

10 Reasons to Avoid Acidosis

1. Corrodes Arteries, Veins and Heart Tissues

Like acid eating into marble, **acidosis erodes and eats into cell wall membranes of the heart, arteries and veins, weakening cardiovascular structures and inter connective tissues.** All living tissue is sensitive to its chemical environment, and most particularly whether its **pH is too acid or alkaline**, the muscle cells of the cardiovascular system are no different. The cardiovascular system may be thought of as one large working "**system of tubular muscles**" designed to carry blood and nutrients to every living tissue in the body and is directly affected by blood plasma pH. The heart, of course, is the muscular pump at the center of everything, which drives blood through the arteries, veins and capillary beds (**a series of complex interconnected tubular tunnels of flexible smooth muscle**) and is designed to help regulate the pressure and flow of circulation.

Everything in the cardiovascular system works normally when the **pH of blood plasma is slightly alkaline, having a pH of 7.35 to 7.41.** But when the heart plasma habitually becomes a relatively more **acid pH<7.35**, it acts as a chemical irritant which slowly begins to attach and eat away at the smooth muscle tissues of the inner walls of arteries and veins, as well as the heart itself. Again, like acid slowly eating its way into marble, **this erosion process begins to weaken the structural composition of the heart, arterial and venous walls, causing lesions and microscopic tearing throughout its framework.** Simultaneously, an acid pH also destabilizes free ionic balances within circulation, increasing the populations of positively charged particles (cations, an ion with a positive charge of electricity: H⁺, Ca²⁺) which directly interferes with the muscle contractility (contraction and relaxation) of the heart and arteries. **Acid pH changes of the circulation** which become habitual and the chaotic ionic confusion they cause, **are now thought to be those factors which critically precipitate the development of arteriosclerosis** (hardening of the arteries), **an aneurysm** (widening and ballooning of artery walls), **arrhythmias** (abnormal rhythms of the heart including tachycardia), **myocardial infarction** (heart attacks) **and strokes** (a cardiovascular accident). Moreover, the structural weakening of the cardiovascularity **creates irregularities of blood pressure**, which further exacerbates those problems.

2. Accelerates Free-Radical Damage and Premature Aging

Acidosis causes partial lipid breakdown and destructive oxidative cascades **accelerating Free Radical Damage of cell walls and intracellular membrane structures, which then unravel, killing cells in the process.** Acidosis is thus thought to be the **first step toward premature aging**, accelerating oxidative cascades of cell wall destruction, **creating wrinkling, age spots, dysfunctioning hormonal systems, interfering with eyesight, memory, and a host of other age-related phenomena.**

"Wastes which are not properly eliminated from the body actually poison the cells they are inappropriately stored in..."

3. Causes Weight Gain, Diabetes and Obesity

An **acid pH** has considerable influence over the majority of **weight problems, including Diabetes and Obesity**. It seems that a habitually acid pH can directly cause immediate weight gain. Here's what happens when a system is too acid, a condition known as **Insulin Sensitivity** is produced which forces too much insulin to be produced, and the body is flooded with insulin so that it won't waste any calories, **it diligently converts every calorie it can into fat**. Could it be that an acid pH, from an imbalanced diet, produces a condition which stimulates the predetermined genetic response to starvation and famine as well, and thereafter requires that the body increasingly hoard every calorie consumed and store it as fat? Yes, indeed, it seems that it does!

It is thought that an **acid pH immediately signals the powerful genetic response to an impending famine**, directly interpreting with the all important and very sensitive, Insulin-Glucagon Axis. This makes the body produce more insulin than usual, and in turn, produce more fat and store it. In general, the more insulin is available to the body, the higher the probability that fat will be produced and stored, rather than used and burned as energy.

Thus, and acid pH will likely alert the genetic response to famine, **directing more insulin to be produced and store more fat than usual**. Conversely, a healthy, slightly alkaline pH, will more likely yield normal fat burning metabolic activity, making no demands on the body to overly produce insulin and make fat, allowing fat-weight to be burned and naturally lost. And too, with a healthy pH, there's less likely to be any yo-yo effect, or rebounding from a diet with additional weight gain. As long as nutritional stores are maintained, a healthy, slightly alkaling pH allows fat to burned normally for energy, rather than hoarded and stored under the mistaken biochemical belief of an impending famine.

Moreover, acidosis disrupts the integrity of insulin producing pancreatic beta cells. Again, when the body is too acid, too much insulin will be produced. Acidosis is thought to be a very dangerous condition because beta cells are especially sensitive to pH, and find it very difficult to function and survive when conditions are acidic.

With increased pressure to produce insulin under the worst conditions, beta cells lose phase with one another (**cellular communication is thwarted and the Immune System begins to over-respond**) and stress within the cells increases, making it difficult for them to perform adequately, and further, survive. In a very real sense, they simply burn out! Acidosis is thus thought an important yet often underestimated precursor to **Diabetes Mellitus**. Interestingly, before the advent of synthetic insulin, diabetes was treated historically by buffering the system with base or alkaline causing powders.

4. Causes Cholesterol Plaque to Form

LDL-Cholesterol is laid down at an accelerated rate within an acid chemical environment of the cardiovascular System, inappropriately lining the vascular network, and clogging up the works! Specifically, an **acid pH initiates electrostatic potential**, damaging arterial walls, which in turn initiates a PDGF-dependent immune response, causing cholesterol oxidation and the formation of plaque with heavy metals. As research has shown, simply reducing the amount of cholesterol in the diet cannot negate this problem. **The amount of cholesterol in the diet has not been found to be a major factor in cholesterol plaque formation**. Rather, pH status appears to be the factor more directly involved, binding cholesterol with heavy metals and other cellular debris.

5. Disrupts Blood Pressure

With acidosis, (pH<7.20) arteries become dilated. Yet, severe lowering of blood pH also causes persistent venous vasoconstriction (a disease in the caliber of blood vessels). When this happens, peripheral blood is shifted more centrally: the more acidic the patient, the greater the fractional redistribution of blood to the central vessels. **This central redistribution of blood adds to the heart's workload when its contractability is compromised.** Interestingly, increased venous pressure occurs in congestive heart failure. This may obviously have potentially lethal cardiovascular effects, making it difficult to control high blood pressure/hypertension, various arrhythmias and the advent of heart attack.

6. Disrupts Critical Lipid and Fatty Acid Metabolism

Acidosis disrupts general lipid and fatty acid metabolism within the body. Fatty acids are intimately involved in nerve and brain function. **When fatty acid metabolism is disturbed, neurological problems may arise including MS, MD and others,** as well as problems with hormonal balance within the endocrine system.

7. Inhibits Metabolism of Stored Energy Reserves

An acid pH inhibits efficient cellular and body metabolism. Acidosis causes chemical ionic disturbances, interfering with cellular communications and functions. Acidosis reduces plus Ca binding of plasma proteins, reducing the effectiveness of this intracellular signal. **Acidosis also leads to a disease of calcium cations** (positive Ca) entry through positive Ca channels, **resulting in reduction of cardiac contractibility, or the ability of the heart to pump efficiently and rhythmically.**

Also, positive Ca and positive H regulate the activity of intracellular proteins and are driven out of cells, because of the "Sodium-Potassium pump" (Na-K pump), which provides a strong incentive for sodium to be driven into cells. There are some 10 times the amount of positive Na in extracellular fluids than in cells. The Sodium-Potassium pump regulates the amount of sodium and potassium each cell in the body stores, and uses up as much as 25% of our caloric input per day to run. Positive Ca exchanges the plus Na, being forced out of cells, but naturally, the electrochemical gradient for positive Ca favors both positive H and positive Ca entry into cells, as there is less calcium and positive H in cells than in the extracellular fluids.

Therefore, **in acid solutions, less plus Na will be present, slowing down the processing and induction of nutritional items going into cells.** Thus, increasing positive H and positive Ca buildup within the plasma, while making it more available to electrostatically bind with LDL-Cholesterol. With free positive Ca populations and channels disrupted, **(calcium may become inordinately leached from bone mass, causing osteoporosis.) An acid pH drains us of energy and disallows stored energy reserves to be used.**

8. Inhibits Cellular Regeneration & DNA-RNA Synthesis

For DNA-RNA synthesis and healthy cell proliferation to occur, cell pH must not be acidic. However, **cancerous cells grow well in acidic mediums, therefore an acid pH actually accelerates and increases the possibility of cellular mutations (Cancer).**

CANCEROUS CELLS DO NOT CONTAIN HYDROGEN ATOMS. WHEN HEALTHY CELLS HAVE PLENTY OF HYDROGEN THEY CANNOT BECOME CANCEROUS. IF WE CAN GET HYDROGEN INTO ANY UNHEALTHY CELLS, THEY CAN HEAL.

9. Inhibits Oxygen Getting to the Tissue

Acidosis decreases the oxygen affinity of hemoglobin in the blood. All biochemical functions are severely comprised if oxygen supplies are decreased to living tissue. Less oxygen to the heart and brain cells means eventual death. **An acid pH decreases the amount of oxygen that can be delivered to cells, making normally healthy cells unhealthy and eventually die.**

10. Inhibits Life Giving Electrolyte Activity

Life-essential functions, like electrolyte Potassium (K plus) and Sodium (Na plus) channels, **are inactivated by acidosis**. This has far reaching effects cardiovascularly, since without extended sufficient electrolyte management, heart attacks are likely to occur. Without appropriate electrolyte management, **our heart literally stops beating**. Inhibition of electrolyte activity also effects the way we feel and behave, and is intimately involved in the energy levels we experience, because of the nature of the Na-K Pump and cellular metabolism.

An Acid pH is the Seed-Bed of Degenerative Diseases

- * Cardiovascular Disease: Arteriosclerosis, Heart Attacks, Stroke, High Cholesterol, High Blood Pressure**
- * All Forms of Cancer**
- * Diabetes, Insulin Sensitivity, Obesity**
- *Neurological Diseases, MS, MD, ALS and Parkinson's Disease**
- *Liver & Kidney Disease**
- *Senility, Dementia, Alzheimer's**
- *Immune Deficiencies**
- *Osteoporosis, Osteoarthritis & Tooth Loss**
- *Hormonal Imbalances**
- *Premature Aging, Male Prostate Problems**

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The Specific Harm Caused By An Acid pH

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