

Distilled Water and Its Relationship to Health...





Change Your Water - Change Your Life

Distillation Station- Aquamedia Group Companies- Copyright 2013- All Rights Reserved

Douglas Clayton Hoover Author



Douglas & Alice Hoover- Mich.



Hoover Marketing Distillation Station Bill's Douglas is a retired contractor, author, freelance writer, inventor, designer, architect and lives in San Diego, CA with his wife Alice.

# He is the founder and developer of the "Distillation Station," the very "first bottled water vending machines in the United States."

The original station was placed in Bill's IGA Store, Brooklyn, Michigan, in 1976. Douglas Hoover has been studying water and its relationship to health for over 40 years.

He rarely debates with the distilled water naysayers, because, "A man with an experience is not at the mercy of a man with an argument." Douglas is a living example of the miraculous health benefits of a "*fasting lifestyle*" and drinking plenty of distilled water.



John Messimer- Bill's



Bill's IGA Grocery- Brooklyn MI-



Illustration 1: Distillation Station- Kiosk with A stations

John Messimer-



In the year 1976, just a

stone's throw from the Michigan International Speedway, in Bill's IGA (Independent Grocers Association) distilled water was being installed by Doug Hoover of the Aquamedia Corporation. Nine years later, in June of 1985, the owner of Bill's IGA store reported sales of Crystal Distilled drinking water was in excess of 2500 gallons per week in addition to over 1,500 pounds of Crystal Distilled ice cubes. Brooklyn has a population of 1,300! He was excited to add that the Crystal Distilled drinking water from the Distillation Station produced the highest profit margin of any item in his store." Crystal Distilled water and ice is produced by steam vapor compression distillation which kills all bacteria and cysts, removing everything from the water, resulting in the purest, healthiest water available, distilled!

#### TABLE OF CONTENTS

	Preface 6
1	What Is Distilled Water? 7
2	Distilled Water – Simple Yet Misunderstood 16
3	Why Do I Need to Drink Distilled Water? 22
4	What's In Your Water? 32
5	The Fluoridation of Drinking Water 39
6	Drinking Water and Cancer 42
7	Does Bottled Water Provide Health Benefits? 47

## TABLE OF CONTENTS (Cont'd)

9	Distilled Water Helps Burn Fat	66
10	Cooking With Distilled Water	70

11	Comparing Organic & Inorganic Minerals 7	'8
12	Mineral Chelates Are Not Created Equal 8	32
13	Carbon Filters: "Cheapest" Water Treatment But Are They Effective?	3
14	40 Years of Fasting With Distilled Water	92
15	Fasting – Distilled Water – Exercise	03

#### **Preface**

This book will expose the myths and falsehoods while revealing the truths about water quality and its relationship to health and longevity.

Think of what you need to merely survive. Food? Water? Air? Cell phones? Obviously, by the book's title, I'm going to concentrate on water. Water is of major importance to all living things; in some organisms, up to 90% of their body weight comes from water. Up to 60-70% of the human body is water; the brain is composed of over 70-72% water, and the lungs nearly 90%. Lean muscle tissue contains about 75% water by weight, as is the brain; body fat contains 10-12% water and bone has 20-22% water. About 83% of our blood is water, which helps digest our food, transport waste, and control body temperature. Each day humans must replace 2.5 to 3 quarts of water lost through the excretory system, with most of it replaced through drinking, and the rest from our foods.

So it only stands to reason that the quality and quantity of water we replace daily has a direct bearing on our health and longevity.

I will be sharing many statistics and facts in this book while reiterating some of what I already said in several chapters. We all learn from repetition, therefore it has been said that the best speakers, teachers and preachers will tell you what they're going to tell you, then they will tell you, and then they will tell you what they told you. So you hear it three times!

#### CHAPTER 1 What Is Distilled Water?

Why is it that water (H<sub>2</sub>O), which is the second simplest substance next to oxygen (O), seems to be much too complicated for some medical doctors to figure out? Not only is water number two in importance, it also happens to be the most important next to oxygen for our survival. For the survival of the Earth, for that matter. All living things require water to survive and without a continuous supply, the average human will perish in only a few days.

Water is required for our bodies to produce blood, lymph, digestive juices, lubricants, bile, extracellular fluid and cytoplasm, the fluid inside the plasma membrane. It is common knowledge that most municipal and private water supplies are severely polluted with everything from chlorine, trihalomethanes, nitrates, pesticides, herbicides, heavy metals and chemicals of every kind, to jet fuel and pharmaceuticals. Consider the fact that since the government established "the priority pollutant list" of 126 known cancer-causing chemicals:

Each year the U.S. Environmental Protection Agency reviews an average of 1,700 new compounds that industry is seeking to introduce. Yet the 1976 Toxic Substances Control Act requires that they be tested for any ill effects before approval only if evidence of potential harm exists—which is seldom the case for new chemicals. The Agency approves about 90 percent of the new compounds without restrictions. Only a quarter of the 82,000 chemicals in use in the U.S. have ever been tested for toxicity. And there are no guidelines for so called "safe" levels in drinking water established for any of these pollutants. Some of these pollutants can be found in every water supply in America, including rivers, streams, lakes, reservoirs, wells, and municipal water supplies. David Ewing Duncan, National Geographic

As a consequence of this alarming condition of America's drinking water sources, the bottled water industry has developed into a \$15 billion profit industry, including bottled waters, sports drinks, water purifiers such as reverse osmosis (RO), distillation, filtration, plus the current fad of ionizers that produce "alkaline" water.



# What Americans Are Drinking



#### ONE OUT OF 4 DRINKS CONSUMED IN AMERICA IS A SOFT DRINK!

Let's talk about filtration and distillation.



**FILTERS:** Regardless of the process or the technology behind it, the main purpose of these devices is to produce the cleanest, purest, healthiest water possible. The most commonly used method for cleaning up tap water is the carbon block filter which removes the water's bad taste, smell, chlorine, nitrates and many chemicals. It is, indeed, the most economical form of water treatment available; however, it comes with several serious drawbacks:

- It does not remove all chemicals present;
- Chemicals can build up in the filter to dangerous concentrations which end up in your body if you don't change the filter regularly;
- A carbon filter is a breeding ground for bacteria and germs;
- The filter can develop channeling from water taking the path of least resistance.



Therefore, unfiltered water can pass

straight through the filter, unobstructed.

The second most popular and effective filter system is reverse osmosis. The RO process involves a special membrane which most pollutants cannot pass through, in addition to prefiltering and post-filtering, to ensure that 99% of the pollutants are removed.

The most effective process of removing everything from the water, including bacteria and cysts, is steam distillation – along with a postcarbon filter to catch any residual volatile gases that escape with the steam. Because distilled water is pure, clean  $H_2O$  and has a pH of 7 (neutral on the pH scale of 1 to 14 with "1" being acid and "14" alkaline), it is used in science and medical laboratories and research facilities including biology and chemistry labs due to its pure neutral qualities. Unlike with RO and distillation, filtration and the ionizers do not remove the hardness or inorganic minerals from the water.



According to Dr. Charles Mayo of the Mayo Clinic and the American Medical Association, Harvard Medical School, along with many doctors and nutritional experts, have determined that very few of the minerals found in water are organic, nor are they chelated or able to be absorbed easily by our cells and tissues. Consequently, they contribute to many ailments and diseases related to the intestinal tract. They also contribute to kidney stones, gall stones, hardening of the arteries and plaque buildup in the colon. Dr. Charles Mayo, Founder of the Mayo Clinic, said, "water hardness" is the underlying cause of many, if not all, of the diseases resulting from poisons in the intestinal tract.

These (hard minerals) pass from the intestinal walls and get into the lymphatic system, which delivers all of its products to the blood which, in turn, distributes to all parts of the body. This is the cause of much human disease. Since the ionizers and filters do not remove the minerals from the water (including chemicals and other toxins), advocates, manufacturers and sales associates malign the use of reverse osmosis and the distillation process.

They claim that the minerals in water are good for you and that these two processes remove the "valuable" minerals. They also go so far as to say that because reverse osmosis and distilled water is so pure, they will leach good minerals from your body, depleting the supply. Promoters of alkaline water even say that distilled water is an acidic which causes it to dissolve even more minerals. **Distilled has a pH of 7 (neutral).** 



The alkaline water industry is now extremely profitable and has become so by making false medical claims that this water can cure a myriad of diseases and prevent many others. In order to support their claim that alkaline water is superior to any other purified water, they must find fault with the two purest and healthiest water purification processes available. The main reason for the popularity of the alkaline water machine is because of the exorbitant profits and the fact that it is sold through multilevel marketing (MLM). Each machine retails at between \$2,000 and \$5,000.

#### Can clean water and dirty water both flow from the same spring?

There are medical doctors such as Dr. Joseph Mercola and Dr. Zoltan Rona who also promote an MLM water filter for the whole house, shower or sink, prompting both of them to claim that, "drinking pure, clean, healthy <u>distilled water</u> will result in early death." This is not only a false claim, it would cause anyone with common sense to question the scientific knowledge and medical judgment and reliability of these doctors or any other "nutritional experts. "**The next time you hear anyone claim that**:

- The minerals found in water are totally beneficial to our body's health;
- Distilled water is acidic;
- Distilled water will leach valuable minerals and nutrients from your body; or
- Early death will come from drinking distilled water,"



# Fresh water distiller USS ALGOL -AKA 54

Ask them, if these claims were true, why would the government allow tens of thousands of naval sailors to continuously drink distilled water found on all Navy ships for well of over five decades?

Also ask, "Why would the Mayo Clinic and many other hospitals, medical centers and clinics recommend distilled water to their patients?"



Dr. Andrew Weil, M.D., nominated as one of Newsweek's "top 100 most influential people in the world," states that, "the minerals that the body needs come from our food, not from our water, and the pH of foods or water does not have an effect on the body's pH."



Dr. Andrew Weil also states that, "the minerals that the body needs come from our food, not from our water, and the pH of foods or water does not have an effect on the body's pH." Alkaline water machines and their product, alkaline water, are "bogus."

Dr. Weil continues, "Don't buy a machine or the alkaline water; save your money. Whether you're drinking distilled water with a pH of 7 or orange juice with a pH of 5.5 or alkaline water with a pH of 8.0, when these reach the stomach, their pH is changed immediately to the pH the body requires."

If we were to drink something extremely acidic, the duodenum would

neutralize the acid. And if it is extremely alkaline, the stomach will produce additional acid to neutralize it." The distillation process involves turning water into steam, leaving behind all of the pollutants, then capturing the steam, cooling it, converting it back to a liquid free of pollutants. This is how mother nature has been purifying water since this planet was created.

# The Hydrological Cycle



The hydrological cycle is the process of water being heated by the sun, evaporating and collecting in the atmosphere in the form of clouds; cooling, condensing, and falling back to earth as pure (distilled) water free of pollutants which were left on the earth's surface.

## **Drinking Unpolluted Water**



The Hunza people living in the Himalayan Mountains are known to live for well over 100 years. They experience few diseases and little or no sickness, are extremely healthy, vibrant and strong. It has been determined that, in addition to eating homegrown fruits and vegetables and hormone-free meat, their source of drinking water is melted glacier ice (distilled water).



These glaciers were formed thousands of years ago (before the atmosphere was polluted) as a result of pure rain and snow (distilled water). This author has been drinking one to one-and-a-half gallons of distilled water daily for over 40 years, in addition to fasting (not eating any food) for a minimum of 21 days per year. As a result, I am in perfect health and free of sickness and disease. So for those of you who have a desire to argue, feel free. But, "a man with an experience is not at the



mercy of a man [or doctor] with an argument."

## **CHAPTER 2**

Distilled Water – Simple Yet Misunderstood



One of the very first signs of dehydration is fatigue and lack of energy... 80% of all Americans are dehydrated to some degree.

Our body's cry for more water is usually mistaken for a hunger for food; so we end up at the refrigerator instead of the water tap. This results in a two-fold problem: becoming overweight and being dehydrated – thus the cycle continues.

#### Water is the Key to Excellent Health



Most people do not drink

enough water to satisfy their body's needs. When their body is screaming for water to aid in critical body functions, they mistake this craving for hunger, even if they ate a couple of hours earlier. Consequently, most Americans are dehydrated and when the body gets dehydrated it goes into survival mode and start storing water. The problem with that is, fat cells are used to store the water. So instead of having enough water to metabolize fat, the body stores the fat to store up the water for possibly worse conditions to come.

The body is not getting the proper amount of water it needs for all the organs to function properly; so the body takes the supply of water from less important organs to allow enough water for the major ones such as the heart, lungs and kidneys.

To compound the problem, instead of drinking good, clean, healthy distilled water which the body craves, they drink Sport drinks, soft drinks,

Starbucks, malts, shakes etc. Just as bad, if not worse, is tap water which contains chlorine, hydrocarbons, fluorocarbons and dozens of other carcinogenic chemicals and compounds – all at safe levels according to the EPA. Yeah, right, I'm going to walk into a restaurant and ask for a glass of water, and oh yeah, please add a slew of cancer-causing chemicals, but go easy, I'm trying to quit.

Not only does the body need to use vital energy to process these tasty alternative treats in order to end up with the water it needs, the water it contains is not enough. Since it was not an adequate quantity to meet the need of the body, dehydration follows, resulting in the body storing more water in fat cells. Now the vicious cycle begins. The human body cannot continue to be abused without serious consequences.

The simplest way to lose weight is to drink a gallon of water per day, sipping a little at a time. You won't be as hungry and the body will metabolize the fat that has been stored instead of storing more. This is why some lose so many pounds the first week of a fast or crash diet. They are actually losing stored water. Our bowels need plenty of water to function properly with moving waste through its 30 foot length.The elimination of undigested food and other waste products is equally as important as the proper digestion and assimilation of food.



The very best diets can be no

better than the very worst if the sewage system of the colon is clogged with a collection of waste and corruption.

Of all the vital organs in the body, the one that suffers the most abuse from modern dietary habits is the large intestine, otherwise known as the colon. Our colons were intended by nature to function as smoothly flowing sewer systems, in order to promptly flush digestive wastes from the body. Instead, they have become stagnant cesspools, the physiological equivalent to a festering pile of uncollected garbage or a broken toilet that continues to be used for defecation.



The average

American and European colon today carries within it over 5pounds of putrid, half digested red meat plus another 5-10 pounds offoul toxic waste impacted for years in the folds of the colon with mucus.

While you are fasting your body will need more water than usual. Again, you may mistake its cry for more water as hunger, so be very diligent in drinking water all day. Your body needs extra water to detoxify and to keep waste moving through the colon, kidneys and bladder. It would be easy to dehydrate if you don't. Our bodies are made up of over 60% water, and unless this water is replenished daily, we will die in a few days. The human brain contains 90% to 95% water, our blood over 80% and lungs 85% to 90%. Our body can be severely affected by as little as a 2% decrease in bodily fluids, these symptoms are the result:

- 1. Sleepy, tired, less active
- 2. dry, sticky mouth
- 3. acquired thirst
- 4. decreased urination
- 5. reduced tears when crying
- 6. dry skin
- 7. mild to severe headache
- 8. constipation
- 9. fuzziness, dizzy, light-headed
Severe dehydration will include:

- extremely dry skin, no elasticity
- X extreme thirst
- 🕅 no sweat
- No urination or dark yellow urine
- accelerated heartbeat
- 🛛 sunken eyes
- ☑ accelerated breathing
- Image: Market with a start with a start
- M fever
- possible delirium or even unconsciousness.

One of the very first signs of dehydration is fatigue and lack of energy... 80% of all Americans are dehydrated to some degree. Our body's cry for more water is usually mistaken for a hunger for food; so we end up at the refrigerator instead of the water tap. This results in a two-fold problem: becoming overweight and being dehydrated – thus the cycle continues. Most disease is a result of our organs being starved of necessary water, so the body is in a constant battle to store up water in fat cells, with one organ robbing water from another. Water is critical for every bodily function and for the life and health of every single cell, from our brain to our little toe.



Glacier water is pure clean healthy distilled water

# Water:

- 1. provides lubricants for our joints;
- 2. provides digestive juices/saliva and stomach acid;
- 3. controls body temperature through perspiration;
- 4. is used to manufacture blood and lymph;
- 5. delivers nutrients to the cells and carries away waste
- 6. helps move material through the intestinal tract; and
- 7. regulates the body's metabolism.

Pure (distilled) water is nothing but  $H_2O$ , so consequently it is the most effective water at meeting the required needs of the body – especially with cleaning toxins and waste materials from the cells of the body. The Mayo Clinic has discovered that plenty of distilled water can decrease the risk of colon cancer by at least 45%, bladder cancer by 50%, in addition to other forms of cancer, including breast cancer. Many medical experts agree that most disease is a result of not drinking enough clean, healthy water for the body to function as it needs to, such as flushing the bladder of toxins and chemicals. When the body does not receive enough water, the result is disease. Then to complicate the unhealthy condition, doctors prescribe drugs to deal with symptoms which then can result in additional health problems.

2 0

# CHAPTER 3 Why Do I Need to Drink Distilled Water?

# How the EPA Has Failed

The consequences of EPA's failure to establish standards for organic chemical contaminants in drinking water are very serious. First, because the establishment of standards is a necessary prerequisite for monitoring the quality of drinking water, water suppliers are not presently required to monitor the water they sell for organic chemical contamination. The only contaminants they must look for are the relatively small number presently included in the current regulations.

Thus, unless chemical contamination of a supply is so gross as to cause taste, odor or public health problems, most water utilities across the country do not routinely monitor for unregulated contaminants and, accordingly, do not know the chemical quality of the water they provide. Second, and equally important, other regulatory programs designed to prevent contamination of ground water are keyed to the National Primary Drinking Water Regulations.



Under the

Resource Conservation and Recovery Act (RCRA) leachate from hazardous waste landfills is only tested for the presence of chemicals included on the agency's short list of primary drinking water. Toxic chemicals at thousands of hazardous waste sites across the country continue to seep into the nation's underground, contaminating the land, and poisoning the air.



The U.S.

Accounting Office says that the Superfund program will be required to clean up in excess of 300,000 sites, which appears to be, at the present time, an insurmountable task. Over 6 billion tons of solid and hazardous waste are generated in the United States each year. 400 million pounds of toxins are discharged each year into our waterways by American Industry, according to recent data from the EPA.



In 1997, Americans generated 340 million tons of municipal waste, which averaged 1.272 tons per person. (15 years later there was 250 million tons of municipal solid waste generated.) It is estimated that since 1990, more than 11 billion tons of domestic and foreign waste have been disposed in the U.S.

This is equal to covering every acre in the nation with 4.7 tons of waste. Relying on EPA's Franklin Associates, which calculates price per ton of municipal waste disposal at a conservative \$100/ton, the total cost to consumers of all waste disposed in the U.S. since 1990, is in excess of \$1.1 trillion.

# **COVER-UP OR WATERED-DOWN FACTS**

It is interesting to hear how so many water utilities brag about the superior quality of their water. San Diego (my city) boasts of its water quality when at the same time it contains 500 to 600 milligrams per liter of dissolved solids, which is considered undesirable for drinking by most health standards. It is rated in the top 10 of the most polluted cities with over 24 hazardous chemicals in its water supply.

Sierra Club director, Carl Pope, is the author of "Hazardous Waste in America." He recently wrote in *California Magazine:* "The water that is rejected at the Sacramento tap flows into the city sewers, where it mixes with household waste and industrial effluent containing a variety of heavy metals and solvents. Some of these, but only some, are removed by the sewage treatment plant. Agricultural Drainage into the Aqueducts



The remainder of the water dissolves in the effluent, and pours down into the Delta where the Sacramento is joined by the San Joaquin River. Down the San Joaquin River come toxaphene, mercury, chlordane, PCB's, arsenic, cadmium, copper, chromium, lead and selenium, all of which are on the EPA's list of priority pollutants. This mix makes it one of the most heavily polluted rivers in the state. Most of this pollution comes from surface and subsurface agricultural drainage into the agueducts; the remainder comes from mining, timber and other industrial activities. The Delta itself adds more pesticides and herbicides from agricultural operations, heavy metals from energy facilities and organics from gasoline storage and transfer facilities. EPA officials estimate that of the 2.5 million storage tanks, as many as 100,000 are leaking 11 million gallons of gasoline a year. Other sources indicate that as many as 420,000 tanks may be leaking now; and experts predict that 75% of all tanks will begin leaking over the next 5 to 10 years. Then, as the water makes its way to San Jose, Los Angeles and San Diego in the California Aqueduct, it continues to pick up pesticide residue from spraying operations on farm lands along the aqueduct itself. "As goes California, so goes the rest of the country."

# LEGALIZED POISONING

Every year, millions of pounds of chemicals that can cause cancer, birth defects or sterility – even in trace amounts –are released directly or indirectly into our drinking water. This takes place with the approval, sanction and authority of state and federal agencies. In addition to these contaminants, the water utilities add many other chemicals during treatment. A mixture of hydrogen and oxygen, water is only truly pure if it is distilled. In its natural state, water contains a number of chemicals, among them sodium, calcium, fluoride, carbon dioxide, and a number of minerals. Most minerals found in water are inorganic which our bodies do not chelate and assimilate. But nature's contribution is only a start.

As many as 60 chemicals may be added during the collection, treatment and delivery process; e.g., CHLORINE: a disinfectant to kill bacteria and other microorganisms. (Science has now discovered that when chlorine comes in contact with decayed plant and animal matter, trihalomethanes [THM's] are created, which have been found to cause cancer in humans.) LIME: added to retard corrosion of pipes, or to neutralize water that is too acidic. COPPER SULFATE: to kill algae. ALUMINUM SULFATE: to force solid particles to clump together and settle out. SODIUM BISULFATE or sulfur dioxide: added to correct an over-supply of chlorine in the water. SODIUM FLUORIDE or hydrofluorosilicic acid – an unstable poisonous corrosive acid known primarily in the form of its salts. Proclaimed by the government to help fight tooth decay.

Thirty-two people die every day from bladder cancer in the USA. Although the National Academy of Sciences has identified as carcinogens twentytwo of the chemicals found in drinking water, *the vast majority of the*  estimated 1,200 chemicals so far detected in drinking water have not yet been tested. Little is known about the adverse health effects of many of these chemicals, especially in the minute amounts that may be present in drinking water.

What about the additional threat of combining the chemicals in water with those found in our foods? Such effects are not always immediate, though. It may be decades, even generations, before certain health problems appear. And it may be just as long before scientists can be sure of the risks. With the aid of modern technology, water utilities are doing all they can to clean up the water. However, regardless of the fact that the chemicals and other cancer causing substances are at safe levels and considered fit for human consumption, based on government safety standards, should we still drink it?

Do they drink their own? Los Angeles boasts of its water quality. "Despite spending \$1 million in the last two years to assure Los Angeles residents that their tap water is not only safe to drink but also top quality, City officials spent \$88,900 in public money during that time on bottled water from private firms. The Department of Water and Power, which supplies the City's water and promotes it, spent the most on bottled water, paying \$31,160." *Atlanta Journal Constitution* 01/04/06.

Since water is the most important single element for supporting life, second only to oxygen, should it not be something that you know something about? We can live without food for 40 days, but will die if we go without water for, at most, 6 days. Water serves three major purposes in our bodies:

- 1. It controls body temperature.
- 2. It is the solvent for the foods we eat, carrying the nutrients to every cell of our body.
- **3.** Water replaces bodily fluids such as blood plasma, lymph, digestive juices, bile, etc., and washes and bathes every cell, flushing and carrying away waste materials and toxic poisons.

If water is so vital to our health and existence, shouldn't we drink the healthiest water possible? What would that be, you ask? The answer is: Distilled water. Distilled water is true  $H_20$ , one part hydrogen, two parts oxygen, and **nothing else.** Rainwater would be pure distilled water if it

were not for air pollution. The same goes for any water source on our planet, because it has come into contact with the earth, and our earth is polluted. Consequently, these pollutants are picked up by  $H_20$  and the  $H_2O$  becomes a formula of " $H_20$  + whatever it picks up."

Impure water is usually distilled by boiling it and capturing the steam in the process. The detractors of drinking distilled water most often use the argument that it doesn't contain any minerals. But they forget about one important fact: that the minerals our bodies need are supposed to be ingested as part of our food, not water.

The minerals that are found in water are inorganic and cannot be assimilated or chelated by the body. The minerals our bodies need are organic, the kind found in fruits and vegetables. Minerals get absorbed into the cells of the food directly from the soil. Water is not our source for minerals, food is. Because water is used to replace our bodily fluids and clean our bodies, it makes sense to use the cleanest water possible.

Water is to our bodies as gas and oil are to our car. If the engine doesn't receive enough oil it begins to overheat and the various parts begin to wear down. As a consequence, if any one part on an engine fails, the whole engine is affected.

Water regulates body temperature by causing us to sweat; as the sweat evaporates heat is pulled from our skin and water moistens our tissues such as those in the mouth, eyes, nose and throat. Water protects the body's organs and tissues, lubricates joints, prevents constipation, carries nutrients and oxygen to the cells, and carries away waste for elimination. *An adequate supply of water lessens the burden on the kidneys and liver by flushing out waste products. Water helps dissolve minerals and other nutrients to make them accessible to the body and aids in the elasticity of muscles .* 



If water

is that critical for the health of every bodily cell, how important would it be with regard to the water's quality? Would it make sense to attempt to wash your dishes in a sink of dirty water? Of course not, and neither does it make sense to drink dirty water and expect it to clean your cellular system. I'll cover the relationship more thoroughly later on.

# So why drink distilled?

Distilled water is the only water that can be called Water  $(H_2O) - a$  molecule of 2 parts Hydrogen and 1 part Oxygen, period. Plus **nothing** more! All other "water" is actually H<sub>2</sub>O plus something. That "something" could be whatever the water came into contact with and was able to dissolve, absorb and retain.

In nature, water is heated by the sun causing it to turn to its gaseous form, evaporating, rising into the upper atmosphere, cooling and condensing into tiny droplets and gathering to form clouds. As the droplets cool further, the molecules clump together, becoming heavy, then fall back to earth as distilled water (this process is called the hydrological cycle). Unfortunately, our atmosphere is polluted by ozone, particulate matter, sulfur dioxide, nitrogen oxides and carbon monoxide. Read more: National Ambient Air Quality Standards (NAAQS).



Unfortunately, by the time this pure distilled water reaches the earth, it is  $H_20$  + volatile organic compounds (VOCs) +NO<sub>X</sub> + CO+ numerous carcinogenic chemicals. But it doesn't stop there. After the mildly polluted water reaches earth it begins on a journey of absorbing and dissolving everything it contacts on the surface of the ground prior to soaking into the soil or running off into storm drains. At this stage, the once pristine water cleans the oil, dust, dirt and toxic residue off the streets, highways and parking lots, including fertilizers, pesticides, fungicides, herbicides from yards, gardens and farmlands and the list goes on.

# There is not one stream, river, lake or underground aquifer that is pollution-free.



Deformities caused by farm runoff- Nitrates-Pesticides-Herbicides etc.



Guess where the food and beverage processing industry, cities and municipalities get their water? You guessed it, those same rivers, lakes and ground water.

### These are the chemicals found in San Diego, CA, drinking water:

20 Total Contaminants Detected (2004 – 2009):Aluminum, Bromide, Barium (total), Manganese, Nitrate, Monochloroacetic acid, Dichloroacetic acid, Trichloroacetic acid, Monobromoacetic acid, Dibromoacetic acid, Total haloacetic acids (HAAs), Chloroform, Bromoform, Bromodichloromethane, Dibromochloromethane, Total trihalomethanes (TTHMs), o-Xylene, m- & p- Xylene, Combined Uranium (pCi/L), Gross beta particle activity (pCi/L) Note: Information on violations is drawn directly from EPA's national violations database in the Agency's Safe Drinking Water Information System.

I reside in San Diego, where over half the population drinks from the tap. After all, why not? If the water was unhealthy, wouldn't our caring, compassionate, ever expanding government warn us? The facts are, according to California's Department of Public Health, San Diego's drinking water system contained eight chemicals exceeding health guidelines as well as two chemicals that exceeded the EPA's legal limit. In total, 20 contaminants have been found. One of those in excess of the EPA limit was trihalomethanes with one being chloroform. The other was manganese, a natural element that's a by- product of industrial manufacturing and is poisonous to humans.

Did I find out that I have been drinking these chemicals from my tap because the City of San Diego warned me with a notice in my water bill? NO! I had to diligently search out the facts on the internet.



# Distilled Water & Health

# CHAPTER 4 What is in Your Water?



"Most Americans are totally oblivious to the very serious condition of America's drinking water, including both tap and bottled. After spending a considerable amount of time researching the facts and statistics, I'm thankful knowing the remarkable truth about distilled water and fasting..."



Bottled Water Quality Investigation: 10 Major Brands, 38 Pollutants

- 1. Over 46% of the lakes and rivers in America are so polluted they cannot be fished or used for swimming.
- 2. 40% of the continental United States' water drains into theD Mississippi River; as a result, 1.5 metric tons of nitrates end up in the Gulf of Mexico annually, sending out into an area of 7,800 square miles.
- 3. There are 1.3 trillion gallons of untreated sewage industrial 0 waste and runoff from storm drains discharged into America's waterways annually.
- 4. There are roughly 6 to 11 million deaths per year resulting from 260 million cases of water-borne diseases worldwide.
- 5. 3.5 million tons of toxic chemicals are released into the air annually, most all of which end up back on earth, much of it finding its

Despite the fact that most drinking water in the U.S. generally is not healthy, at least most Americans can afford to treat their water or to purchase bottled water. Most tap water in the United States has been disinfected On the other hand, more than 525 million Chinese, and 700 million people in India are deprived of safe drinking water. Worldwide, countries generate close to 500 billion tons of industrial waste annually, much of which ends up in the water supply. In developing countries, water pollution has been linked to high miscarriage rates and severe brain damage, resulting in learning disabilities. Amoebic dysentery contracted from polluted water supplies has resulted in the loss of over two million children's lives annually.



Broad Range of Pollutants Found in 10 of the Top Brands of Bottled Water

Care to take a guess which ones?

It really doesn't matter if you could have guessed all ten right, because if the top ten companies are found to have chemicals and/or bacteria in their water, and they are acclaimed to be the best ten, what about those that aren't? Why would they be considered any more trustworthy or accountable? An analysis conducted by the University of Iowa Hygienic Laboratory of ten brands of bottled water (brand names were not released) revealed a wide range of pollutants, including not only disinfection by-products, but also various common urban waste water pollutants like caffeine and pharmaceuticals (Tylenol); heavy metals and minerals including arsenic and radioactive isotopes; fertilizer residue (nitrate and ammonia); and a broad range of other tentatively identified industrial chemicals used as solvents plasticizers viscosity

When you shell out hard earned cash to pay between Sl and S3 dollars for a bottle of water, were you expecting a bonus of chemicals, heavy metals, caffeine, drugs, arsenic, nitrates and radioactive isotopes?



checked the prices of various drinking water brands in one particular grocery store, I was shocked to find some over \$2 for 16 oz. Fiji was \$2.35 for 16 oz. (128 oz./gal), or \$18.80 per gallon. What on God's green

earth is so special about Fiji water other than imported from Fiji, halfway around the world? Fiji water is owned by an American woman living in the States. Why Fiji? Because the Fiji dictatorship gave them an offer they couldn't refuse: no taxes and the military junta would protect them.

Fiji Water's chief marketing whiz and co-owner (with husband Stewart) is Lynda Resnick, well-known westerners who are living high on the hog. The locals are living in dire poverty with a per capita income of \$3,900. "Nowhere in Fiji Water's glossy marketing material will you find reference to the typhoid outbreaks that plague Fijians because of the island's faulty water supplies. The corporate entities that Fiji Water has —despite the owners' mention of financial transparency — are set up in tax havens like the Cayman Islands and Luxembourg; or the fact that its signature bottle is made from Chinese plastic in a diesel-fueled plant and hauled thousands of miles to its Eco-conscious consumers.

And, of course, you won't find mention of the military junta for which Fiji Water is a major source of global recognition and legitimacy. Fiji Water posters across the island declare, "Fiji," and the slogan is almost eerily accurate: The reality of *Fiji, the country,* has been eclipsed by the glistening brand of *Fiji, the water.* If you drink bottled water, you've probably drunk Fiji – or wanted to. Even though it's shipped from the opposite end of the globe, even though it retails for nearly three times as much as your basic supermarket water, Fiji is now America's leading imported water, beating out Evian.

# It has spent millions pushing not only the seemingly life-changing properties of the product itself, but also the company's green "creds" and its charity work.

Put all that together in an iconic bottle emblazoned with a cheerful hibiscus, and everybody, from the Obamas to Paris and Nicole to Diddy and Kimora, is seen sipping Fiji. Why is Fiji America's leading imported water beating out Evian? What does that say about Eco-conscious Americans who support this status symbol of Hollywood and Washington, often serving Fiji water at their gatherings?



# The Audacity of Branding

Seizing on the bottle's ubiquity, *Tourism Fiji* has been circulating this photo of President Obama at an event featuring Fiji Water.



# **CHAPTER 5**

The Fluoridation of Drinking Water

Think about it: Does it make sense to debate whether or not fluoride is beneficial in reducing tooth decay when it is being added to a "soup" of known chemicals such as chlorine, trihalomethanes, nitrates, herbicides, fungicides and heavy metals, to name a few? Would you add spice to a soup that you already determined was not edible? This is what our government is doing with our water.

WHO has warned dental professionals, public health officials and administrators that they should be aware of current total quantities of fluoride that the population is exposed to before adding any additional fluoride in their program of tooth decay prevention.

There are millions of people being subjected to exorbitant quantities of fluoride naturally found in many aquifers and other natural water sources.

Many people who consume this water suffer from mild dental fluorosis, including debilitating skeletal fluorosis. This serious situation continues to be unpublicized, unrecognized and ignored for many reasons.

# The Main Reason is a Political One

The majority of the population is totally unaware of the fact that the fluoride added to municipal drinking water is by no means clinical grade fluoride. On the contrary, it is in fact a toxic waste by-product of the fertilizer and aluminum manufacturing industry, called hydrofluoro-silicic acid, used in the manufacturing of poison. Guess which industry contributes the largest donations to the American Dental Association? You guessed it, the aluminum manufacturing industry. Hydrofluoro-silicic acid actually causes mottling and brittleness of the teeth in children. Staining and pitting of teeth is caused by clinical dental fluorosis from drinking fluoridated water; and in some cases the enamel is actually damaged.

# <complex-block>

Fluoridation of drinking water can also cause skeletal fluorosis, the result of fluoride accumulating in bones over many years. This results in distortion, deafness and joint pain. Calcification of ligaments and severe changes in bone structure with crippling effects can also be attributed to long-term exposure to fluoridated drinking water.



Mild

Moderate

Service

27 0.5082.121



A publication of the World Health Organization (WHO) warns water utilities of the need to take great care not to exceed the minimum levels of fluoride in municipal water supplies due to the known research showing the negative effects.

Low concentrations of naturally occurring fluoride in drinking water are actually good for teeth; however, excessive amounts will lead to serious health issues. In particular, fluorosis of the skeletal structure can be devastating to a community.

For example:

1. More than ten million Chinese are estimated to be suffering from fluorosis of the skeletal structure.

Other areas of the world where fluoride occurs at high concentrations include Africa, southern Asia, and the Mediterranean area.
Among the highest known concentrations of fluoride in the water exist in Turkey, Iran, Iraq, India, Afghanistan, China, and Northern Thailand.
There are several regions of the world where water sources are scarce (Africa) and they contain dangerous quantities of fluoride.

As with other toxins, fluoride has varying effects on people. Consequently there is a wide range of symptoms which depend on many different factors, such as genetics, amount of fluoride retained by the body, the method of exposure, and length of time exposed (whether chronic or acute as by ingestion of fluoridated water or food).

Even though the proponents of fluoridation have managed to collect a certain amount of positive statistics regarding the possible benefit of fluoridated drinking water, the fact remains that there are still plenty of negative results. There are already many very bad chemicals in all municipal water supplies nationwide. So should one more be added, regardless if it could be shown to be a health benefit?

To mention a few, chlorine, THMs, nitrates, pesticides, fungicide, herbicides, heavy metals and thousands of industrial chemicals and pharmaceuticals have already been added. So now they want to add yet another chemical to help prevent tooth decay? How about removing everything that's in there now so you can drink good, clean, pure H2O plus nothing? Now that's healthy!



# CHAPTER 6:

# Drinking Water and Cancer



Recently, prior to starting a 40 day fast on distilled water, I made an appointment with my doctor at the VA Medical Center in La Jolla, California. At first the doctor was very much opposed to a 40-day fast, especially since I purposed to eat no food at all, and drink nothing but distilled water.

But after explaining that I have been fasting this way every year for over 40 years, she seemed to be a little more receptive. Especially after viewing the lab results of my blood cells, cholesterol levels and blood pressure. She was amazed to discover that at age 65, I seemed to have the "heart of a 25-year- old" – and the results of my blood test were "excellent."

My doctor asked me why I was drinking distilled water as opposed to any other kind, which prompted me to ask her what type of water she drank. I was shocked to hear that she and her family drink San Diego's water from the tap. My next question to her was, "Do you have any idea how many pollutants are present in San Diego's municipal drinking water?" The doctor immediately retorted, "If it wasn't safe to drink, I'm sure they would let us know." By the time I finished sharing with her what I knew about the chemicals and carcinogens (all at "safe levels," according to the EPA), as well as water and its relationship to health, she was ready to purchase a reverse osmosis filter.



This is a small example of the serious problem we have with regard to the ignorance of Americans in trusting our government with our health. Regardless of where you live, if you were to call up your local water utility and ask them if there are any dangerous chemicals or carcinogens in the municipal drinking water, they would say yes, several, but they are all at safe levels. When I drink water, I would like to think that it is  $H_2O$  plus nothing: pure, clean and healthy. I do not want to be concerned with many dangerous, cancer-causing substances at "safe" levels.

Fortunately, many communities across the U.S. are voicing concerns about the potential and known links between the chemicals found in municipal water and cancer. Even though water utility companies are required by law to follow specific guidelines with regard to the levels of cancer-causing chemicals, there is much debate on what exactly are "safe levels."

As a result of much public concern, new laws have been enacted requiring water utilities to publish the results of their water testing every year for public review. Therein lies the problem: virtually no one reads these reports or, for that matter, even know they exist, let alone have knowledge of the situation. Consequently, the general public continues to drink water that is by no means healthy or safe.

"Putting chlorine in the water supplies is like starting a time bomb. Cancer, heart trouble, premature senility; both mental and physical, are conditions attributable to chlorine treated water supplies. It is making us grow old before our time by producing symptoms of aging, such as hardening of the arteries."

Dr. Herbert Schwarts, Biological Chemist



A glass of city water is not going to kill you or give you cancer any more than one cigarette will give you cancer; it is that cigarette after cigarette after cigarette. Or glass after glass after glass of tap water. One of the most serious cancer-causing chemicals found in our tap water was put there by the water utility company, "for our safety and health." Chlorine is widely known to cause cancer in humans, yet it is the safest chemical available to control water-borne diseases. Not only is chlorine a carcinogen, but when it comes into contact with humic acid (decayed plant and animal matter), it creates Trihalomethanes.


#### Some THMs are:

Chlorodibromomethane Chloroform Bromoform Lodoform Dichlorobromomethane Fluoroform Chlorodifluoromethane

Now, as a result of adding one cancer-causing substance, chlorine, we have eight carcinogens which are linked to rectal, bladder and pancreatic cancers. Yet another chemical added to our water for our health and wellbeing, fluoride, has also been determined to cause cancer. The national toxicology program study found that fluoride is linked to cancers affecting the pharynx, mouth and rectum. Another study published in the Journal of Environmental Pathology, Toxicology and Oncology found fluoride directly linked to a rare bone disease, osteosarcoma.

Most people are aware that there are hundreds of chemicals being released into the environment every year; yet none of these is being tested to determine whether or not they cause cancer in humans, or at what specific level they are deemed to be safe.

With thousands of chemicals found in our nation's water and food supplies, imagine what astronomical combination of compound chemicals could be created exponentially. If the result of combining chlorine with humic acid can create eight carcinogens, then what can the result be of mixing hundreds of unknown chemicals on the environment or our bodies? No water utility has the ability or technology to remove this soup of potentially hazardous chemicals from our water supplies. Keep in mind that this is true with most bottled water companies, the majority of which obtain the water they bottle from the same source as the water utility.

Many experts believe that the majority of disease in the world today comes from our unhealthy drinking water in combination with dehydration (not drinking enough water). So if you want to live healthier and longer, drink plenty of pure, clean, healthy distilled or purified water and eat plenty of fresh fruits and vegetables.



#### **CHAPTER 7**

Does Bottled Water Provide Health Benefits?



#### What's In Your Bottled Water - Besides Water?

Twenty-nine brands have ignored California's new disclosure law. More than a quarter of the water bottles purchased in California did not list certain consumer information on the label or failed to provide a water quality report when contacted by EWG, as is required under state law. These brands include Fiji Natural Artesian Water and Green Planet Pure Handcrafted Water."



**NRDC** is the nation's most effective environmental action group, combining the grassroots power of 1.3 million members and online activists with the courtroom clout and expertise of more than 350 lawyers, scientists and other professionals.

**The New York Times** calls NRDC "One of the nation's most powerful environmental groups." The National Journal says they're "A credible and forceful advocate for stringent environmental protection."

#### **Bottled Water**

- 1. Isn't bottled water safer than tap water?
- 2. Can bottled water actually be unsafe?
- 3. Could the plastic in water bottles pose a health risk?
- 4. How can I find out where my bottled water comes from?
- 5. How can I determine if bottled water is really just tap water?
- 6. What action can I take to improve bottled water safety?
- 7. How does drinking bottled water affect the environment?
- 8. If I drink tap water, should I use a filter and what types of filters are most effective?
- 9. How can I obtain test results on my tap water?

#### Isn't bottled water safer than tap water?

No, not necessarily. NRDC conducted a four-year review of the bottled water industry and the safety standards that govern it, including a

comparison of national bottled water rules with national tap water rules, and independent testing of over 1,000 bottles of water. Their conclusion is that there is no assurance that just because water comes out of a bottle it is any cleaner or safer than water from the tap. In fact, an estimated 25 percent or more of bottled water is really just tap water in a bottle – sometimes further treated, sometimes not.

#### 2. Can bottled water actually be unsafe?

Most bottled water appears to be safe. Of all the bottles we tested, the majority proved to be high quality and relatively free of contaminants. The quality of some brands was spotty, however, and such products may pose a health risk – primarily for people with weakened immune systems (such as the frail, elderly, some infants, transplant and cancer patients, or people with HIV/AIDS). About 22 percent of the brands we tested contained, in at least one sample, chemical contaminants at levels above strict state health limits. If consumed over a long period of time, some of these contaminants could cause cancer or other health problems.

#### 3. Could the plastic in water bottles pose a health risk?

Recent research suggests that there could be cause for concern, and that the issue should be studied closely. Studies have shown that chemicals called phthalates, which are known to disrupt testosterone and other hormones, can leach into bottled water over time. One study found that water that had been stored for 10 weeks in plastic and in glass bottles contained phthalates, suggesting that the chemicals could be coming from the plastic cap or liner. Although there are regulatory standards limiting phthalates in tap water, there are no legal limits for phthalates in bottled water – the bottled water industry waged a successful campaign opposing the FDA proposal to set a legal limit for these chemicals.

## How to Avoid Phthalates: Phthalates mimic hormones and have been linked to numerous health problems, but remain legal.

Unfortunately, it's not particularly easy to avoid phthalates. You'll rarely find the word "phthalates" on a label (except for the occasional "phthalate-

free," which is helpful). Here are some tips for identifying products that have, or are likely to have, phthalates or another compound, Bisphenol A, that has raised similar concerns and is found in similar products.

#### Read the ingredients. According to the organization, Pollution in People, you can identify phthalates in some products by their chemical names, or abbreviations:

**DBP** (di-n-butyl phthalate) and DEP (diethyl phthalate) are often found in personal care products, including nail polishes, deodorants, perfumes and cologne, aftershave lotions, shampoos, hair gels and hand lotions. (BzBP, see below, is also in some personal care products.)

**DEHP** (di-(2-ethylhexyl) phthalate or Bis (2-ethylhexyl) phthalate) is used in PVC plastics, including some medical devices.

**BzBP** (benzylbutyl phthalate) is used in some flooring, car products and personal care products.

**DMP** (dimethyl phthalate) is used in insect repellent and some plastics (as well as rocket propellant).Choose plastics with the recycling code 1, 2 or 5. Recycling codes 3 and 7 are more likely to contain bisphenol A or phthalates.

#### 4. How can I find out where my bottled water comes from?

A few state bottled water programs (e.g., Massachusetts and New York) maintain lists of the sources of bottled water, but many do not. Try calling or writing the bottler to ask what the source is, or call the bottled water program in your state or the state in which the water was bottled to see if they have a record of the source (your state's health or agriculture department is most likely to run the bottled water program). If you choose to buy bottled water and are concerned about its safety, buy brands with a known protected source and ones that make readily available testing and treatment information that shows high water quality.

#### 5. How can I determine if bottled water is really just tap water?

Often it's not easy. First, carefully check the bottle label and even the cap – if it says "from a municipal source" or "from a community water system" this means it's derived from tap water. Again, you can call the bottler or the bottled water program in your state or the state where it was packaged.

#### 6. What action can I take to improve bottled water safety?

Write to your members of Congress, the FDA, and your governor (see below for contact information) and urge them to adopt strict requirements for bottled water safety, labeling, and public disclosure. Specifically, point out to these officials that they should: (a) set strict limits for contaminants of concern in bottled water, including arsenic, heterotrophic-plate-count bacteria, E. coli and other parasites and pathogens, and synthetic organic chemicals such as "phthalates"; (b) apply the rules to all bottled water whether carbonated or not and whether sold intrastate or interstate; and (c) require bottlers to display information on their labels about the levels of contaminants of concern found in the water, the water's exact source, how it's been treated, and whether it meets health criteria set by the EPA and the Centers for Disease Control for killing parasites like cryptosporidium. Members of Congress and governors should also pass legislation providing the resources for the FDA and state regulators to actually enforce the law.DTo take further action, you can encourage your bottlers and the International Bottled Water Association (a trade organization that includes about 85 percent of water bottlers) to voluntarily make labeling disclosures such as those above.DDContact information:DFDADAndrew C. von Eschenbach, M.D.DCommissioner, U.S. Food and Drug AdministrationD5600 Fishers LaneDRockville, MD 20857

#### 7. How does drinking bottled water affect the environment?

In 2006, the equivalent of 2 billion half-liter bottles of water were shipped to U.S. ports, creating thousands of tons of global warming pollution and other air pollution. In New York City alone, the transportation of bottled water from Western Europe released an estimated 3,800 tons of global warming pollution into the atmosphere. In 2006, 18 million gallons of bottled water were shipped from Fiji to California, producing about 2,500 tons of global warming pollution.

And while the bottles come from far away, most of them end up close to home – in a landfill. Most bottled water comes in recyclable PET plastic bottles, but only about 13 percent of the bottles we use get recycled. In 2005, 2 million tons of plastic water bottles ended up clogging landfills instead of getting recycled.

# Americans use 2.5 million plastic water bottles per hour!



6.3 billion are dumped into landfills and the ocean annually!



## 8. If I drink tap water, should I use a filter, and what types of filters are most effective?

The real long-term solution is to make tap water safe for everyone. However, if you know you have a tap water quality or taste problem, or want to take extra precautions, you should purchase filters certified by NSF International (800 NSF-MARK). These filters designate which contaminants they remove, and you can look for one that removes any contaminants of special concern such as cryptosporidium. Such certification is not necessarily a safety guarantee, but it is better than no certification at all. It is critically important that all filters be maintained and replaced at least as often as recommended by the manufacturer, or they might make the problem worse. See our guide to water filters for more information. Also, see chapter on Carbon Filters.

#### 9. How can I obtain test results on my tap water?

Under new "right-to-know" provisions in the drinking water law, all tap water suppliers must provide annual water quality reports to their customers. To obtain a copy, call your water provider (the one that sends your water bills). You also can test your water yourself, though this can be expensive. There are state-certified drinking water laboratories in virtually every state that can test your water. Call your state drinking water program or the EPA Safe Drinking Water Hotline (800-426-4791) for a list of contacts. Standard consumer test packages are available through large commercial labs at a relatively reasonable price.



The best way to assure you are getting the best water on the market is to purchase water only from bottlers that have a currentmembershipwith the IBWA.

"The International Bottled Water Association (IBWA) supports a policy by which its members and all other bottled water producers provide consumers with clear, accurate and timely information about the safety and quality of his or her bottled water choice, upon request. Bottled water producers should have the flexibility to determine the best and most effective way to distribute this information to consumers whether by way of regular mail, e-mail, website, telephone, any combination thereof, or any other reasonably effective method. IBWA supports the current voluntary system by which companies provide bottled water quality information to consumers."



#### What's In Your Bottled Water - Besides Water?

Twenty-nine brands have ignored California's new disclosure law. More than a quarter of the water bottles purchased in California did not list certain consumer information on the label or failed to provide a water quality report when contacted by EWG, as is required under state law. These brands include Fiji Natural Artesian Water and Green Planet Pure Handcrafted Water. I will often ask someone what kind of water they drink, I am amazed how many will answer me with, "I don't drink water, I drink Coke". Or they will list several things, Mountain Dew, coffee, tea, Gatorade, sports drinks etc. — just about anything but pure



#### When somebody drinks a Coke, what happens?

- In the first 10 minutes: 10 teaspoons of sugar hit your system. (This is 100% of your recommended daily intake.) You don't immediately vomit from the overwhelming sweetness because phosphoric acid cuts the flavor, allowing you to keep it down.
- 20 minutes: Your blood sugar spikes, causing insulin burst. Your liver responds to this by turning any sugar it can get hold of

into fat. (There's plenty of that at this particular moment.)

- ✓ 40 minutes: Caffeine absorption is complete. Your pupils dilate, your blood pressure rises, and as a response your liver dumps more sugar into your bloodstream. The adenosine receptors in your brain are now blocked, preventing drowsiness.
- **45 minutes:** Your body ups your dopamine production, stimulating the pleasure centers of your brain. This is physically the same way heroin works, by the way.





**Within 60 minutes:** The phosphoric acid binds calcium, magnesium and zinc in your lower intestine, providing a further boost in metabolism. This is compounded by high doses of sugar and artificial sweeteners, also increasing the urinary excretion of calcium.

Within 60 Minutes: The caffeine's diuretic properties come into play. (It

makes you have to urinate.) It is now assured that you'll evacuate the bonded calcium, magnesium and zinc that were headed to your bones as well as sodium, electrolytes and water.

**Within 60 minutes:** As the rave inside of you dies down, you'll start to have a sugar crash. You may become irritable and/or sluggish. You've also now literally urinated all the water that was in the Coke, leaving behind the garbage. But not before infusing it with valuable nutrients your body could have used for things like the ability to hydrate your system or build strong bones and teeth.

#### **Sports Drinks**

Bottled waters and sports drinks are a multibillion-dollar industry, but ABC News' medical contributor Dr. David Katz says these drinks offer little more than extra calories, sugar and sodium to our diets. Katz reviews the winners and losers of sports drinks and fortified waters.

#### The Losers

**Gatorade** – <u>8 ounces has 50 calories and 110 milligrams of sodium.</u>Dr. Katz says that Gatorade might be appropriate for elite athletes like Michael Phelps. But it is marketed to everyone, and provides un-necessary calories, sugar and salt to the average person. Gatorade says the drink's "ingredients serve to help rehydrate, replenish and refuel for optimal performance."

**Powerade** – <u>32 ounces contains 280 calories, 220 milligrams of sodium</u> <u>and 76 grams of sugar.</u>Like Gatorade, Powerade, made by Coca-Cola, is a "sports drink" marketed to appeal to Olympic couch potatoes, says Katz.

**Glaceau Vitamin Water** – <u>8 ounces has 50 calories from sugar.</u> Katz says, "If we had a problem with epidemic malnutrition in this country, a drink such as Vitamin Water might make sense. But since we have,

instead, epidemic obesity and diabetes, how about we just leave water alone, instead of using it as a delivery system for sugar no one needs?" Vitamins are better obtained from food or even a calorie-free supplement, he says. Glaceau responded by saying, "Artificial sweeteners don't work, and may in fact increase the incidence of obesity. What does work is an all-natural, low-calorie approach, like Vitamin Water."

#### The Winners

#### Plain Old Water – Zero calories.

Katz says there's no contest: Unless you're a true high-performance athlete who is losing electrolytes that can't be replaced with food, pure, clean water is the way to hydrate.

#### Polar Fruit Flavored Mineral Water – Zero calories.

Contains carbonated water and natural fruit flavorings. Katz's recommendation for people who want something more interesting than water, without the superfluous calories, sugar and electrolytes.

#### **Natural Fruit Juices**

Calories, sugar, sodium and vitamin content will vary. Katz says when you do want a drink that provides calories, energy, nutrients and something to satisfy your sweet tooth, choose an all-natural juice like orange or apple.

#### Is Flavored Water Really Healthy?

Plain water is "still the best." As a result of America's love affair with sugar and their habit of having their taste buds constantly titillated, flavored water has become very popular. We all know that drinking plenty of water is healthy. But because water is not tasty for most people, it can be difficult to drink the recommended seven to eight glasses per day. As a consequence, water not only comes in flavors, it offers vitamins or herbs, and even ingredients that may improve athletic performance. Are these ersatz waters just as good as plain water? How about better, in some cases? Although flavored waters may taste better than plain water, you may not want to put the contents into your body.

#### Artificial Sweeteners vs. Sugar

Plain water has no calories and no artificial sweeteners. Unfortunately, that is not the case with many flavored waters, since they do contain artificial sweeteners or sugar. Artificial sweeteners have been connected with memory loss as well as other possible unhealthy side effects. Some flavored waters even contain sugar. So much for flavored water being a healthy substitute for just plain old, pure water. Many flavored waters that contain fruit also contain preservatives. If you're looking for a chemicalfree drink with zero (or very little calories), most flavored waters do not fit the bill.

#### Vitamins and Minerals?

Although some flavored waters do contain vitamins and/or minerals, many of these waters also contain ingredients that you do not need. For example, Glaceau Vitamin Water's *Energy* formula contains vitamins; however, it also contains crystalline fructose, caffeine, gum ester, artificial flavoring and caramel coloring (chemicals). It also sports 125 calories per serving. Other products have similar ingredients. Snapple's *Antioxidant* water contains electrolytes and vitamins, but it also contains modified corn starch, sugar, disodium EDTA, and epigallocatechin gallate. "**Give me distilled water, please!**"



CHAPTER 8

America: Overweight, Sick & Dying Earlier?



Simple Solution...H2O

Drinking 8 to 10 glasses of pure, clean distilled water daily is essential for optimum health, reduces the likelihood of sickness, disease and cancer, and assures a longer, sprightly, healthy life.

Why drink tasteless, sugar-free water when Americans can pick from close to **24,000** other tasty, tempting beverages?

46% of America is overweight or obese. Health expenditures in the United States neared \$2.6 trillion in 2010, over ten times the \$256 billion spent in 1980. In total, health spending accounted for 17.9% of the nation's Gross Domestic Product (GDP) in 2010.



Lately the term obesity has

been touted all over the news, echoing the alarming statistics that more than one out of three Americans is obese or overweight. So, are you part of that 35.9 percent? Maybe you're simply overweight; let's do the math. Obesity is defined as being 20% or more above your ideal weight for your height. In simpler terms, it is having an excessive amount of body fat.

Since 1961 the number of obese children has more than doubled, primarily as a result of high fat and sugar intake, along with lack of physical activity. There are several factors and physical characteristics that need to be considered in determining obesity, such as the percentage of body fat or the body mass index (BMI), along with the three body types: endomorph, mesomorph and ectomorph.



One way to determine obesity is to assess percentage of body fat; however, it is very difficult to accurately measure body fat. Weighing a person underwater is the most accepted method for obtaining accurate body fat measurements. A major drawback to this type of procedure is that there are limited facilities with this specialized equipment. Another method of measuring body fat is the skin-fold test. A special instrument is used that can choose a fold of skin to precisely measure and determine the thickness of the subcutaneous layer of fat, or bio-electrical impedance analysis, which is also performed at a specialized clinic.

Regardless of the fact that humans come in many sizes and various shapes, most people fall into one of the three groups or body types

mentioned above. Following is a more in-depth description.

#### ENDOMORPH

The endomorph's hands and feet are relatively small, and the arms and thighs are usually larger than the wrists and ankles. The waist is high. They have fine hair and smooth soft skin. The endomorph's head is large and round.

#### Endomorph summary:

- Soft, short body
- Not very muscular
- Round body shape
- Hard to lose weight
- Can build muscle easily

The endomorphs have the greatest propensity for becoming obese.

#### MESOMORPH

The mesomorph's muscles are well-defined and the bones are large. The torso is shaped like an hour-glass with a low, narrow waist. The head consists of prominent bones and muscles. They have clearly defined facial features, such as a square jaw and wide cheek bones with a long, wide face. Arms and legs, including the hands, are muscular. The mesomorph has thick skin that tans easily.

#### Mesomorph summary:

- Athletic "hard body"
- Rectangular physique- male
- Hourglass physique- female
- Body is muscular, good posture, skin is thick
- Easily builds muscle, easily gains weight.

#### ECTOMORPH

The ectomorph's body is fragile and delicate with light bones, small joints and slight muscles. The arms and legs are relatively long and the shoulders slump. The physique is somewhat linear causing them to appear taller than they really are. Arms and legs also lack muscle mass so the ectomorph needs to exert more energy in order to get the same amount of work done. Some ectomorphs will have long fingers, toes and neck. The facial features are sharp, with a receding, triangular lower jaw. Their skin easily sun burns.

**Ectomorphs** have difficulty adjusting to extreme fluctuations of temperature due to low body fat and low muscle mass. Their hair grows quickly and is fine and difficult to manage.

#### Ectomorph summary:

- Fragile body build
- Flat chested
- ☑ Thin and lean
- Light muscular frame
- Small shoulders
- Slow to build muscle

Now you can start to see how weight gain can affect various people differently with regard to body types and varying metabolisms.

#### HOW DOES OBESITY AFFECT HEALTH?

High blood pressure is directly related to obesity or an overweight condition. In addition, it can adversely affect the balance of cholesterol and triglycerides, including resistance to insulin. Because of the vast number of medical conditions developed through obesity, the effects of obesity are somewhat confusing.

Infertility, skin problems, chronic musculoskeletal problems, and respiratory complications are some additional nonfatal, debilitating health issues. There are four major areas of serious life-threatening problems resulting from obesity:

- 1. cardiovascular disease;
- 2. insulin resistance conditions that cause diabetes;
- 3. large-bowel and hormonally-related cancers plus additional types of

cancers; and

4. serious gallbladder issues. Increasing body fat percentage also increases the likelihood of developing hypertension and Type 2 diabetes.

### Adult and Children Obesity Rates in US



Diabetes has primarily been associated with older adults, but now this disease attracts even obese prepubescent children. Of the 90 percent of overweight or obese people suffering with diabetes, 86 percent have Type 2, and it is rapidly becoming a word-wide problem.

Raised BMI and increased risk of several forms of cancer (including breast, prostrate, gallbladder, kidney and colon) show up in one out of

every three adults over 50 years of age. A major disabling disease in adults is osteoarthritis and can be caused by obesity and being chronically overweight.

Fortunately, obesity and its related diseases are reversible and are slowing being brought under control. They can eventually be completely eradicated by changing one's lifestyle and eating habits, drinking plenty of distilled water daily, and with periodic fasting under professional care.



#### **CHAPTER 9**



Distilled Water Helps Burn Fat

Distilled water not only helps to metabolize the fat stored in the body, it also will help to suppress your appetite better than any diet pill on the market today. Pure, clean water not only aids in weight loss, it also helps prevent your body from gaining weight.

When your body is dehydrated and not receiving adequate quantities of water for normal bodily functions, the body will start storing water as a protective measure, and it does so in the fat cells. When the body is starved of water, instead of metabolizing fat with the help of water, it will start storing water and fat. Our kidneys cannot function adequately without the proper quantity of water; consequently a portion of their load is transferred to the liver. Metabolizing stored fat and converting it into energy is the primary function of our liver. As a result, the overloaded liver cannot function properly or at full capacity by metabolizing fat; and the fat that is not used as energy is stored in the body.

#### The Body in Survival Mode

If you are not supplying your body with an adequate quantity of water, it will perceive this as a threat to the body's survival. It begins storing water in the fat cells, causing the ankles, feet, legs and hands to swell and puff up. You can actually press against the swollen area with a finger and leave a temporary indentation. In this process the body will begin storing as much water as it is supplied, and unfortunately the water the body is storing is not being used. Therefore the organs may start pulling water from less critical bodily functions, which can result in many serious conditions such as:



1. Heat stroke

- 2. extremely dry mouth and nose
- 3. extremely dry skin, no elasticity
- 4. extreme thirst & no sweat no
- 5. urination or dark yellow urine
- 6. accelerated heartbeat sunken eyes
- 7. accelerated breathing
- 8. no tears when crying fever & possible delirium or even unconsciousness.


The only way to rid the body of these symptoms is to drink plenty of water. The body will stop storing water and begin supplying it with much needed hydration. Then the stored water will be released. If you feel you are drinking an adequate amount of water and yet seem to be retaining it due to swollen feet, ankles, legs, arms or hands, this may be the result of ingesting too much salt.

Your system will attempt to dilute excess quantities of salt which results in swollen tissues. To solve this issue, simply drink plenty of water, preferably distilled or reverse osmosis.

The larger a person is, the more water they require for their metabolic processes. So an overweight person obviously would need to drink larger quantities of water for their metabolism than would a thinner person. If you seem to have frequent muscle cramps, it is a sign that your muscles are not receiving enough water to stay elastic and maintain proper muscle tone.

Another sign of dehydration is dry skin that seems to have lost its resilience and ability to spring back when pinched between two fingers.



### **Ridding the Body of Waste**



Another major function of water is to help rid the body of waste material. As the body starts shedding fat cells after receiving an adequate supply of water, these metabolized fat cells along with residual waste material must be eliminated. It is therefore important that the body received plenty of water in order to help flush the waste material from the body.

#### Move Waste Material through the Colon

To move waste material through the colon, it needs a continual supply of water for this process, and if that does not happen you will become constipated. If you are not drinking enough water, the colon is one of the first organs to be deprived of its share. When this happens, you simply need to drink more water, not take medication.

### Drinking 3 to 4 Quarts of Water Daily

The average person should be drinking 3 to 4 quarts of water daily to adequately supply all of the body's needs and to flush waste and toxins from the colon, kidneys and bladder. The best way to accomplish this is to have a bottle of water close by throughout the day and drink a little bit often. This will assure that you will not only stay hydrated, the water in your stomach will help suppress hunger.

## When the Body Is Properly Hydrated

When the body is properly hydrated, every organ will function properly. You will also prevent water retention and any stored water will be released. The liver will properly metabolize stored fat and this fat will be used as fuel and burned up. Then you will again have normal thirst and normal hunger.



CHAPTER 10

Cooking With Distilled Water

Fresh-baked Sour Dough Artisan Bread with several additionaloptional ingredients...

Do you consider yourself an average cook, a good cook, a great cook or even a Master Chef? Regardless of where your culinary skills fall, I can show you how to take it up a notch, both your skills and your belt.

So what's the great secret about distilled water? Well, there are several reasons why the quality of your dishes will improve by utilizing distilled water in their preparation – especially if you're currently using tap water.



# Cooking and Baking with Tap Water

Imagine that you were about to bake fresh bread such as in the recipe listed below...

You have everything you need for this task organized and laid out on the kitchen counter. Suddenly a complete stranger strolls in and begins adding unknown ingredients to the mixing bowl, then leaves. You had noticed a skull and crossbones label clearly displayed on every one of the ingredients. What would you think and how would you react? Would you simply ignore what you know, bake the bread and eat it? Those additional ingredients are listed in the recipe below.



Fresh-baked Sour

Dough Artisan Bread 1 cup warm water 1 pkg active yeast 1 tsp salt 1-1/2 tbsp sugar 1 tbsp shortening ¼ cup milk 3 cups flour

Additional: Optional\* Ingredients



arsenic to flavor

nitrates & pesticides pinch of pharmaceuticals bacteria, viruses, cysts all-purpose chemicals tsp heavy metals & lead fold in 1 cup decayed plant & animal matter chlorine to taste sprinkle of THMs, HAAS, chlorite, bromate So you wouldn't eat the bread? Actually, when you use the tap water from almost any city water supply for any recipe, you need to know that those additional "optional" ingredients <u>will be added</u> if you use tap water.

So what is the point? If you don't want extra harmful, cancer-causing grossness added to your foods, prepare them with distilled water, baking and cooking. You can actually expect the food to taste more like it is supposed to.



Preparing food, baking and cooking using distilled water improves the food's flavor, and will even enhance the appearance of the food. With the purity of distilled water, and being a natural solvent, nitrates or pesticide residue will be effortlessly rinsed from vegetables and fruits.



When you use tap water to reconstitute vegetable or fruit juice, the chlorine and other chemicals affect the flavor. So, too, with coffee and tea. Distilled water is pure, odorless, and tasteless; so whatever you add to it that is the only taste you experience.

Therefore, for better tasting juices, coffee and tea, you will find the taste to be greatly enhanced using distilled water. Distilled water is what was originally removed from the fruit to concentrate it, and there is nothing in distilled water to compromise the taste. You can actually use extra water, get the same flavor, and make it go further.



The best tasting coffee in

the world comes when using pure, clean, healthy, tasteless distilled water. Less tea and coffee are required when using distilled water because the pure water extracts more of the coffee and tea from the product, thus requiring less to get the same flavor.

Distilled water reduces the drink's cost by as much as 25 percent. Even though it will be lighter, the richness of flavor will be prevalent, with much less of a bitter taste.



#### **Better Ice Cubes**

There is a very noticeable difference in distilled water ice cubes. They're not only crystal clear, but they are also harder and last longer since there is no inorganic matter to cause it to melt faster.

# **Reconstituting Vegetable & Fruit Juices**



When concentrated

fruit and vegetable juices are reconstituted by using distilled water, they not only taste fresh squeezed, but you can add 20-25% more distilled water and make it stretch farther and still retain the natural flavor. Because distilled is so pure, whatever you put in it, that is the only flavor you will get out of it. This is because there are no contaminants to alter the flavor or chemistry as there is in tap water. It tastes much closer to the original fresh product. It is also possible to stretch the volume of your finished drink by using distilled water to reconstitute it.

### **Cooking Vegetables**

Distilled water will not subject the vegetables to contaminants, as opposed to tap water. Vegetables like potatoes, broccoli, asparagus and cauliflower

retain their natural brilliant colors. Soups made with distilled water are amazingly tastier.



#### Sprouting Seeds with Distilled Water



When sprouting various

grains, seeds, and all types of beans, distilled water will be much more effective than tap water at germinating. It will take place much more quickly, with no contamination, and stay crisper and fresher longer.



### **Distilled Water for Baking**

The texture of baked goods made with distilled water is smoother. Since distilled water is so pure, more is absorbed by the flour than with tap water. The finished product will also have better flavor and be free of impurities. Various pastries, breads, pancakes, and pizza are all dramatically affected by the distilled water.

### **Canning of Fruits and Vegetables**

Canning with distilled water results in better tasting vegetables and fruits and their original color and texture will be retained. Also, because the water is pure and sterile, jars seal better resulting in a lower spoiling rate.



### **Pasta Products**

Pasta of all kinds, rice, and grains will absorb distilled water more readily than tap water. These types of products absorb distilled water more readily than tap water, resulting in better texture and less stickiness.



### **Dehydrated Foods & Distilled Water**

In the process of dehydrating fruits and vegetables, naturally existing distilled water was eliminated through continual exposure to low heat. So it stands to reason that distilled water is ideal for reconstituting it. Because distilled water is so pure, it can pass through the walls of the dried food more effectively than water containing inorganic matter and contaminants.

### **Mixed Drinks**



Obviously, alcoholic mixed drinks

taste much better with distilled water. As with everything else, less alcohol is required to effect the same results. Alcohol will sometimes interact with many of the contaminants in tap water such as chlorine, THM's and pharmaceuticals found in most municipal water supplies to create dangerous compounds. So use distilled water in the preparation of your next dish and be amazed at how the flavors actually come from the ingredients you have added and not from some mystery source such as tap water.

### CHAPTER 11

Comparing Organic & Inorganic Minerals

We hear day in and day out that we need more minerals. "Vitamins and minerals" are words that go hand in hand when promotion healthy diet items and supplements. In fact, the body needs about 70 different minerals to carry out all the functions a body is required to do. But many may not realize there are two types of minerals: organic and inorganic. Between those two types, it may be easy to recognize which one does a body good. Ever hear people tout the benefits of an inorganic diet?

Here is a brief overview of the differences between these two: Organic minerals: These are once living, or are living and can bring life to cells. These contain carbon, and their electrons spin clockwise, just like those of the human body. Additionally, these cells can form an ionic bond with the body and can easily break down into materials to help with bodily function, such as tissue repair.

**Inorganic materials**: These were never living, are without carbon and cannot bring life to cells. The body treats these metals like toxins. They are tightly held together and cannot be easily broken down. Their electrons spin counterclockwise, out of sync with the rest of the body.

Let's look further at what negative effects inorganic minerals have. Inorganic minerals are removed from water during nature's water cycle, that is, during evaporation from the sun. Only the water itself is removed, with the inorganic chemicals behind. The distillation process is one filtering process that mimics what nature does on its own. So, why are these minerals removed from pure drinking water?

Most minerals found in their natural form and those found in water are primarily inorganic in form. Therefore, unless they are chelated, they cannot be absorbed by living cells. Unless they are converted through chelation, they will contribute to various ailments and diseases related to the colon, such as kidney stones, gall stones, and plaque buildup in the colon and arteries or in the joints of the body.

Our bodies consist of elements and compounds derived from molecules consisting of atoms. Molecules are constructed elements from which are the building materials for compounds such as water,  $H_2O$ . Water consists of 2 atoms of hydrogen (H) and 1 atom of oxygen (O). Another example of compounds would be vitamins.



In order to understand how living organisms use nutritional minerals, you must first understand the relationship between elements and compounds, what they are, and how they function.

### **Minerals (Nutritional)**

The minerals that are essential and critical for life are sometimes referred to as "major minerals" or "macro minerals" and are usually listed or presented alphabetically. Minerals make up about 4% of the body's weight. Most of our body's weight is made up of water along with organic compounds consisting of hydrogen, oxygen, carbon and other "combustible" elements.

There are two main functions of minerals: building and regulating.

## Macro minerals are what our bodies need the most

These are considered to be calcium, phosphorus, sodium, chlorine, potassium, magnesium, sulfur and iodine.

**Trace Minerals** are: iron, zinc, luorine and copper. **Additional trace minerals** are: boron, cobalt, chromium, iodine, iron, manganese, molybdenum, selenium, & vanadium.

The required intake for various trace minerals is somewhat lower than for macro minerals.



Functions of Minerals: Calcium - strong, healthy teeth & skeleton;

Phosphorus – utilized by teeth and bones; Sodium – controls balance in cellular fluid; Potassium – for the health of the heart; Iron – controls anemia and healthy red blood cells; Zinc – digestion, liver, and bones; Fluorine – teeth strength and tooth decay prevention; Copper – helps produce red blood cells; & lodine – thyroid.

**Minerals Found in Nature Are Inorganic:** Inorganic minerals are minerals found in their raw form in the earth and in water, which means, non-biological. Organic compounds are of biological nature and origin. This is an important issue regarding the differentiation between organic and inorganic, to more easily understand the organic compound referred to as a chelate. **Chelated Minerals:** One reason that the human body cannot assimilate most of the inorganic minerals dissolved in water is that a living organism cannot utilize inorganic minerals directly. Inorganic minerals are basically dirt and are the cause of many disorders and diseases. Before a living organism can absorb an inorganic mineral, it needs to convert it to an organic or biologically structured compound. This transformation occurs in the digestive tract where the inorganic mineral is chemically bonded to an organic molecule.

This bonding process is referred to as chelation, and the final product is called a chelate. In Latin, chelate means "*bond.*" Now the body can recognize the mineral chelate as an organic compound which can be successfully absorbed by the cells.

### **Absorption of Minerals**

There are several things which can increase the difficulty with which inorganic minerals are absorbed and utilized by cells. In most cases, there's insufficient organic matter for bonding with the mineral prior to passing through the organism without being absorbed. Secondly, the mineral may not be assimilated due to the health of the organism.

Scientists have discovered how to create mineral chelates by bonding inorganic minerals found in nature to organic or amino acid. It is converted to a bonded "reacted" organic ligand (a completed mineral chelate), enabling it to be efficiently and successfully absorbed by the digesting organism. Learn more about scientifically chelated minerals in the next chapter.



### CHAPTER 12 Mineral Chelates Are Not Created Equal

Most people understand that minerals and vitamins are distinctively different. There happens to be as great a difference when organic minerals are compared to inorganic minerals. The key word, when discussing the differences between these two types of minerals, is "chelate."

Mineral chelate is a technical scientific term with a specific definition that has been overused, misused, misrepresented and misunderstood in nutritional health circles and the marketplace, while becoming a trendy buzz word.

### What Is a Mineral Chelate?

The term "chelate" specifically identifies a particular bond between the atom of an inorganic mineral and a molecular structure known as a ligand. The mineral chelate is an element while the ligand is a molecule. For the ligand to form a molecule, it must be attached to the mineral in two separate locations rather than just one. So much for the broad definition of a "chelate." This is where it starts to get interesting. As life is fraught with variation, so are chelates.



A ligand's size and characteristics are not defined by a chelate's definition.

Learning this fact is important since there are a number of molecules that are ligands. There are also some ligands toxic enough to the environment that they are controlled by government regulations. Some are required to be broken up before they can be absorbed since they are too large; and even then, they still are not able to be absorbed.

## The Size of Ligands

Glycine is an amino acid which comes in a string of nitrogen, oxygen, hydrogen and carbon. A higher absorption rate of a ligand is dependent upon the chain's length and size. Yet if the chain and size get too big, it cannot be absorbed by the cell. It is possible, however, that the oversized chelate molecule could be broken apart in the colon, reducing the mineral to a functional size. In this instance, it can then be re-chelated for possible absorption. However in this case it will more than likely pass completely through the digestive tract, never being absorbed.



## **Glycine Amino Acid**

## **The Manufacturing Process**

It's not a simple process to produce or manufacture an effective, highly efficient mineral chelate. Prior to the manufacturing step, there are variants in mineral chelates and ligand choices to be taken into consideration prior to determining which of the four manufacturing processes to use.

### Various Mineral Chelate Production Processes

- 1. **The most effective is spray-drying**. At a specific time in the reaction process, the formulated product is dried during spraying, guaranteeing a more viable, potent and effective product. It requires expensive and sophisticated equipment. Precise variations in this process are intricately controlled and continuously monitored.
- 2. Air-drying a slurry mixture. This technique results in a

variable finished product, but it is an inexpensive method and therefore quite common.

3. Dry blending and mixing of the mineral and agent. The finished product is not chelated or reacted. The mixing process is crude and fundamental, similar to mixing cement in a drum mixer. The manufacturer advertises that these minerals will be chelated in the person's digestive tract in a natural process.

Some mineral processors use a combination of the second and third methods, resulting in a certain degree of chelation in addition to high levels of inorganic or unreacted minerals.

It is difficult for the average consumer to sort through all of the options, manufacturing processes and claims in order to come to a confident conclusion and make the right decision on a healthy and effective product choice.

You can start to see that there is much more to "minerals" than meets the eye. It is very understandable why the majority of people think that the water-soluble minerals found in water are healthy and beneficial, not realizing that these are responsible for many ailments, maladies, diseases and human suffering. Only chelated minerals can be utilized by our bodies. That means it is a mineral that is attached by a bond at two points by the ligand, making it "fully reacted and bonded."

When it comes to your health and well-being, don't compromise on quality and purity for the sake of price. When it comes to minerals, do your homework and investigate the manufacturer's claims and production processes. Regardless of a manufacturer's claims, the bottom line remains whether their minerals are "fully reacted" and whether they can willingly and easily provide indisputable confirmation and proof.



### CHAPTER 13

Carbon Filters: "Cheapest" Water Treatment... But Are They Effective?



This chapter will address the major health issues and maintenance of the popular and trusted **carbon water filters**. This is one of the most common types of water purification systems used in homes. Although effective for removing many harmful substances, they have a number of disadvantages affecting the quality and chemistry of the filtered water, which I will cover later. But first, there are several major reasons why carbon water filters are the number one choice for cleaning up tap water nationwide.

## Aggressive marketing - Low manufacturing costs - High profits

Carbon filters do remove many chemical and cancer-causing substances and are relatively inexpensive compared to reverse osmosis, deionization and distillation. Since there is a very high profit margin, this method of water purification is preferable. Unfortunately, many of the manufacturers and/or salespeople are not forthcoming in what a carbon filter can and cannot do. Instead of mentioning what it can't do, they will amplify and exaggerate the positive aspects of the filter. As a result, the consumer is under the false impression that their "filtered water" is now healthy.

#### Carbon filters are not complicated and are easy to install

Most people are looking for simplicity at a great price. It is not a secret that most municipal water supplies are polluted to some degree. However, the average person is unaware of any details about these pollutants or what is involved in removing them from water.

If they are told that a carbon filter removes dangerous substances, does so more cheaply than any other method, and that the water will taste and smell better, that's good enough for most people.

### Carbon filters do remove many chemicals and carcinogens

But what about the harmful toxins and substances filters they do not remove? Activated carbon filtration systems do not remove microbes, sodium, nitrates, fluoride, hardness, inorganic minerals that create kidney and gall stones, lead and other heavy metals.

### The activated carbon removes most of the bad tastes and smells

Our senses of sight, smell and taste can be easily and fatally deceived! In case you are unaware, most of the dangerous chemicals and substances found in tap water are colorless, odorless and tasteless. As a consequence, most people do not get concerned as long as their water taste okay, smells okay, and looks clear.

### Most filter systems use replaceable cartridges

It is not a matter of how easily a filter can be changed, but rather how often to change it. Most contaminants in water are measured in Part per Million (PPM). As these chemicals pass through the filter they are attracted to and absorbed by the carbon. As a result, they begin to accumulate in larger quantities than what are considered to be safe levels according to the EPA. It is usually impossible to know at what point the filter is full and holding all the chemicals it can.


This means that extremely large quantities of chemicals can easily be forced loose by the pressure of the water passing by at any moment when the filter is full. This will allow high concentrations of dangerous PPMs to be released into your glass.

#### **Additional Challenges with Filters**

#### **Clogging and Channeling**

Carbon filters will clog in many places, forcing the water to go around the clog. Undissolved solids usually clog up the filter. These clogs will reduce the normal lifetime of the filter. If your water has a sediment problem, you will probably have to use separate sediment pre-filter to keep clogs from ruining your carbon water filter.

This continues until an unobstructed path through the filter is found. This process is called channeling. Channeling provides an unrestricted flow for the water and pollutants to pass through the filter, totally negating the carbon's ability to retain the pollutants. Unless there was a dramatic change in the filter's flow, you would not know there was a serious problem, nor when to change the filter.

#### Rate of Flow and Water Pressure Affect the Filter's Performance

A Case in Point: The most ineffective water filter on the market is the small one that attaches to your faucet spout where you push a button for the water to flow through it. The main requirement of a carbon filter is to be of a size proportionate to the volume of water, rate of flow and water pressure to allow the suspended pollutants to stay in contact long enough for the carbon to attract and absorb them. That little filter does not contain enough carbon for this to happen. The water speeds through in a fraction of a second, giving up nothing to the carbon it passed through.

#### **Breeding Ground for Mold and Bacteria**

Another disadvantage of a carbon water filter is its susceptibility to mold. The organic substances that are captured by the filter can rot after being trapped. Therefore, if you leave the carbon water filter unused for prolonged periods, mold will likely grow inside it. In addition to mold, a filter can be a breeding ground for bacteria.

#### Harmful Substances

Carbon water filters don't remove certain harmful substances from your water. The filter will do nothing to get rid of harmful nitrates or toxic metals that contaminate the water. Also, a carbon water filter is incapable of removing high levels of sodium and fluoride.

#### Ph Value

Many people have water that is too acidic. Unfortunately, a carbon water filter can't change the pH balance of the water. The minerals that cause acidity in the water dissolve and pass right through the filter. So if you have acidic water, it will still be acidic after going through the carbon water filter.

In conclusion, the volume of carbon needs to be in direct proportion to the volume of water that it is expected to filter. Carbon filters are best used as pre-filters and post-filters for more reliable purification methods such as:

- Distillation
- ☑ Deionization
- Reverse osmosis

Why leave substances in the water that you drink if they are not needed by your body? Take everything out and just drink pure, clear, healthy  $H_2O$ ! You easily spend hundreds of dollars every year on electronics or other luxuries that are doing nothing for your health or longevity. So spend a few bucks on attaining a good quality product that assures you will drink clean water every day. Invest in a water distiller.





#### **CHAPTER 14**

40 Years of Fasting

# Fasting with Distilled Water

## FastingAuthority.com

Fasting is one of the Grim Reaper's best kept secrets. Fasting is the single most important thing in existence that is guaranteed to result in premium health and a longer life that will be most likely free of sickness, disease and cancer. Douglas C. Hoover

Disclaimer: I recommend two products in this book, one from *Liquid Health* and the other from *Iron-Tek*. *I found these two products in a search for the best liquid vitamin and protein. I am adding this after completing this 40 day fast and a second 21 day fast 13 days later, for a total of 61 days. I took both products on the 40 day fast and found them to be exceptional.* 

However I have not been paid by either company for this promotion, it is strictly my own personal endorsement.

I recently completed my third 40 day fast with distilled water, taking one ounce (2 tablespoons) of "Complete Multiple" liquid vitamins and 1-1/2 oz. (3 tablespoons) of Iron-Tek Essential Liquid Amino Complex daily.

Fasting has been a lifestyle for me over the past 40 years. I went on my first fast at age 25, lasting 19 days on just distilled water, with one to two fasts every 3 years. These fasts ranged from 21 to 30 days until I reached 55 in 2002 in which I gave 40 days a shot on distilled water alone and made it to 39 days. Why 39 and not 40? It is a long story; maybe I'll share it later.

This particular fast was accomplished while working 8-10 hours per day building rock waterfalls and ponds, handling 6 to 12 tons of rock per week. What's more, on the 32<sup>nd</sup> day with no food, only distilled water, to demonstrate the energy I felt, I personally moved a 6 ton truck load of rock from where it had been dumped on plywood in the street to the back yard of a client in less than an hour, using a large landscaper's hand truck. So much for all the myths touted by the so-called nutrition experts that have nothing to share but theory, rumors and urban legends, and they probably haven't fasted more than one day in their life. If they have at all, it was more than likely a juice fast, which means they are getting plenty of nutrition and their body is still digesting the food components in the juice.

"The American Cancer Society estimates that in 2011 about 141,210 people will be diagnosed with colorectal cancer and about 49,380 people will die." You're asking, how is that possible to have that much energy while fasting with nothing but distilled water? The human body is using large amounts of vital energy digesting food, delivering this food throughout the body and carrying away waste products for elimination. On the 6<sup>th</sup> or 7<sup>th</sup> day of a water fast, the digestive system has finished with its job and can now rest. In most cases, as a result of fasting for the very first time, all of their organs associated with digestion finally have a chance to rest.

As a consequence, all that vital energy that was used in digesting food 24/7 can now be utilized to start repairing the body and eliminating toxins, stored chemicals and toxic substances, and ridding the colon of impacted putrefying meat and other waste that has been stuck in its numerous folds in the colon for even decades. Is it any wonder The American Cancer Society estimates that in 2011 about 141,210 people will be diagnosed with colorectal cancer and about 49,380 people will die of the disease in the US? In both men and women, colorectal cancer is the third most commonly diagnosed cancer and the third leading cause of cancer death.

So why was this recent 40 day fast different from all the other fasts I've completed? Two reasons: I retired six years ago and sold my waterfalls and ponds construction business and have since gained over 50 pounds. I have not fasted for 4 years and I'm now 65 years old. My wife Alice and I have joined a spa and hired a personal trainer who explained that since I was going to be working out during this fast, I would be burning fat which needed to be replaced with muscle. That required taking protein. After a considerable amount of research, I found a liquid protein (minus any food value) that is used by professional boxers, wrestlers, weightlifters and athletes developed and marketed by Iron-Tek, *Liquid Amino* 



If you choose not to exercise while fasting, I recommend not taking the protein and only take the "Complete Multiple" liquid

Supplement Facts Serving Size: 45 mL (1.5 fl oz)		
Servings per Container: About 10		
	Amount Per Serving	% Dally Value
Calories	100	
Total Carboliydrate	9 y	3%
Sugars	9 q	•
Protein	15 g	30%
Vitamin B1 (as thiamine HCI)	2.5 mg	187%
Vitamin 82 (as riboflavin 5' phosphate)	2.5 mg	147%
Niacin	30 mg	160%
Vitamin B6 (as pyridoxine HCI)	4 mg	200%
l olate (as tolic acid)	100 mcg	25%
Vitamin B12 (as cyanocobalamin)	12 mcg	200%
d Biotin	10 mcg	3%
Pantothenic Acid (as d-pantothenol)	30 mg	300%
Sodium	10 mg	1%
Proprietary Protein Blend Providing:	15 g	•
Hydrolyzəd Gəlatin		+
Whey Protein Isolate		
Choline Bitartrate	100 mg	
Inositol	100 mg	ħ.
L-Camitine (as Base Free Form)	25 mg	*
PABA (as para amino benzoic acid)	2 mg	*



### Complete Multiple Vitamins:



Nutrition Facts Serving Size: 1 II oz Servings per Container: 32

	Amount Per Serving	% Daily Value
Calories	48	- 98. 4
Total Carbohydrates	11 g	2%
Sugars	4 q	*
Fat Less than	1g	<1%
Sodium	23 mg	<1%
Dietary Fiber	2 y	8%
Vitamin A (as retinyl palmitate)	5000 IU	100.0%
Vitamin B1 (as thiamin)	1.5 mg	100.0%
Vitamin B2 (as riboflavio)	1.7 mg	100.0%
Vitamin D3 (as niacinimide)	20 mg	100.0%
Vitamin B5 (as d calcium pantothenate)	10 mg	100%
Vitamin B6 (as pyridoxine HCI)	2 mg	100%
Vitamin B12 (as methylcobalamin)	10 mcg	166.0%
Folic Acid (as folate)	400 mcg	100.0%
Biotin	300 mog	100.0%
Choline (Bitartrate)	15 mg	
Vitamin C (from PureWay-C@ proprietary formation of ascorbic acid USP combined with lipid metabolites (fatty acids) from vegetable waxes)	120 mg	200.0%
Vitamin D (as cholecalciterol)	400 10	100%
Vitamin F (as d-alpha tochopherol acetate)	30 IU	100.0%
Calcium (plant source)	32 mg	3.0%
Magnesium (plant source)	6 mg	1.0%
Manganese (as manganese chelate)	1 mg	50.0%
Zinc (as zinc gluconate)	1 mg	7.0%
Chromium Polynicofinate	60 mcg	*
Natural Lomato Blend: Lomat O Red® and Lyc O Mato® (containing ycopene, beta carotene, phytoene, phytofluene from natural tomato extract)	10 mg	
Aztec Marigold (Tagetes crecta L.) (flower) (containing 10% Eutein and 1.2% zeaxanthin)	10 mg	٠
Citrus Bioflavonoids	100 mg	( <b>x</b> )
Borage (som ce of gamma linolenic, linolenic, oleic, strearic and palmilic fatty acids)	26 mg	*

Super- Phyto Food Complex

Aloe Vera Juice (ActivAloe®), Lithothamnium Calcareum, Cultivated Seaweed (laminaria digitata), Citrus Bioflavanoids, Fruits + Greens (extracts of: banana, kiwi, mango, pineapple, cranberry, cherry, raspberry, red pepper, plum, apricot, ginger, broccoli, spinach, kale, cabbage, orange, grapefruit, 1emon, 1ime, green tea.), Bee Pollen (apis mellifica), Xanomax® Mangosteen 6:1 extract (garcinia mangostana) Noni 4:1 Extract (morinda citrifolia) (fruit), Pomegranate 4:1 Extract (punica granatum). Pau d'arco (tabebuia impetiginosa). Spirulina (arthrospira platensis). Wheatgrass (triticum vulgare)(leaf). Olive Leaf Extract (olea europaea). Irish Moss (chondrus crispus) (whole plant), Blue Green Algae (aphanizomenon flos-aquae), Horsetail Extract (equisetum arvense) (aerial stems) O Vision &Youth Complex MSM (Methyl-sulfonylmethane) 99.9%, TMG (as betaine anhydrous), GreenGrown® Glucosamine Hc1 USP, Grape Seed Extract (vitis vinifera), Rhodiola Rosea (bark). Hyaluronic acid. Digestive Support Complex Apple Pectin (malus domestica) (fruit), Parsley (petroselinum crispum) (aerial parts), Cinnamon (cinnamomum zeylanicum) (bark), Fenugreek (trigonella foenum-graecum) (seed) Organic Plant Digestive Enzyme Therapy Bromelain. Amylase (starch liquifying and digesting) Protease (protein solubizing) Lipase (fat splitting) Cellulase (digestion of cellulosic material) Lactase (milk and dairy digesting) Circulatory Support Complex Hawthron Berry (fructus crataegi) 41 Extract, Acai Berry (euterpe oleracea mart) 41 Extract, Horse Chestnut (aesculus hippocastanum) (seed), Red Korean Ginseng (radix panax C.A. meyer) (root), Ginko Biloba, Eleuthero (eleutherococcus senticosus), Coenzyme Q10 (as ubidicarenone), Garlic (allium sativum) (cloves).



Other Ingredients Liver Cleanse & Detox Go, iberry (lycium barbarum) extract. Suma (pfaffia paniculata). Alfalfa Extract (medicago sativa). Rose Hips (rosa canina), Alpha Lipoic Acid, Burdock Root (arctium minus). Vegetarian Amino Acid Complex Alanin, Arginine\*\*, Aspartic Acid, Cystine, Glutamic Acid, Glycine, Histidine, Isoleucine\*\*, Leucine\*\*, Lysine\*\*, Methionine\*\*, Phenylalanine\*\*, Proline, Serine, Threonine\*\*, Tyrosine\*\*, Valine\*\* Essential Amino Acids Sea Vegetation Derived Trace Mineral Complex Antimony, Barium, Beryllium, Bismuth, Boron, Bromine, Cadmium, Calcium, Carbon, Cerium, Cesium, Chloride, Chromium, Cobalt, Copper, Dysprosium, Erbium, Europium, Fluoride, Gadolinium, Gallium, Germanium, Gold, Hafnium, Holmium, Indium, Iodine, Iridium, Iron, Lanthanum, Lithium, Lutetium, Magnesium, Manganese, Molybdenum, Neodymium, Nickel, Niobium, Osmium, Palladium, Phosphorous, Platinum, Potassium, Praseodymium, Rhenium, Rhodium, Rubidium, Ruthenium, Samarium, Scandium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Tantalum, Tellurium, Terbium, Thallium, Thorium, Thulium, Tin, Titanium, Tungsten, Vanadium, Ytterbium, Yttrium, Zinc, Zirconium

#### Other Ingredients

Purified Water, Vegetable Glycerin USP, Agave Nectar (from Agave Cactus), Blueberry juice, Elderberry Juice, Natural flavoring, Citric acid, Potassium Benzoate (to preserve freshness), Potassium Sorbate (to preserve freshness) Liquid Health's first all-inclusive daily nutritional product contains the highest quality ingredients, including Optiberry, PureWay C, XanoMax and NutraFlora. The addition of fiber and 10 blends and complexes designed to enhance the whole food based vitamins, minerals, enzymes, and amino acids in this formula makes Liquid HealthD Complete the most comprehensive multiple available. Sweetened with agave cactus nectar and fruit juices, Liquid HealthD Complete is a great tasting multi-supplement for the

If you choose not to exercise while fasting, I recommend that you do not take the liquid protein and only take the "Complete Multiple" liquid vitamins and if you are in relatively good health, and do not have any heart problems, consume only distilled water. I have completed dozens of 21 and 30 day fasts over the past 40 years and two previous 40 day fast on only distilled water.

Since I had not fasted for four years, I supplemented the distilled water with 1oz. of *Complete Multiple* daily to assure that if my body needed repair it has the tools and nutritional building blocks to accomplish it. If you happened to skip over the last two pages, I suggest you go back and check this product out. This is the most complete multi-vitamin in the world.

#### Preparations for a Major Fast

The best way to approach fasting is to first realize it is the single healthiest thing you could do for your long term health and longevity. Fasting is simply the decision to not eat for a defined extended period of time. At no time during a 21 to 40 day fast will you ever feel hungrier than you would after missing two to three meals. (95% of the key to fasting is "Mind over Matter" or basic willpower.



#### Before You Start Fasting...

- 1. Map out a specific length of time on a calendar, taking care not to have any conflicts with special occasions such as holidays, birthdays, out of town guests etc. These can be very good reasons to abandon a fast. Keep a detailed diary to capture your thoughts and experiences throughout the fast.
- 2. Write down your personal goals related to the fast and what you expect the results to be, such as:

A. You will be detoxifying your body for perhaps the first time in your life.

B. Your body will be able to rest and restore itself for the first time ever.

C. You will be teaching and training yourself to have control over your body's desires and learning serious discipline skills. D. A distilled water fast is an ideal time to kick an addiction: Smoking, drugs, alcohol, caffeine, sugar, salt, junk food, soft drinks etc.

- **3.** Start cutting back on your addictions in the days prior to your fast. Otherwise, during the first two weeks of the fast caffeine and nicotine can cause headaches, dizziness or stomach aches as your body starts releasing the stored chemicals into your blood stream.
- 4. Prior to your fast begin eating less meals with small portions, also try to resist the temptation to eat a big meal the day before starting the fast. Cutting back on your meals a few days before starting your fast helps condition your mind, stomach, and appetite.
- **5.** Gather support from your family and friends by letting them know your plans for fasting prior to starting.



What prompted me at age



25 to fast for 19 days?

Doug Hoover built/designed the Galleon at 23 years old.

### Galleon Restaurant (Cutty Sark) Built in 1972

I was the cook in my restaurant for almost two years prior to selling it. In less than a year I gained 60 lbs. and developed gout in my left foot, swelling to twice its normal size. Gout is a result of an over production of uric acid creating crystals which collect in a joint, and like broken glass, these crystals grind in the socket causing great inflammation and pain. I couldn't wear a shoe or stand very long on one leg since I couldn't put pressure on my left foot. The doctor said it was the worst case of gout he had ever seen in someone so young. To be able to function I needed 500 mg of Zyloprim twice a day to keep the gout at bay in order to function without constant, searing pain. The doctor warned me that this quantity of Zyloprim could severely damage my kidneys over time.

A customer came into the restaurant two days later and asked why I was limping and I responded, gout. He said I needed to read two books by Dr. Paul Bragg, "The Shocking Truth about Water" and "The Miracle of Fasting." So I asked my wife to pick them up from the health food store. These books literally changed my life! I learned the simple truth that distilled water was the purest water available. I was amazed at the simple fact that fasting with distilled water would cleanse my body of foreign substances such as dissolving kidney stones, gall stones, uric acid crystals that form in a joint, inorganic mineral plaque forming in arteries and much more.

Dr. Bragg also talked about the importance of fasting and how it helps clean the body of stored inorganic substances, toxins, carcinogens and the colon from years of impacted fecal matter. He mentioned that fasting using distilled water would not only clean out our body, but also give our

digestion system and its organs a chance to rest and regenerate, adding years to our lives and preventing many diseases.

While I was studying Bragg's book, my wife was suffering from phlebitis (blood clots) in her legs. She was taking Coumadin, plus large doses of antibiotics for her frequently recurring kidney infections, being admitted twice for intravenous antibiotics.

We both started drinking a gallon of distilled water a day and I started my fast while cooking in my restaurant 12 -16 hours per day. No food at all, only distilled water. Was it easy? Absolutely not. The only time I wasn't constantly being tempted was while I was sleeping. However, I think I may have had nightmares about starving to death. LOL! I actually had no choice: fasting was my only hope for getting off that deadly medication and eradicating the gout.

I had been smoking since entering the Navy at 17, so I was also looking forward to this fast to cleanse my lungs of tar and nicotine deposits, as Dr. Bragg had promised. After the system is clean of this addicting drug, it is much easier to quit smoking for good. Dr. Bragg was saying that even though any length of fast is good for you, you should go beyond 17 or 18 days, or else it is not a total cleanse. The 18-19<sup>th</sup> day is when you have your last bowel movement. During the fast the distilled water helps pull out toxins, carcinogens, chemicals, artificial colorings, flavorings, preservatives, etc., including tar and nicotine in the lungs and colon from smoking.

The colon has been actively moving, loosening and breaking free the impacted feces composed of encrusted, undigested, mucus coated greasy food and putrefied, rotting meat, all of which can contribute to colon or rectal cancer. When this is taking place, you will hear loud growling and gurgling noises, and maybe some cramps. This is a great sign that very good things are happening. The activity plus the cramping is what will bring on the last elimination of the colon. Make sure you're alone in the house and the bathroom fan is on with all the windows open. Purchase a pallet of industrial air freshener in advance. That experience for me was life changing! When I saw and smelled what came out of my body, I was appalled. The smell was like that of a dead, rotting animal, the texture was

slimy, sticky and gummy, and I thought I had given birth to a still-born tar baby. As a matter of fact, it stuck to the side of the toilet bowl and wouldn't let go, as if it were a foul, demonic creature with needle-sharp, stainless steel claws planted into the side of the porcelain bowl whose footprint was extremely hard to eradicate.

When you're done gagging and retching and judging me for my lack of discretion, just remember your body and colon could be more impacted and toxic then mine was at 26, depending on your age and especially if you have never fasted. My candid description is to hopefully invoke some degree of concern and action on your part.

I dedicate my miraculous health to my Lord and Savior, Provider, Protector, Designer and Creator and thank Him for leading me to



A

# CHAPTER 15 Fasting-Distilled Water-Exercise



This is my own personal unsolicited endorsement of LA Fitness and





#### http://www.wikihow.com/Become-Flexible

NOTE: There are hundreds of exercises and exercise techniques listed on *wikiHowso* I chose the most common recommended by my master trainer at LA Fitness. This chapter covers exercises for every body

#### Fasting in a Toxic Environment

Man's greatest fear is dying, especially prematurely as in an accident or disease. And the second greatest fear and dread is to become totally dependent upon others through old age and sickness, such as dementia or Alzheimer's.

Health experts are discovering that one of the greatest common denominators for most diseases and sickness is the quality and quantity of the water we drink. The greatest (though not widely known) discovery in terms of long-term health is the rejuvenating effects on man physically, mentally and spiritually through fasting using pure clean water purified through reverse osmosis or distillation.

Our body's greatest challenge and struggle is dealing with the toxic waste and debris in our environment. The body is continually trying to metabolize today's over-processed, de-mineralized foods laden with preservatives, artificial chemicals and excessive amounts of sugar and salt. A huge amount of energy is spent by the body in its struggle to process or metabolize this food. It must:

- 1. convert the calories into usable energy;
- 2. separate out toxins, chemicals, waste material and pollutants; and
- 3. try to eliminate all of these from the body.

Since I am continually sipping on distilled water, I still do not have any strong cravings for food. However, temptations are a whole different story. Alice went off her complete fast and is now eating salads and fruit. So I went with her to buy another bottle of Complete Multiple Liquid Vitamins and had to walk across the entire store to get to the health food section, passing all my favorite things, **Food**! That was not fun! I recommend you stay out of grocery stores while fasting; and did I mention the kitchen?

Today my trainer went over the program and talked about the various forms and types of exercise...

There are basically four different types of exercise and all four help the body in different ways. All four types are needed and each serves a different function of your body:

# The first thing I learned is that I don't need to be a bodybuilder to benefit from strength training.

- 1. The resistance exercises *increased the strength* of my bones, muscles, ligaments and tendons.
- 2. It produced muscle *definition and shape*.
- 3. It also increased my muscle mass—I discovered that most all adults lose about one-half pound of muscle per year after 25 years of age primarily due to less activity. When the body is at rest, muscle tissue is still burning a number of calories (the basal metabolic rate, or BMR). As my muscle mass increases, BMR increases, making it easier to maintain my optimal healthy body weight based on my height and age.
- 4. The quality of my life is greatly enhanced as my muscle strength increases. Daily life will be less strenuous, such as walking upstairs or long distances, hiking, biking or swimming.

#### **The Primary Program**

My trainer has developed a program that combines many exercises that build all the major muscle groups. No single group should be neglected since that could inevitably lead to strength imbalances and serious posture issues. My certified fitness professional is helping me develop a safe, effective, long term program. If you are considering an exercise program while fasting, you may also wish to consult with a certified fitness professional to learn safe technique before beginning a strength-training program.

As an example: "One set of eight to 12 repetitions, working the muscles to

the point of fatigue, is usually sufficient. Breathe normally throughout the exercise. Lower the resistance with a slow, controlled cadence throughout the full range of motion. Lifting the weight to a count of 2 and lowering it to a count of 3 or 4 is effective."

"When you are able to perform 12 repetitions of an exercise correctly (without cheating), increase the amount of resistance by 5 to 10% to continue making safe progress."

#### **Flexibility Exercises**

Holy cow, I never realized how out of shape I am! It was about all I could do to bend over and touch my knees, let alone my toes. Stretching exercises will help you become more flexible. However, doing them every day is essential. The most important thing to do is have a regular exercise routine every day. And if you don't know what you're doing, having some sort of supervision is crucial. You don't want to injure yourself unintentionally.

Keep your joints and muscles lubricated. I start all my workouts with low impact stretches and work up to a full stretch workout. Later, I wind down my routine with low-impact exercises.

Do stretches every day and work at it progressively. Remember, you can't become flexible overnight. Work at a rate you're comfortable with, and then slowly increase the difficulty (length of time, length of reach or both).

Make sure you have supervision. If you have no idea what you're doing, you'll injure yourself. Most martial arts schools and gym classes have extensive programs and teachers. Check them out. Eat a healthy diet.

Eat more green leafy vegetables, and drink plenty of distilled water, especially upon waking. Increase your protein and calcium. Reread the section on supplements and vitamins. The most important thing is to balance everything.

#### Shoulders

Stretch each arm as far across your chest while holding it as long as you can without feeling pain for 5 or 10 minutes every day. Lift small weights daily so that your muscles can become gradually accustomed to the repetitive motion and movement.

#### Back (Be Extremely Careful)

I myself, have two ruptured discs and a herniated disc in my back so I have to build up slowly the muscles that support the spine. This next exercise was especially helpful in accomplishing this.

#### Lie down on the floor.

- 1. Sit up straight, leaving your legs out in front of you. They don't have to be flat.
- 2. Turn your upper body slowly, and make absolutely sure that you stop turning before it starts to hurt. If you stretch improperly it is relatively easy to damage your spinal cord, so pay attention.
- **3.** When you stop turning, hold that position for 5 to 10 seconds. Turn the other direction and repeat.

**Try and do a back-bend/bridge.** Be very careful not to go too far! Once you are in the bridge, gently push through your shoulders, and try to put your legs together and straighten them. Don't go onto your toes!

- 1. You can also stand up with your arms hanging out to the side and then very slowly twist from side to side.
- 2. Another stretch is to lay flat on your tummy and then use your arms to put yourself in a snake or seal stretch.

#### Legs

- 1. Sit down as you did before for the back exercises, only this time make your legs as flat on the ground as possible, right beside each other.
- 2. Stretch down toward your knees. Do not bend your head to face
your knees, face forward.

- **3.** This will also stretch your neck muscles; if it hurts your neck to do this exercise, face your knees and stretch.
- 4. You can also sit down with your legs straight out and take your right leg and swing it over your left leg a few times. Do the same with your left leg.
- 5. Try doing the splits as well as possible, but carefully for about 4 minutes per day. If you are advanced and flat on the ground, take a sofa pillow and put one of your legs on it to give more of a stretch. Remember to be patient. (I should talk!) The key to being flexible is waiting calmly.

#### **Upper Thighs (Butt)**

**Squeeze both sides of your thighs together**. Hold for 5 minutes. (If this is too long, start with 2 minutes, and build up.)

#### Fingers

Hold one hand out in a fist .

- **1.** Slowly open up the fist.
- **2.** Stretch your fingers back as far as they can. Hold for a minute. (You can also try this against a wall.)
- **3.** Repeat with your other hand. This can help with carpal tunnel syndrome.

#### Ankles

- 1. First, sit with your legs straight out in front of you (as you did in the leg stretch) and twist your ankles in any shape or form (for example, the ABC's).
- 2. You can also sit with one leg in front of you and take the other ankle and rest it on your knee. Grab your foot and twist your ankle.

#### Wrists

- 1. Sit on your ankles, kneeling, and then put your hands out like you are reading a book.
- 2. Flip your hands onto the floor with fingers facing you, like "save the page."

**3.** After you do the stretch above, flip your hands in various ways (fingers facing outward or inward to the side).

#### **Positive & Negative Stretching**

Remember to include both the positive and negative motions when you stretch. Keep it symmetrical. If you are stretching your left, stretch out your right, too. If you are bending forward, bend backwards too.

#### Tips

- 1. Remember to begin with gentle, slow stretching. Warning: Starting with difficult and advanced stretches is dangerous and ill-advised for anyone.
- 2. One way to warm up would to be to do a decent amount of jumping jacks.
- **3.** Take a ballet class to get flexible, so a professional can train you.:-) Come on guys, you can do it!
- **4.** Be patient, if you think you're not getting any more flexible, don't quit. You'll see progress eventually, and it will be worth it.

#### What is cardiovascular exercise?

Cardiovascular exercise is aerobic exercise, and sometimes referred to as 'cardio'. Cardio exercise involves strengthening the large muscles like legs and arms and making your heart and lungs stronger. There are many health benefits derived from cardio, such as lowering your blood pressure, plus burning lots of calories. This is good for people like me who want to lose weight and build muscle at the same time.

**Aerobic means** "requiring air," where "air" usually means oxygen. During cardiovascular or aerobic exercise, oxygen gets delivered to the muscles. In order to give the heart an adequate workout, there needs to be a certain amount of intensity in your cardio. It is important to pay attention to your heart rate during the exercise to ensure you do not over-do it. Most treadmills and bikes at fitness centers utilize heart rate monitoring.

You can measure your heart rate manually by taking a pulse count with your fingers or by using a heart rate monitor. In measuring the heart rate, you are checking the heart beats per minute. A resting heart rate is the rate your heart beats per minute while you are resting. The maximum heart rate is the maximum amount of times your heart beats in a minute. You should always work within your 'target heart rate zone' which is a range of heart rate that is considered to be the best rate to assure your heart is getting a good workout. The target range should be between 50% and 85% of your maximum heart rate.

You can have a doctor determine your maximum heart rate or use the following formula to calculate a rough estimate.

For women: 226 minus your age equals your maximum heart rate

For men: 220 minus your age equals your maximum heart rate

For example, if you are a 32 year old woman: subtract 32 from 226226 - 32 = 194

Then take that number and multiply it by .5, to get your lower end of your target zone. Finally, multiply that same number by .85 to get the upper end of your zone. For example:  $194 \times .5 = 97$  and  $194 \times .85 = 164.9$ 

So, for a 32 year old woman an estimate of her maximum heart rate is 194. And her 'target heart rate zone' is between 97 and 164.9 heart-beats per minute.

#### **Co-ordination and Balance Exercises**

Balance and coordination skills are necessary for everyday tasks. Good balancing skills require control of many muscles to carry out activities without falling over. Coordination skills include eye-hand coordination, bilateral coordination and smooth, controlled movements of the body.



### Your Complete Guide to Ball Exercises

The Ball-Exercises.com website contains everything you

Ball exercises are grouped based on the main muscle group they mainly target and clicking on each will bring you to a page where you can review detailed instructions and animated illustrations.



**Fasting is beneficial for these conditions:** Although fasting is not recommended in every situation, (cancer of the liver is one instance where fasting is contraindicated), in many situations fasting is the only known solution. Fasting has been beneficial for arthritis, asthma, high blood

pressure, lupus, chronic fatigue, colitis, Crohn's disease, diverticulitis, spastic colon, irritable bowel, cases of paralysis, neuritis, neuralgia, neuroses, and mental illness such depression, as well as many others. Fasting will also break down tumors and for this reason, many have overcome cancer through fasting. Fasting decreases dependency on doctors and drugs.



"Ask your doctor if this drug is right for you" is the most common phrase in prime time commercials. Nasalrite may help you breathe better but it could thin your blood so don't cut yourself, and it could cause a stroke or depression, it could cause dizziness or impair your sight, ask your doctor if Nasalrite is right for you. Once you start taking a drug of any kind for any ailment, you become a lab rat for a drug company. One drug masks one problem and causes several more, requiring yet more drugs. Before my mother-in-law passed away, the doctors had her on 10 to 15 prescription drugs. For each drug they prescribed there seemed to be one or two more ailments surfaced requiring even more drugs. We just assume that medical science is going to fix every little ailment that comes along, by giving us a pill, a treatment or a surgery. We are so alienated from our bodies that we think that a doctor knows more about us than we do.

The reality is that doctors don't have the cures that we need. What traditional medicine offers is only the possibility to treat our symptoms, but not actually curing us or even rooting out the cause. When we take these kinds of treatments to suppress our symptoms rather than cause, which is the underlying reason we are sick, then in fact the illness continues to grow.

We will never be healthy until we take responsibility for our own health. We need to stop blaming someone else for making us sick, whether it is a corporation, a person, our immediate environment or a government. We must recognize instead that our sickness is a symptom telling us something inside needs to be addressed. For sure there are outside influences that we can't control, but there is much that we can control by taking responsibility for ourselves and working to change our habits. Drink more water and fast.

#### **Benefits of Fasting**

- Mental clarity is improved and brain fog is lifted;
- Rapid, safe weight loss is achieved without flabbiness;
- The nervous system is balanced;
- Energy level and sensory perception is increased;
- The longer the fast, the bigger increase in energy and vitality;
- You normally need less sleep;
- Organs are revitalized;
- Cellular biochemistry is harmonized;
- The skin becomes silky, soft, and sensitive;
- There is greater ease of movement;
- Breathing becomes fuller, freer and deeper;
- The digestive system is rejuvenated and becomes more effective;
- The peristaltic action of the intestines (the cause of a natural bowel movement) is stronger after fasting.

Fasting retrains your tasting sense back to more healthy food as acute sensitivity is restored. It can increase confidence in our ability to have control over our lives and our appetite, and that our body is a self-regulating and a self-healing organism capable of establishing balance when given the possibility to do so. Normal metabolic and cell oxygenation are restored. Detoxification – as soon as the body realizes that it's fasting, it will begin to eliminate those things that cause disease, such as fat cells, arterial cholesterol plaques, mucus, tumors, stored up worries and emotions.



Maximize your health and increase your lifespan – hydrate daily with plenty of distilled water, eat plenty of fresh fruits and vegetables, fast regularly and exercise daily. Share this newly found knowledge with others and may God richly bless you and yours... Douglas C. Hoover

# DistilledWaterAuthority.com Coming Soon...



## DistilledWaterSource.com