

The Health Benefits of Water Fasting

Articles

By Stephen Harrod Buhner

Written 2003

Copyright © 2003 Stephen Harrod Buhner

Fasting is an exceptionally ancient, and powerful, approach to healing many common disease conditions. It allows the body to rest, detoxify, and to heal. During fasting the body moves into the same kind of detoxification cycle that it normally enters during sleep. It uses its energy during a fast, not for digesting food, but for cleansing the body of accumulated toxins and healing any parts of it that are ill. As a fast progresses the body consumes everything that it can that is not essential to bodily functioning. This includes bacteria, viruses, fibroid tumors, waste products in the blood, any build up around the joints, and stored fat. The historical record indicates that human beings are evolutionarily designed to fast. It is an incredibly safe approach to healing and the body knows how to do it very well.

The Physiological Changes of Fasting

Many of the most dramatic changes that occur in the body during fasting take place on the first three days of the fast. These occur as the body switches from one fuel source to another. Normally, the primary form of energy the body uses for energy is glucose, a type of sugar. Most of this is extracted or converted from the food we eat. Throughout the day, the liver stores excess sugar in a special form called glycogen that it can call on as energy levels fall between meals. There is enough of this sugar source for 8-12 hours of energy and usually, it is completely exhausted within the first 24 hours of fasting. (However, once the body shifts over to ketosis or fat as fuel, this new fuel is used to also restore the body's glycogen reserves.)

Once the liver's stores of glycogen are gone, the body begins to shift over to what is called ketosis or ketone production - the use of fatty acids as fuel instead of glucose. This shift generally begins on the second day of fasting and completed by the third. In this interim period there is no glucose available and energy from fat conversion is insufficient but the body still needs fuel. So it accesses glucose from two sources. It first converts glycerol, available in the body's fat stores, to glucose but this is still insufficient. So it makes the rest that it needs from catabolizing, or breaking down, the amino acids in muscle tissue, using them in the liver for gluconeogenesis, or the making of glucose.

Between 60 and 84 grams of protein are used on this second day, 2-3 ounces of muscle tissue. By the third day ketone production is sufficient to provide nearly all the energy the body needs and the body's protein begins to be strongly conserved. The body still needs a tiny amount of glucose for some functions, however, so a very small amount of protein, 18-24 grams, is still catabolized to supply it - from 1/2 to 1 ounce of muscle tissue per day. Over a 30 day water fast a person generally loses a maximum of 1-2 pounds of muscle mass. This conservation of the body's protein is an evolutionary development that exists to protect muscle tissue and vital organs from damage during periods of insufficient food availability.

From the third day onward the rate of the breakdown of fatty acids from adipose or fat tissue continues to increase, hitting its peak on the tenth day. This seven day period, after the body has shifted completely over to ketosis, is where the maximum breakdown of fat tissue occurs. As part of protein conservation, the body also begins seeking out all non-body-protein sources of fuel: nonessential cellular masses such as fibroid tumors and degenerative tissues, bacteria, viruses, or any other compounds in the body that can be used for fuel. This is part of the reason that fasting produces the kind of health effects it does. Also, during this period of heightened ketosis the body is in a similar state as the one that occurs during sleep - a rest and detoxification cycle. It begins to focus on the removal of toxins from the body and the healing and regeneration of damaged tissues and organs.

Fasting and Healing

Fasting has been found to help a number of disease conditions, often permanently. There have been a number of intriguing clinical trials and studies treating numerous disease conditions with fasting. Here are some of those findings.

* In one clinical trial of hypertension and fasting, 174 people with hypertension were prefasted for 2-3 days by eating only fruits and vegetables. They then participated in a 10-11 day water only fast, followed by a 6-7 day post fast in which they ate only a low-fat, low-sodium vegan diet. Initial blood pressure in the participants was either in excess of 140 millimeters of mercury (mm HG) systolic or 90 diastolic or both. Ninety percent of the participants achieved blood pressure less than 140/90 by the end of the trial. The higher their initial blood pressure the more their readings dropped. The average drop for all participants was 37/13. Those with stage 3 hypertension (over 180/110) had an average reduction of 60/17. All those taking blood pressure medication prior to fasting were able to discontinue it. Fasting has been shown in a number of trials like this one to be one of the most effective methods for lowering blood pressure and normalizing

cardiovascular function. Blood pressure tends to remain low in all those using fasting for cardiovascular disease once fasting is completed.

* Fasting is exceptionally beneficial in chronic cardiovascular disease and congestive heart failure, reducing triglycerides, atheromas, total cholesterol, and increasing HDL levels.

* Fasting has been found effective in the treatment of type II diabetes, often reversing the condition permanently.

* Because of its long term effects on metabolism, fat stores in the body, leptin, and disease conditions associated with obesity, fasting has been found to be one of the most effective treatments for obesity.

* A number of studies have found that fasting is beneficial in epilepsy, reducing the length, number, and severity of seizures. Fasting is especially effective for helping alleviate or cure childhood epilepsy.

* In a 1988 trial of 88 people with acute pancreatitis, fasting was found better than any other medical intervention. Neither nasogastric suction or cimetidine were found to produce as beneficial effects as those from fasting. Symptoms were relieved irrespective of the etiology of the disease.

* A number of studies have found that fasting is effective for treating both osteoarthritis and rheumatoid arthritis. Fasting induces significant antiinflammatory actions in the body and researchers found decreased ESR, arthralgia, pain, stiffness, and need for medication.

* Autoimmune diseases such as lupus, rosacea, chronic urticaria, and acute glomerulonephritis have all responded well to fasting.

* Severe toxic contamination has been shown to be significantly helped with fasting. Clinical trials have found that people poisoned with PCB experienced "dramatic" relief after 7-10 day fasts.

* Poor immune function improves during fasting. Studies have found that there is increased macrophage activity, increased cell-mediated immunity, decreased complement factors, decreased antigen-antibody complexes, increased immunoglobulin levels, increased neutrophil bactericidal activity, depressed lymphocyte

blastogenesis, heightened monocyte killing and bactericidal function, and enhanced natural killer cell activity.

* Other diseases that have responded to fasting are: psychosomatic disease, neurogenic bladder, psoriasis, eczema, thrombophlebitis, varicose ulcers, fibromyalgia, neurocirculatory disease, irritable bowel syndrome, inflammatory bowel disease, bronchial asthma, lumbago, depression, neurosis, schizophrenia, duodenal ulcers, uterine fibroids, intestinal parasites, gout, allergies, hay fever, hives, multiple sclerosis, and insomnia.

* The historically lengthy claim that fasting increases life span is beginning to garner some support in research literature. Regularly repeated 4-day fasting has been found to increase the life span in normal and immunocompromised mice.

* Although the use of fasting in the treatment of cancer is controversial, there is some emerging data SHOWING that fasting helps prevent cancer. Intermittent fasting (2 days weekly) has shown an inhibitory effect on the development of liver cancer in rats.

People Who Should Not Fast

Although most people can fast, there are a few who, because of special conditions, should not.

* People who are extremely emaciated or in a state of starvation

* Those who are anorexic or bulimic

* Pregnant, diabetic women

* Nursing mothers

* Those who have severe anemia

* Those with an extreme fear of fasting

* Those with porphyria. Porphyria refers to a genetic metabolic defect that affects the body's ability to manage porphyrins. Porphyrins are a group of compounds that combine with iron to produce blood, are involved in the control of electron transport systems, and, within mitochondria, are intricately involved in the production, accumulation, and utilization of energy. Porphyria can cause malfunctions in the liver, bone marrow, and red blood cells and produces a wide range of symptoms including seizures.

* People with a rare, genetic, fatty acid deficiency which prevents THE INITIATION OF KETOSIS. This is a deficiency involving the enzyme acetyl-CoA, a mitochondrial fatty acid oxidation enzyme, that is essential to ketosis. Those with this deficiency who do fast can experience severe side effects, including hepatic steatosis, myocardial lipid

accumulation, and severe hypoglycemia.

A Note on Pregnancy, Children, and Fasting

Although many fasting texts suggest that pregnant women not fast, those that have been found to suffer side effects were also diabetic. Ketosis during pregnancy can seriously harm the fetus if the mother is diabetic. Fasting during pregnancy if a woman is not diabetic has not been found harmful to either mother or fetus. However, fasts for nondiabetic pregnant women should be no longer than 2-3 weeks duration and be monitored by a health care provider. Children, even infants, can also fast without complications if the fasts are of relatively short duration. For infants 2-3 days, children 1-2 weeks depending on age. These fasts should also be monitored by a health care provider unless of short duration. The need for infants and young children to fast is rare.

Those Who Should Fast Under Health Care Supervision

While most people can fast safely there are some that should do so only under the supervision of a health professional experienced in fasting for healing.

- * Those with serious disease conditions
- * Pregnant women
- * Infants and young children
- * Type I diabetics
- * Those with insufficient kidney function
- * Those who are extremely afraid of fasting yet wish to do so anyway
- * People with a high toxic contamination level of DDT. DDT is stored by the body in a highly concentrated form in fat tissue. Fasting can release huge levels of DDT into the bloodstream as the fat stores are released. This can be quite dangerous.

[Back to top](#)