water, tea or coffee – is one of the key causes of morning sickness during pregnancy. As the fetus cell divides a trillion times to grow to a full-term baby, the mother has to take in much more room-temperature water to supply the demands of the growing fetus. As thirst triggers morning sickness, the mother tends to consume more hot drinks with or without caffeine to calm the nausea, which in turn results in increased dehydration and prolonged pregnancy sickness.

**6.** Stress to the human body immediately causes dehydration and dehydration causes stress – as they both initiate the same series of physiological steps for crisis management. The available body resources of water and food products will be distributed accordingly to handle the crisis. Stress and dehydration is hence a vicious circle that can cause other more serious illnesses including cancer.

7. Functions of water in the body – Our body uses water in all its cells, protects organs and tissues, helps regulate its temperature, and maintain other body functions. Water participates in the biochemical breakdown of what we eat – helps dissolve minerals and nutrients to make them accessible to the body - and is a carrier, distributing essential nutrients to cells. It removes waste products including toxins that the organs and cells reject, and flushes them out through urines and defecation. It protects and lubricate tissues, joints, and acts as a shock absorber for eyes, brain, bones, spinal cord and the fetus through amniotic fluid. It brings the cell oxygen and takes the waste gases to the lungs for disposal. It is needed for the production of neurotransmitters and hormones made by the brain (melatonin), and generates electrical energy for all brain functions. It moistens tissues around the eyes, mouth and nose. Water aids in digestion and helps prevent constipation. Consuming water at regular intervals during the day is needed, as previously supplied water is busy with other functions when new water comes in.

8. Signs of dehydration – Chronic fatigue, fibromyalgia, dizziness/light-headedness, irritability, anxiety, heavy-headedness, heat intolerance, dark urine, headaches/migraines, sleeplessness, muscles stiffness/cramp, stiff joints, rheumatoid arthritis pain, osteoarthritis, gout, osteoporosis, lower back pain, difficulty breathing, asthma and allergies, skin dryness and diseases, facial wrinkles, loss of elasticity of tissues, muscles, vessels, organs and skin, dry and burning eyes, overheat, hot flashes, heartburn, constipation, kidney weakness resulting in frequent urination, incontinence, kidney stones, coronary heart disease, hypertension, water retention under the skin (edema), Type II diabetes, obesity, autoimmune diseases, forgetfulness, brain diseases, heatstroke, seizure, cancer.

**9.** Severe dehydration and depletion of body water reserve can cause complications– In the event of continued chronic dehydration, all capillaries that supply water to the lower limbs shut down to preserve the body water reserve for upper body key organ functions. The body draws water reserve from the inner cells, the outer cells and the blood to supply water to vital organs such as the heart, lungs and brain. Severe dehydration and depletion of water reserve can cause complications such as cerebral edema (swelling of the brain), hypovolemic or low blood volume shock (causing drop in blood pressure and amount of oxygen in the body), kidneys failure, coma and death.

**It's never too late to start drinking sufficient water again -** When we did not drink enough water for a long period of time, we lost the thirst signals. If we start to drink water regularly again, we will regain clear thirst signals. For example, after drinking a coffee or a tea, or after being in the sun for half-anhour, our throat will feel dry and thirsty.

## Here are some tips to drink water:

- Do not drink a lot of water at any one time because our body may not be able to absorb all the water.

- Drink a 6 oz, 8 oz or 10 oz glass of water every hour, depending on the total amount of water each individual needs in a day with or without physical activities. This way, you don't have to remember how much water you have or have forgotten to consume.

- Drink a glass of water before we eat solid foods. The water needs to be broken down first (hydrolyzed) before the body can use the various components in food.

- Drink water during meal to avoid constipation. Do not drink cold water during a fatty meal. Most Asians drink hot green tea during meal and a hot soup at the end of the meal to help dilute the fat from the food.

- Drink water during exercises and sports.

- Drink water outdoor in summer heat, winter cold weather and on the plane.

- Discard any bottle water that was left heated or frozen in the car as it is toxic.

- Don't be afraid of drinking water fearing frequent urination. Contrarily, my patients who used to visit the bathroom up to 8 times during the night now only get up once after increasing their water and protein intake, as organs, vessels, muscles, and tissues became stronger and more elastic. Patients with incontinence also experienced much better control of the functions of the bladder and urinary system.

**Warning:** Drinking too much water can be dangerous. It causes blood cells to swell and can result in a severe case of hyponatremia that can lead to water intoxication, an illness whose symptoms include headache, fatigue, nausea, vomiting, frequent urination, mental disorientation, and death.

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