

Medical Benefits of Fasting

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Abstract: The purpose of fasting is basically therapeutic, and in this sense it not only meets the requirements of most patients, but is perhaps the most effective measure ever to be employed. Clearly the extraordinary value of fasting has not been recognized by the professions of healing as a whole.

Keywords: Fasting, Medical Benefit.

INTRODUCTION

Accounted for fasting interest large segments of people in various parts of the world, past and present, where he considered the ancient way to prevent infection during epidemics and the way the body gets rid him, especially the intestines of leftovers stagnant which prevent the transmission of disease by food.

And when it appeared the principles of religions in the world little by little, their leaders and priests took the fasting condition for worship and a means to get closer to the gods. In ancient Egypt and Mesopotamia and the rest of the centers of ancient civilization was required to enroll in the service of temples to fast seven full days, do not eat them but a few doses of the water and the duration of fasting, sometimes extending to 42 days. The Persians are training their children to fast since childhood in order to grow up strong and endure difficult tasks. The Greeks and the imposition of fasting in their beliefs.

Abstinence from food may mean missing one meal, or it may mean going without food until death results from starvation. Missing one meal produces no organic or chemical changes in the body; in starvation, many changes occur. It is necessary to know that different changes occur at different stages of the period of abstinence and that the changes at different stages are of different, even opposite, character. For example, in women and female animals, atrophy of the mammary glands is seen in starvation, but in fasting, there is only a loss of fat. In the early stages of abstinence in young guinea pigs, the pancreas, like the other internal organs, is in general more resistant to loss of weight. Pancreatic losses in the early stages of abstinence are relatively slight, while in advanced stages, that is, in starvation, pancreatic loss (atrophy) is extreme, being, as a rule, relatively greater than that of the entire body. Many examples of similar differences will be given throughout the pages of this book.

There is naturally and necessarily a loss of weight when man or animal ceases to eat and if food is abstained from long enough, death results from too great loss. In discussing the differences between *fasting* and *starving* we made use of Margulies' three stages of the inanition period--from the omission of the first meal until its ending in death. In general, in both birds and mammals, the loss of weight is greatest during the first third of the inanition period, least in the second third, and intermediate in the last third, although this final acceleration of loss is variable or even absent.

In all animals, from worms to man, the various organs and tissues of the body differ very greatly in their rates of loss while fasting and starving. In general, it may be said that most of the soft tissues of the body lose weight during a fast, but they lose at varying rates. Instead of a uniform wasting of the body's resources, biologically important organs are sustained at the expense of less important ones.

Structural changes during fasting are largely those that result from loss of weight. At death from starvation the amount of weight lost may amount to fifty to sixty per cent. No such losses are registered in a fast. As before pointed out, individual organs or tissues, show a very unequal emaciation, some is living at the expense of others.

It will be interesting to note some of the losses and changes which occur during the fast. In death by starvation the following losses have been observed by some investigators:

Fat 91% Spleen 63%
Muscle 30% Blood 17%
Liver 56% Nerves ???

Yeo's physiology gives the estimated losses that occur in death from starvation as:--

Fat 97% Spleen 63%
Muscle 30% Blood 17%
Liver 56% Nerve Centers 000

According to Chossat, the losses sustained by the various tissues in starvation are as follows:-

Fat 93% Nerves 2%
Muscles 43% Pancreas 64%
Liver 52% Spleen 70%
Blood 75%

Chossat's table was made from animal experimentation, and agrees very well with the observations of others, except in the loss of blood. Others have given this as less than twenty per cent. The *International Encyclopedia*, under "fasting," gives a table showing the losses sustained by an animal while fasting for thirteen days. This table gives the loss of blood for this time as 17% and the loss to the brain and nerves as none.

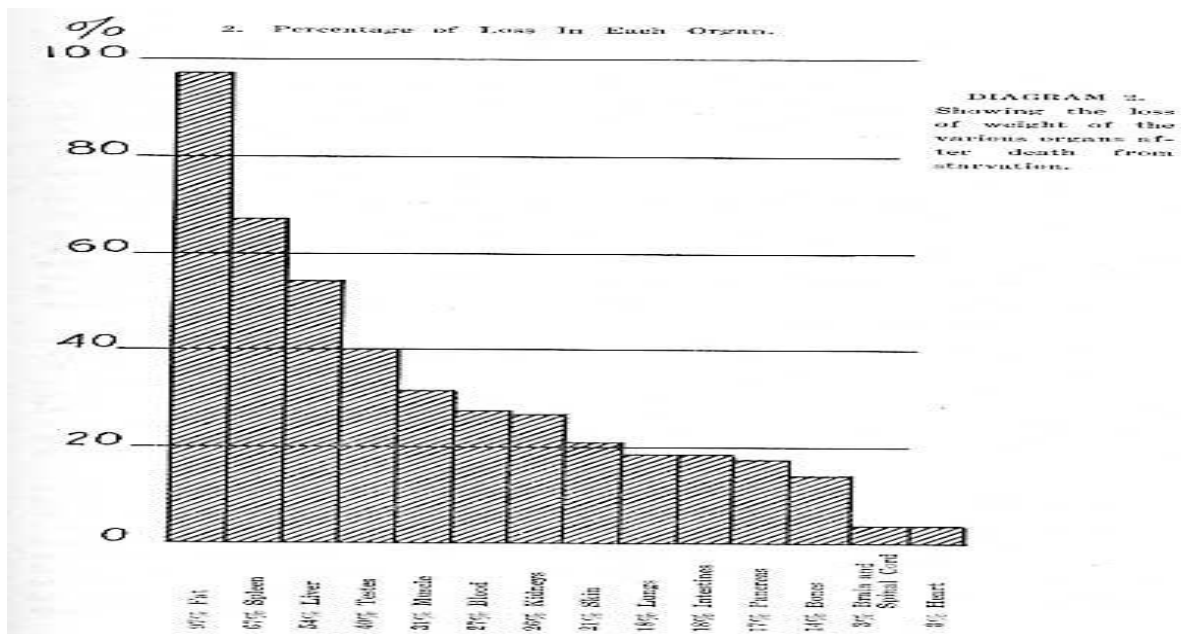
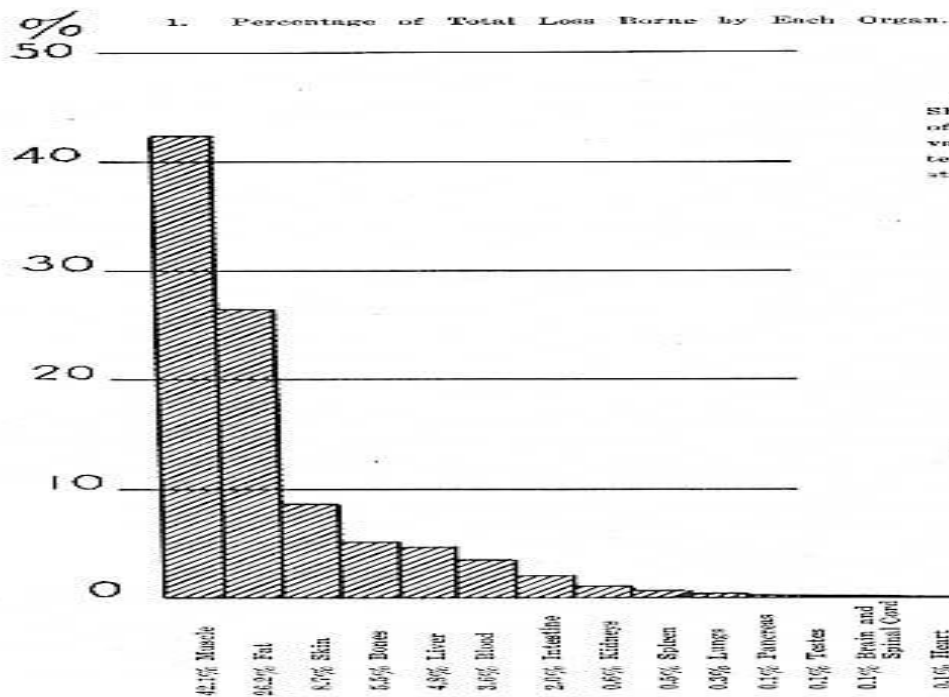
It will be observed that during the fast the tissues do not all waste at an equal rate; those that are not essential are utilized most rapidly, those least essential less rapidly and those most essential not at all at first and only slowly at the last. Nature always favors the most vital organs. The fat disappears first, and then the other tissues in the inverse order of their usefulness. The essential tissues obtain their nourishment from the less essential, by enzyme action, a process which has been termed *autolysis*.

From these tables it will be seen that the brain and nervous system continue intact (retain their structural and functional integrity) until the last and retain the inherent power to maintain their nutrition unimpaired, although every other tissue has wasted beyond repair; and that the blood even in the most extreme cases, does not show extraordinary depletion.

Such physiological facts would seem to argue that nerve and blood supply throughout the body are virtually normal during a fast; and that the human body is, in reality, a veritable organization of assailable food elements dominated by a self-maintaining intelligence which is capable of preserving relative structural integrity and physiologic functional balance even when all food is withheld for considerable intervals.

Only in a very special sense does the body "start eating itself" when one begins to fast. It never consumes its tissues indiscriminately, but, true to its rule of always favoring its most vital organs, it uses up the least useful tissues first. Selective action is exercised from the beginning and the most rigid economy is exercised in appropriating its food reserves in sustaining the heart, lungs, brain, nerves and other vital organs. Even the respiratory muscles are more carefully guarded than the other muscles of the skeleton.

The accompanying two diagrams, Nos. 1 and 2 are after Voit. Diagram 1 shows the percentage of the total loss of the body borne by each organ in death by starvation, while diagram 2 shows the percentage of loss in each organ under the same circumstances. These tables also include the proportion which the loss in each bears to the weight of a similar animal killed in good condition.



The careful student will bear in mind that most of the actual tissue losses shown by these tables occurred in the last third of the inanition period--the period of starvation proper--and do not occur during the fasting period.

While table 1 shows that the musculature of the body supplies the greatest loss of weight, the actual loss to the muscles only reaches 21 per cent of the total muscular substance (chiefly the superficial muscles), while, though the actual proportion of weight lost is less, 97 per cent of the fat present is used up. The other organs which lose much of their weight are the spleen with 67 per cent; the liver with 54 per cent, and the testes with 40 per cent. The central nervous tissue and the heart supply only 0.1 per cent of the total loss, and 3 per cent of their actual substance.

A closer and more detailed view of the losses to the more important organs and tissues will help us to better understand the subjects we are here dealing with.

The difference between the Islamic fasting and starvation (fasting medical).

Definition of Islamic religious fasting: it is to refrain from eating, drinking and sexual intercourse from dawn to sunset with the intention.

Medical definition of fasting (starvation) is the partial or total abstinence from eating food and drinks together, or eating food only for a period of time longer or shorter ⁽⁴⁾.

He has received mixing and unambiguous between fasting and Islamic religious and starvation, making the recipients of modern science and especially doctors do not differentiate between them, and they fall errors starvation fasting Muslim Fasting Medical refrain person's hunger only without water for a period of time longer or shorter, and the idea is the fact that the ability of energy stored in the body's supply of human life and the movement period ranging from one month to three months.

Benefits of starvation (fasting medical):

I registered beneficial effects of starving (fasting Medical) occur on the basic functions of the body, which benefited doctors, building sea for her medical clinics that deal with disorder body and some illnesses chronic fasting, has said the author of Therapeutics fasting (e. M. ^{Shelton}) ⁽⁵⁾ other which can be summarized in the following points:

1. Provide comfort and functional (physiological) to all members of the body.
2. Put up toxins and waste out of the body.
3. Renewal of tissue cells.

He says the world specialist is Upton Sinclair: The biggest thing gives him Fasting is a new level of health; because the membership is renewed whole improves its functions numerous and active and gives the body the best chance to get rid of toxins and waste accumulated between inbuilt at the heart of its fabric and Organic ⁽⁶⁾.

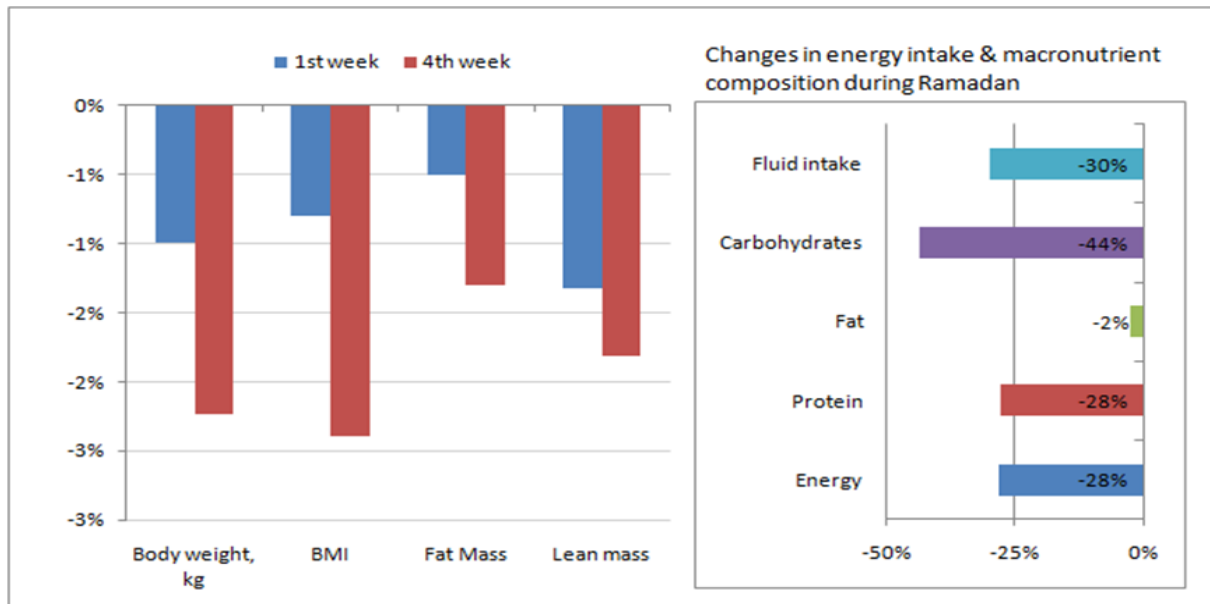
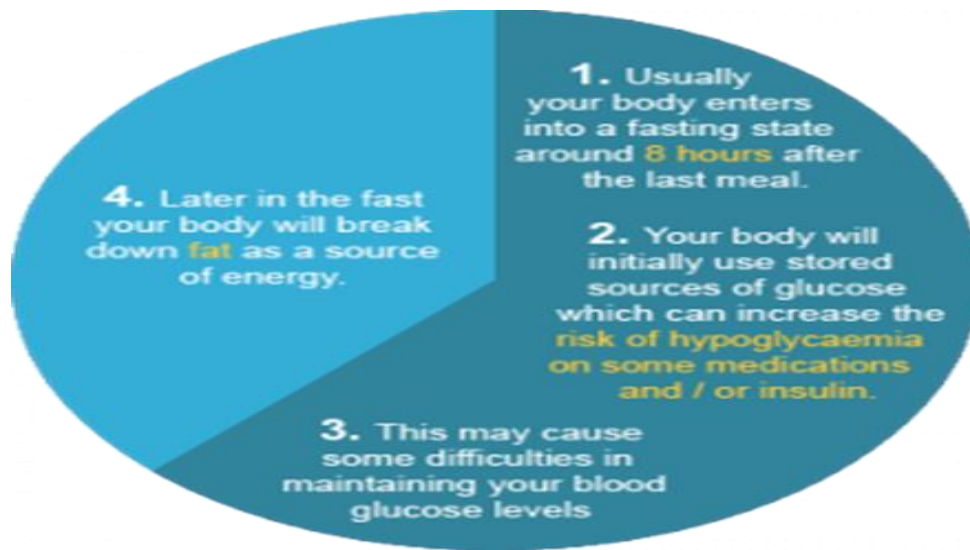
I've pointed out experiments by Dr. (Carlson, Conde) in the Department of Physiology at the University of Chicago that fasting for a week is enough to renew a temporary tissue within the human body at the age of forty to restore these tissues to the case of functional (physiological) are similar to what they are at the age of seven ten years ⁽⁷⁾.

Indeed, experiments conducted on humans were conducted on dogs in the laboratory at the University of Chicago Bio and published their findings in the Journal of Metabolic Research has shown that habitually for 30-40 days gives an increase in the amount of metabolic 5-6%, and if we know that the shortage in the degree of metabolic is a manifestation of aging we know how that fasting increases the rate of metabolism in the body and put the accumulated toxins and absorb the dead tissues of the weak tissue and replace it with a new young how it brings him so young and vital ⁽⁸⁾.

Fasting is good for its own sake, and to achieve the benefits of the believer and the spiritual pleasure and happiness in this world and the hereafter. Meaning if you know { } any virtue of fasting and its benefits.

These benefits and the benefits realized each taxpayer healthy residents, and who fast without discomfort excess of the people of licenses who can eat my meal breakfast and suhoor like healthy , and there is no scientific research - far as I know - was conducted on fasting healthy, in normal circumstances, however, and said one of two things: either a lack of the effect of fasting on the physiology and body composition in any amount is dangerous to the body or cause harm to achieving most of the diseases. Or it shows a clear interest in some of these jobs, or improve some components of the body and physiology in aging, or during pregnancy, or breast-feeding or while traveling, and even research proved that fasting helps in curing some diseases.

And thus remain in the fast good for most patients, travelers, and pieties of fasting, and be achieving them of the benefits and benefits a bit too much, which does not teach. Fasting for patients and travelers and pieties is the first and most useful, unless weaken self-bear hardship, or hit it or infects the body damage Investigator: In the first the license, and in the second should be breakfast, and said some of the people in this interpretation and audience of scholars. Has demonstrated these benefits and settled he had witnessed in our time.



Changes in body composition (left) as a consequence of 4 weeks of Ramadan fasting at the given (self-selected) macronutrient amounts (right) in rugby players (data calculated based on Bouhlel. 2008).

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