## Distilled Water and Longevity

of

ELMER ELLSWORTH CAREY, Chicago.

Written for SUGGESTION

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When a piece of wood is immersed for a period in certain mineral waters, the wood cells thru a chemical action similar to that observed in electro-plating, are replaced by molecules of minerals, and petrifaction ensues. In petrified wood, the form and markings of the original are distinctly seen. At rare intervals surgeons find a human kidney that has actually become petrified—a stone kidney -and sometimes in post mortem examinations veins are found which are brittle, and which crumble at the touch. In old age the various organs are partly petrified -ossified is the term used in the text But petrifaction is the proper books. term. The cells of the muscles, arteries, etc., are not replaced by osseous deposits, but by mineral matter.

What is the cause of old age, and how may it be prevented? Old age is not an inevitable condition; it is an accidental state caused by ignorance and wrong living. The daily press recently chronicled the case of a Russian peasant who had baptismal and marriage records to prove that he was 200 years old. The United States census report for 1900 gives the names of two persons over 150 years of age. I instance these cases to show that there is no reason why death should occur from old age, per se. If one person can live to be one hundred or two hundred years old, why not another? If the human race lived strictly under a rational hygienic dispensation, death would never occur from old age, under several hundred years.

Suggestion is now mainly responsible for keeping the limit of life at about eighty years. For thousands of years man has been taught that he would die at about the age of 70; consequently when in the neighborhood of this age, man begins to look for death-to expect death-to believe in death-and he is never disappointed. The mineral salt deposits in the body commence to manifest themselves between 40 and 50 years of age. These salts are derived mainly from ordinary drinking water, altho cereals contribute their share. The presence of an excess of lime retards the functions of all organs; all processes are hindered; the various bodily systems act slowly; this favors the additional deposits of more salts. The functions of the organs are still more restricted. We say the man is "aging rapidly." As the body becomes weaker the organs become weaker, and mineral deposits quickly accumulate. The victim is rapidly becoming petrified. All organs are clogged; the vital powers are lowered, and as the petrifaction proceeds, death approaches; finally the muscles of the heart become so dense that their elasticity is gone and death ends all. When one dies from "old age," he dies because his body is partially turned to stone. If we can keep the percentage of water in the body at 80 or 85, we will never die of old age. To maintain the proper proportion of aqueous elements in the system, no liquids but distilled water should be used for drinking or cooking; and furthermore, foods containing a high percentage of mineral salts, as cereals, should be eaten sparingly. When the ideal hygienic race conditions prevail, man will live on distilled water, nuts and fruits; and he will understand the art of mastication; he will breath pure air twenty-four hours out of the day; he will spend many hours daily in the sunshine; he will take enough exercise to keep the body supple, and his mind will be free from worry, care and anxiety; he will not expect death at any particular year or time, nor will he think about dying; children will not read the deadly suggestion about "three score and ten years," and they will be taught how to build and mould the body by mental processes; all suggestions will be for health, strength and vigor. Bulletins from the bedside will be abolished, and "drugs" will exist only in the dictionaries of the antiquarian.

The first step in the physical regeneration of the race is a crusade against ordinary or "raw" drinking water. When distilled water is universally used humanity will take a long step forward. It is the duty of the state to see that only perfect drinking water is used; we look after cesspools, drains, noxious odors, plumbing, adulterated food, etc., and the water supply is more important than all these. If distilled water was in every home the board of health would have to go out of business.

"But a German doctor stated that distilled water is injurious," remarks a reader. He did, but his statement is false. His remarks in substance are as follows: "By 'chemically pure water' we usually understand perfectly fresh, distilled water, whose behavior and properties are well understood. It withdraws the salts from the animal tissues and causes the latter to swell or inflate. Isolated living organic elements, cells, and all unicellular organisms are destroyed in distilled water—they die, since they become engorged therein. They lose the faculty, upon which life depends, of retaining their salts and other soluble cell constituents, and consequently these are allowed to diffuse throughout the water.

"Distilled water is, therefore, a dangerous protoplasmic poison. The same poisonous effects must occur whenever distilled water is drunk. The sense of taste is the first to protest against the use of this substance. A mouthful of distilled water, taken by inadvertence, will be spit out regularly. The water once in the stomach, the superficial stratum of epithelium experiences a powerful distension, the cells are leached by their salts, die, and are cast off. This local poisonous effect of distilled water makes itself known by a sensation of uneasiness, belching, etc., furnishing all the symptoms of a catarrh of the stomach on a small scale.

"The harmfulness of the process so much resorted to today, of washing out the stomach with distilled water, is acknowledged; and we find the physicians who formerly used that agent are now turning to the 'physiological solution of cooking salt,' or 'water with a little salt,' or the mineral waters recommended for the purpose. The poisonous nature of absolutely pure water would scarcely have been recognized and felt long since, were it not that its effects in their most marked form can seldom occur; for through a train of circum-

stances 'absolutely pure' water can rarely be found."

The attack on the daily use of distilled water by an alleged Dr. Koppe was inspired by the owners of mineral springs in Europe; and it has been stated that Dr. Koppe is a myth. The statements credited to him are a tissue of falsehoodsthere is not a word of truth in any of them. Distilled water has no deleterious action on living tissue; distilled water is not poisonous, but the only elixir of life that will be discovered. It is quite true that micro-organisms will die if placed in pure water; they die because there is no refuse This is one of the for them to feed on. strongest arguments in favor of distilled water. When all the fluids of the body are made up of distilled water there will be no fear of germs-a disease germ cannot live in a system that is 80 per cent aqua pura. The mythical doctor's statement that absolutely pure water can rarely be found is as false as the others. In every large city of the United States absolutely pure water is delivered to your door at prices varying from six to ten cents per gallon, while in thousands of homes are small stills which make an abundance of absolutely pure, aerated and appetizing water. All health specialists of the advanced and rational schools of naturetherapy today advocate the drinking of water, from two to three quarts daily; it is conceded that perfect health is impossible without an abundance of water. It does not need an argument to show that this water should be pure, and if an argument were needed the United States army and navy have supplied that argument beyond cavil.

The great, ever present danger in "raw" water is not germs—it is the mineral matter which is not needed in the

human body, as sufficient cell salts are furnished in a natural form by the solid food. The earthy material is simply refuse; it makes additional work for the excretory organs, and all of it cannot possibly be climinated. Hence, the gradual clogging of the system, which brings on a condition known as "old age."

Knowing that the daily use of distilled water in the army and navy has been attended by the most gratifying results, letters were addressed to the government medical departments asking for definite and authoritative statements as to the health giving qualities of absolutely pure Sailors have been under daily observation by medical officers for years; army officers have had ample opportunity to study the drinking water question at short range at home and in Cuba, China and the Philippines, and the result is that sufficient evidence has been collected to settle for all time the desirability of distilled water as a daily drink, and its value in preserving health.

One of the first labors of the medical department of the army in the Philippines was the erection of distilling plants in the city of Manila; from these plants distilled water was supplied to all the camps and garrisons in and around the city, and it is not an exaggeration to say that today every soldier in the Philippines is within reach of a barrel of chemically pure drinking water; and just as surely as he departs from this barrel in quenching thirst, just as surely does he invite disease and death.

While thousands of our soldiers have died in the tropics from cholera, dysentery, typhoid and various intestinal disorders, the sailors of the navy are practically free from zymotic disturbances. Why? Sailors drink pure water, and the only pure water is distilled water. The office of the chief surgeon of the reply in answer to the inquiry from Sugarmy very promptly sent the following GESTION:

Communications on official business should be addressed "To the Surgeon General, U. S. Army, Washington, D. C. Subject:

In reply refer to No......

WAR DEPARTMENT,

## Surgeon General's Office,

Washington, March 30, 1903.

Mr. Elmer Ellsworth Carey, #4020 Drexel Boulevard, Chicago, Illinois.

Sir:

In answer to your letter of March 28, 1903, I am directed by the Acting Surgeon General to state that existing orders in the Philippines require all drinking water used by United States Troops to be distilled, or at places where this cannot be done, to be boiled twenty minutes. It is not too much to say that this precaution has saved an enormous number of lives during the prevalence of cholera and has prevented many cases of typhoid fever, dysentery and intestinal parasites. Cases of cholera among troops in the Philippine Islands have been repeatedly traced to drinking impure water in violation of this order. No deleterious effect of any kind has been attributed to the daily use of distilled or boiled water.

Respectfully,

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Wallet Due Cow Major, Surgeon U. S. Army. From the bureau of medicine and sur- following clear cut and decisive letter: gery, navy department, was received the

Address Bureau of Medicine and Surgery, Navy Department, and refer to No.

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WASHINGTON. D. C.

April 4. 1903.

Mr. Elmer Ellsworth Carey, Editor, Suggestion Publishing Co., 4020 Drexel Boulevard, Chicago, Ill.

Sir:

Replying to your letter of the 28th ultimo, requesting an expression of opinion as to the value of distilled water in preserving health and preventing disease, as derived from the experience gained in its use in the Navy, I have to state that there can be no two opinions as to the protection distilled water affords to crews of vessels and to stations of the Navy against infection from such diseases as are water-borne. When only distilled water is used for drinking and other purposes diseases of this class, as for example, cholera and typhoid, are little feared. It is conclusively proven that a large number of diseases to which human beings are a prey are introduced into the economy by means of contaminated water used for drinking purposes. Distilled water, as prepared and stored for use in the Navy, is of course free from infectious agents, and its general use is a source of great comfort to the Medical Officers who have the maintenance of the health of the many men in their charge. When the water supply is under control, as on board vessels of war, little apprehension is felt of the introduction of cholera, typhoid, etc. The numerous animal parasites that prey upon mankind and that are known to be waterborne find little place in the medical statistics of the Navy.

In conclusion I would say that the general use of distilled water in the Navy is considered one of the principal factors in establishing the high standard of health that is maintained in the Navy of to-day.

Respectfully,

Acting Chief of Bureau.

And to show that the daily use of distilled water extending over a long period was beneficial, another letter was addressed to the bureau of medicine and surgery, navy department, to ascertain how long this "dangerous protoplasmic poison" has been in use, and some may be sur-

prised to learn that our Jack Tars have been drinking the deadly (?) product for twenty years or longer. Regarding the length of time distilled water has been in use in the navy, the following letter speaks for itself:

Elmer Ellsworth Carey, Esq.,
Assistant Editor and Manager, "Suggestion,"
4020 Drexel Boulevard, Chicago, Ill.

Washington, D. C., April 9, 1903.

Sir:

Replying to your letter of the 6th instant, I have to state that there is no record to determine the exact date upon which distilled water began to be used in the Naval Service. It is probable that, to a greater or lesser degree, it has been in use since the introduction of steam as a motive power in the Navy. My experience covers a period of twenty years, and in that time distilled water has been employed with a growing field of usefulness.

Respectfully,
J. F. URIE,
Acting Chief of Bureau.

According to the Journal of the American Mcdical Association, the remarkable increase in the demand for distilled water has called forth an article by one Dr. Koppe, which has been traced to having been written in the interests of the Carlsbad Springs of Europe; and a wide circulation has been given to it in this country by certain mineral springs and filter companies. Scientific and medical journals have only noticed it to contradict it. Two short quotations will give the tenor of their replies. The first is from Homer Wakefield, M. D., of Bloomington, Ill., who is the author of several works on water. He says:

Arthur R. Reynolds, M. D., commissioner of health, Chicago, uses the following language:

"The inference that water deprived by distillation of 'organic elements, cells and all unicellular organisms' is unwholesome is preposterous. We are not expected to extract organic nourishment from the water we drink or from the bacteria therein This remarkable article decontained. duces that distilled water is a 'dangerous protoplasmic poison,' because of the absence of inorganic elements. It should be added here that rain water as is falls from the clouds is aerated distilled water; it is the most healthful known. Rain is nature's production of water free from impurities. Any amount of it can be taken into the system without fear of detrimental results. Physicians know that it is the best solvent of inorganic secretions in the body, and engineers know it is the best boiler compound, following the use of hard water and the consequent formation of incrustations. Extreme purity is a virtue, not a fault, of water. Beware of an author who contends that contaminated water is conducive to health."

The other is from Dr. J. H. Kellogg, the physician-in-Chief of the Battle Creek Sanitarium, who, in replying to the Koppe article, in *Good Health Magazine* for June, 1899, says of distilled water:

"It is free from germs, free from injurious salts, from lime and other substances with which they are found in combination, if not always of the same uniform quality. It is a pity that such an unscientific and misleading statement should be allowed to appear before the public."

Apropos to the above remarks, the following from *Health Culture* is interesting reading:

"Any chemist will confirm the statement that the mineral salts in water are inorganic in structure, and that no inorganic substances can undergo the process of digestion and assimilation in the human system. The soil in which our grains and vegetables grow is also inorganic in form, but the wheat and potato which the soil produce are organized food materials. One might eat a peck of the richest loam three times a day and vet starve his bones, muscles and tissues for want of nourishment. The mineral salts in water are nothing more nor less than the disorganized soil. They not only fail to supply any part of the body with nourishment, but cause serious trouble."

"Distilled water is the acme of purity. Nothing can be purer than that which is absolutely pure. For medicinal purposes, the highest authorities are agreed that pure water is preferable to the so-called medicinal spring waters. The latter all contain more or less impurities in the form of earthy salts or organic matter, which is not the case with distilled water. For flushing the kidneys, stimulating the sluggish liver, eliminating waste

matter from the system; indeed for all affections in which medical waters are believed to be efficacious, pure distilled water furnishes the long-sought desideratum."—Dr. R. N. Tooker, Chicago.

Dr. C. W. DeLacy Evans, surgeon to St. Savor's Hospital, London, says: "The combinations of lime held in solution in the water we drink, when taken into the stomach are soon distributed throughout the system and deposited in all the tissues exactly as they are precipitated and form incrustations on the bottoms of kettles in which water is boiled. The result is general induration, partial and often, in some organs and tissues, complete ossification. The bones become brittle, the joints and muscles stiff and rheumatic; gravel and stones form in the bladder, the kidneys, liver, heart, nerves and brain become indurated and sluggish in their action, all the bodily functions are impaired, the nerves weaken, the mind loses its vigor, the memory fails, senility and death creep

"Used as a drink distilled water is absorbed directly into the blood, the solvent properties of which it increases to such an extent that it will keep in solution salts already existing in the blood, prevent their undue deposit in various organs and structures, favor their elimination by the different excreta, and tend to remove those earthy compounds which have already accumulated in the body.

"There is no doubt as to the high value of distilled water used freely as a retarder of the ossifying conditions which appear to constitute the conditions of old age."

Health Commissioner Reynolds of Chicago authorizes the following statement:

The public should be instructed frequently of the dangers that lurk in the use of impure water. They should be taught

that most of the lakes and streams in the country are polluted already, and as the population multiplies the danger of further pollution will greatly increase. They should be taught that water that comes from wells and springs is not necessarily pure, for it may flow from a soil that is polluted. They should be taught that filtration nor boiling does not remove all the poisons, while neither removes the lime or any of the salts it may contain.

It may safely be taught that the only absolute pure water is that purified by distillation. Instruct the public how distillation can readily and cheaply be done. It furnishes a fruitful field for the genius that will devise a small distilling apparatus for the use of every family.

It would be safe to teach that the generous use of pure water both within and without the body has never yet done any harm; that the functional ailments that afflict the great host of mankind, are in a great part due to the fact of the imperfect elimination of waste matter, and that generous libations of pure water is a most potent agent to flush them from the body, through the skin, the lungs, the kidneys and the bowels. The diseases caused by impure water are numerous and fatal."

DR. THOMAS J. HUDSON is the author of a new book, "The Law of Mental Medicine." This book will be ready in a few weeks; advance orders have exhausted the first edition. Suggestion readers can send orders to this office; price, \$1.20. We have reserved a number of copies, and will promptly fill orders. Send us \$2.00 for two subscriptions to Suggestion and we will mail a copy of the book post paid.

Invalids often think they need more rest, when all they need is less medicine.