

💧 the drinking water debate - a common sense view

"Water water everywhere but not a drop to drink." The mariner's plaintive cry stems from the universally accepted knowledge that a heavily mineralised water like seawater cannot be processed by our metabolism. At the other extreme uncontaminated rainwater is associated with quenching one's thirst. Both these rather clear images come from millenia of actual experience of generations of human beings.

Today the drinking water debate has become rather confused. This is partly due to the increasing emphasis on specialist sciences with their narrow scope. It is also partly due to the various commercial pressures that influence our lives today.

The focus of current scientific inquiry is more on what should not be in our drinking water rather than what constitutes an ideal drinking water. Aluminium has been linked with Alzheimer's syndrome, lead with brain damage especially in children, pesticides with cancers of various sorts, etc. Even fluoride, once thought to be an example of what should be in drinking water, is now thought to be linked with cancer. As our ability to measure things in greater detail increases the so-called safe limits of various substances in drinking water decreases. It does not take great scientific acumen to observe that the trend is towards there being nothing in our drinking water apart from water!

An implicit assumption in this debate is that spring and mineral waters, or water that is drawn directly from the ground, is somehow better than tap water for our metabolism. This assumption is constantly reinforced by the various advertising campaigns run by bottled water vendors. Insofar that tap water has been shown to have greater than 'safe' levels of harmful substances this assumption has been given an air of scientific respectability. However, as the labels indicate, there is a wide variation in the contents of the various groundwaters. The obvious question that which of these substances is good for our metabolism and in what concentration seems to be strangely ignored by the consumer. In the absence of scientific evidence it is assumed that all of these substances in their various concentrations are beneficial to our metabolism. This in turn should imply that 'safe' tap water is equally good for us. However logical consistency is quite easily abandoned by the consumer!

What is indisputably accepted is that we need minerals for our metabolism to work. Nutritionists provide us with guidelines as to our recommended daily consumption of these minerals. Simple arithmetic shows us that on average that the quantity of minerals that we can hope to gain from drinking water is of the order of magnitude of 5-10% of these recommended daily allowances. The remainder must come from food. The common sense conclusion that stares us in the face is that drinking water is not an important source for our mineral intake.

Our understanding of the biochemical reactions that constitute our metabolism is limited. However what we do know indicates that our ability to metabolise minerals in organic compounds is considerably greater than minerals in inorganic compounds. The minerals in drinking water are largely in inorganic form. So not only is drinking water a poor source of minerals for us, our ability to metabolise what minerals it does provide is limited! Plant metabolisms deal more effectively with inorganic minerals and convert them to an organic structure that we can then metabolise.

Experience shows that next to air water is the most critical input that our metabolism requires. Far from being a provider of minerals, the critical function that water performs in our metabolism is to provide a medium for biochemical reactions to occur in and to flush away the excreta generated by these reactions. So the

important question is what kind of water provides the best kind of medium for these biochemical reactions. The most desirable quality in a medium is for it to be as pure as possible so as to interfere as little as possible with the reactions that are going on in it. Again we seem to be led to the conclusion that the best drinking water should have nothing but water in it.

Nature provides us with a continuous supply of pure water via the hydrological cycle. Heat energy from the sun turns water into clouds leaving behind any impurities. The clouds then condense back into pure water in the form of rain. Unfortunately industrial pollution contaminates this rain even as it falls. Consequently we have to look to technology to duplicate Nature's hydrological cycle to produce pure water in a controlled environment. This is achieved by distillation equipment.

Producing distilled water requires a lot of energy and in the past has been an expensive business. Therefore its use has been restricted to medical/laboratory applications. Other cheaper technologies have been developed to purify water where purity is not so important. However better technology has now made it possible for the consumer to buy distilled water at the same sort of price that he/she pays for branded groundwaters.

Thousands of people have been drinking 'technologically' produced distilled water for quite some time now. Their experience supports the view that our metabolism will function better if its processes are conducted in a pure medium. A large proportion of modern man's illnesses are connected with an excess of toxic substances in his metabolism. Distilled water helps flush these toxins out of the system. Case histories indicate that drinking distilled water has benefitted patients suffering from kidney stones, gall stones, arthritis, etc. It has also brought vitality into people with sluggish metabolisms where the level of toxicity is not yet high enough to generate specific ailments.

Some consumers worry about distilled water not only flushing away the toxins from the body but also essential nutrients. A look at the biochemical reactions of our metabolism shows very intricate self regulating mechanisms that keep the level of essential nutrients within the narrow tolerances required for good health. A pure medium for these mechanisms will enhance their performance, not reduce them. If this worry had a sound basis then one would expect the population of distilled water drinkers to be wasting away! Experience shows that the reverse is true and that the population of distilled water drinkers is growing. After all common sense does say that the proof of the pudding is in the eating....

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AUGUST 1994