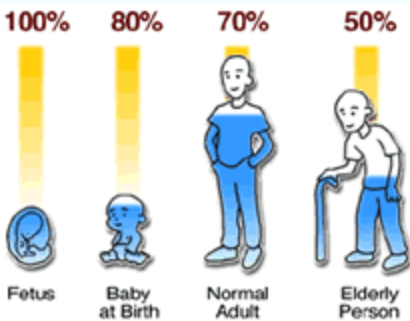


Water

Fluid fluctuations affect blood volume and intracellular hydration levels. This can be life threatening. When the amount of fluid within various cellular compartments is relatively constant, there is an exchange of solutes and water between compartments to maintain unique compositions. Individuals with more body fat have proportionately less total body water and are more susceptible to fluid imbalances that cause dehydration.

Percent of Water in the Human Body



Total body water percentage decreases with age, resulting in inadequate cellular hydration. Most critical is the decrease in the ratio of intracellular hydration. The normal ratio is 60% intracellular, 40% extracellular. The reason for change in this ratio is due in part to an increase in fat along with a decrease in muscle, and a decreased ability of the body to regulate sodium and water balance. With age, kidney function becomes less efficient in producing urine, and responses for conserving sodium weaken.

The body must continuously be in a proper state of hydration. Because 2.5 liters of water is lost each day through normal bodily functions, this must be replaced.

There are two major issues that emphasize the need to keep

the body adequately hydrated with water of the best quality, content, and structure so it can maintain homeostasis. First, the water we put in our body must be able to prevent toxins and chemical substances from accumulating and creating destructive influences on cells. Water must bring all minerals and nutrients required for cell metabolism, and remove any substances that can damage the cell. It must also be able to protect cell walls from damage and invasion. Second, since water is involved in every function of the body, it must act as a conductor of electrochemical activity, such as neurotransmission, by moving water from one nerve cell to another smoothly and effectively.

Movement of water in the body between cells (extracellular fluid) is caused by osmosis. This is created by magnetic forces in the body, which keep the movement in balance. As water flows, changes in pressure create movement across the cell membranes. Any changes in pressure will allow proteins, minerals and other nutrients being carried by the blood to escape into spaces between vessels and deprive the cells of their vital needs to sustain life. When water in the blood is contaminated with chemicals, it enters the cells and changes their structure, which in turn could lead to changes in DNA (pleomorphism). This is the start of the disease process, which is very similar to the aging process.

Is This Just a Coincidence?

There is a direct connection between the *quality* and *content* of the water in our body and how the body responds to disease and aging.

Brain	83% Water
Kidney	82% Water
Heart	79% Water
Lungs	80% Water
Bones	22% Water
and the Blood	90% Water