



INTERMEDIATE FEASTING

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Abstract

Food it's an enormous part of our lives, it influences the way we look, defines our culture, influences our mood and usually it's on our mind a big part of the day.

Intermediate feasting comes as a myth buster for the recommended 5 meals a day popular through fitness and health enthusiasts and stands as a viable replacement for the classic and majority accepted three meals a day eating habit. Sustained by a series of studies intermediate feasting brings many health benefits with quite a small effort, all resuming to eating in an 8 hours interval and then to feast for the remaining 16 hours of the day.

Keywords: Diets, Nutrition, Healty life style, logevity, feasting, wheight loss.

JEL classification: I10; I12; I18; I19

Introduction

Food it's an important part of our life, influencing our mood, our body, culture and for a big part of the day it's what we think about.

The whole idea of civilization it's self comes down to food, from the way cities were built to technology development all gravitated to food.

But since when did it get to complicated to eat? Majority of people just want to look good, feel good and live a long life. Many would argue that by now we as a civilization must have an pretty good idea of what a correct diet and what we should eat every day, but on the contrary, we have countless opinions on what the correct diet should be.

History of food and diets

According to the archaeological evidence, Homo Sapiens appeared about 200,000 years ago, but agriculture did not exist for about 190,000 years, and the fruits and vegetables we have today were cultivated, grafted, combined to our taste in the past 800-1000 years. (<https://lifeforbusypeople.com/2016/07/23/longevity-why-i-eat-once-a-day>)

As seen in the pictures bellow the fruits and vegetables that we today consider all natural and healthy, we're no way near to what we today grow and buy for consumption.

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Fig. 1 Banana 700 years ago



Fig. 2 Painting of a watermelon 1672



Fig. 3 Carrots in the year 1100

Idea of an ideal diet

The first diet was proposed in 1724 by George Cheyne, and more than 50,000 books on this subject can be found today. (Www.wikipedia.com - History of Diet)

What is strange is that in most of these books we are described how to eat like our ancestors, without anyone pointing to the fact that everything we now think of vegetables and fruits certainly did not exist at the beginning as Homosapiens.

We can easily infer that the environment would have chosen our diet rather than we, and our only choices were to eat what was available or die.

The idea that our body has to adapt to a certain range of macronutrients available in the environment is not new, being well known for its "Paleo diet" (summing up as a lack of carbohydrate diet) but very few have also highlighted the adaptation to the frequency of food availability .

Why the 3-5 meal plan?

Abihail Carroll suggests in the book "Three Squares: The Invention of the American Meal" that eating three meals a day was not born as a biological necessity, but rather invented by culture. The first accounts appeared in the Middle Ages when people took a light meal before going to work, a copious meal in the middle of the day, followed by another light snack at the end of the day. Then with the emergence of European colonists in America, they found a native people eating when they felt the need instead of eating at a particular hour. So the Europeans have defined the times you have to eat as a sign of civilization, imposing very quickly in the colonies, briefly the paradigm of three meals per day is not based on our biological needs. (Three Squares: The Invention of the American Meal – Abihail Carroll – pg. 15 – 23)

The methabolism of gluucose and the absotion process

There is a misconception that it is necessary to have a consistent blood glucose level to survive so it would be biologically justified 3 meals per day. However, constant consumption of carbohydrates to maintain blood glucose is not



only useless, but can be a vicious and harmful cycle for the body.

After carbohydrates are consumed - Bread, Pasta, Potatoes, Candy and others, Glucose enters the bloodstream and insulin is secret to properly distribute glucose. By means of an insulin receptor, glucose enters the cells and an enzyme chain acts on it to produce energy in the form of adenosine triphosphate (ATP).

This process produces a residual product called pyruvate, which is transported by mitochondria or the "energetic plant of living matter". The basic function of mitochondria is to create energy for cellular activity in addition to the aerobic respiration process. In this process, glucose is broken by cells in the cytoplasm to form a pyruvic acid that is transported into the mitochondria. In a series of reactions, in which part is called the citric acid cycle or the Krebs cycle, the pyruvic acid reacts with water to produce carbon dioxide (CO₂) and ten hydrogen atoms. (www.scrib.com – Mitochondria)

A residual product called citrate is produced in the mitochondria, and when enough stacks create an enzyme called PhosphoFructoKinase that forms a blockage in the enzyme chain so that excess glucose does not damage the cell.

This process, however, can be done at a specific frequency and to avoid that blood glucose remains in the blood, it is stored in the liver 70 grams, and in the muscle 200 grams.

The body does not want the cells to be loaded with glucose, this is a harmful inflammatory situation called glycosis, where glucose binds to proteins and inhibits their functions. Thus, the body secretes insulin to handle glucose, this makes insulin receptors in cells becoming insulin resistant everywhere, except for fat cells (body fat).

The problem arises when energy levels begin to fall and you can not enter the energy reserves of fat cells precisely because the hormone that can do this process is LIPAZA (a glycoprotein that in the presence of bile salts and colipase transforms Fatty acids in fatty acids and glycerol) is inhibited by insulin.

Thus, through a carbohydrate-rich diet, we enter a vicious circle that prevents us from accessing fatty energy stores because of the hunger that has occurred with the disappearance of glycogen stores in the liver and muscle.

The solution

Theoretically and practically, if we do not eat, the body begins to work with ketones. Ketones bodies are fatty acid liver products to produce energy when you have exhausted glycogen stocks from the liver and muscle (which lasts between 10 and 12 hours depending on activity level and body composition) (www.portal-spiritual.eu , Ketoses)

However, this process has been encountered since the earliest times of mankind through religious posts and beyond.



Intermediate feasting

The intermediate fasting is a strategy of organizing daily meals to speed up fat metabolism and lose weight while maintaining muscle mass. Incorrectly seen as a "diet," the intermediate feast does not aim at reducing calorie intake and does not aim to change what you eat, but the hours at which meals are served. (www.dieta.romedic.ro, - feasting)

With the intermediate fasting you do not eat for 16 hours a day, which gives your body time to exhaust the glycogen stores and start burning fats, and to take advantage of the benefits discussed above.

This breaks down the myth of the five meals a day, popular among fitness practitioners, and fights the "classic" food style with 3 meals a day, with a series of studies demonstrating the many benefits of this diet for health.

Benefits

However, intermittent fasting as a nutritional strategy is not a new technique, as the method has been recommended in the management of diseases such as obesity, diabetes, or epilepsy since 1900. Studies at Cornell University in the 1930s on the effects of caloric restriction in rats have shown that subjects Subject to these restrictions on a daily basis, live longer and are at a lower risk of developing different conditions compared to normal fed subjects.

Mattson has launched the idea that intermittent fasting reduces the risk of degenerative diseases of the nervous system, protecting the brain from the action of toxins that induce the same type of cellular damage that occurs as the aging progresses. The same researcher has shown the positive effects of intermittent fasting in the prevention of damage to the nervous tissue as a result of a stroke, in alleviating motor deficit in an animal model of Parkinson's disease, and slowing the cognitive decline in animal models of Alzheimer's dementia. (<https://lifeforbusypeople.com/2016/07/23/longevity-why-i-eat-once-a-day/>)

Other beneficial effects of the intermittent fasting include: increased insulin sensitivity, helping to stabilize blood sugar and reduce the risk of diabetes, weight loss and reducing body fat, reduce oxidative stress and prevent cellular damage, increase resistance to stress, and Slows the process of cellular aging, reduces "bad" cholesterol and triglycerides, increases HCG (growth hormone), reduces breast cancer risk, lowers the risk of various inflammatory processes and reduces free radical damage, regulates tension Normalizes sensitivity to leptin and gherlin, a hormone called "hunger".

Strategies for intermediate feasting

There are two major methods of intermittent application:

- Daily fast, which involves giving up breakfast or dinner and concentrating all meals in the so-called 6-8 hour window
- Occasionally, which can be either giving up a meal a day at random, several times a week in the full job (nothing to eat), 1-2 times a week



In periods of "starvation", you can drink low calorie beverages - water, teas or unsweetened coffee, and in the 6-8 hours window, consume the amount of recommended daily calories.

Conclusions

In conclusion, we can say that the advantage of the intermittent station is that it does not involve any caloric restrictions, just the reorganization of the meals. Creating a 16-hour restricted barrier window seems to have a number of benefits that are strangely unknown to most people.

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