



Benefits of Intermittent Fasting: A Review

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ABSTRACT:

Intermittent fasting also known as 'IF' is a weight loss approach that has been widely popular since 2012. In this article, we will see what is intermittent fasting, its methods and the benefits of intermittent fasting. It has been very clear that 'when' you eat is just important as 'what' you eat. Intermittent fasting is said to be a method to lose weight but it might also benefit your heart, mind and overall health. IF is now a known alternative that has fasting cycles without any restrictions on eating period. IF has fasting cycles which promotes more flexibility and enhances commitment to the fasting. There are two variants of Intermittent fasting one is Intermittent Energy Restriction (IER) and the other is Time Restricted Feeding (TRF). Intermittent fasting also has been helpful in improvement in glucose homeostasis, lipid profiles and anti-inflammatory effects. This article is about overall intermittent fasting, its methods and benefits.

Keywords: Intermittent fasting, weight loss, diet, caloric restriction, obesity, health, calorie, balanced.

1. INTRODUCTION:

Intermittent fasting is an eating plan where you alternate between eating and not eating for a certain period of time. There is no specific time mention, but you have to at least fast for 12 hours. Many studies have informed that intermittent fasting helps to improve dietary adherence. Currently most of the world population are already obese. Obesity has become a public risk worldwide as it associates to metabolic dysregulation such as insulin resistance, hypertension, dyslipidemia and atherosclerosis. Caloric restriction (CR) means reducing average daily calorie intake below what is typical or habitual, without malnutrition or deprivation of essential nutrition. It is known that a prolonged CR helps in reducing body weight and extends life expectancy. CR in the people facing obesity improves cardiovascular risk factors, insulin, sensitivity and mitochondrial function. Intermittent fasting has emerged as alternative for prolonged CR with similar benefits as weight loss and chronic illness control. Fasting for a long period of time has been a common practice from ancient times. It was said that it helps to heal the body. Fasting has a root in religion where it is believed that it helps deep in your connection to faith. The well-known example of such fasting is during the holy month of Ramadan. During Ramadan 'Roza' are followed where fasting is encouraged from dawn to dusk.

2. METHODS OF IF:

There are various different methods to do intermittent fasting which involves dividing the day or week into two periods feeding and fasting. The most popular methods are:

2.1] The 16/8 method:

The 16/8 method is fasting for 16 hours and consuming for 8 hours a day. This method is followed by either eliminating breakfast or dinner. A basic time table is to start eating around 10 AM and stop eating at around 6 PM. This fast helps in improving heart health and regulate weight. This cycle can be repeated as per your convenience like just once or twice a week or every day. The 16/8 method is also believed to improve blood sugar control and enhance longevity. This method is simple to follow and provide noticeable results with minimum disruption to your diet. The 16/8 method is considered to be less restrictive and flexible.

2.2] Eat – stop - eat:

This is the method in which you eat nothing from dinner of the day to the dinner of next day which is for 24 hours. This has to be followed once or twice a week. For remaining 5 to 6 days you are free to eat but it is recommended to make food choices that are balanced and nutritious. This method does not restrict certain foods. The only rule of this method is not eating for straight 24 hours one or two days per week.

2.3] 5:2 diet:

The 5:2 diet is also known as the fast diet. It is called 5:2 diet because five days of a week or normal eating days while the remaining two days have

restricted calorie intake about 500 to 600 per day. As this diet does not restrict which food to eat but it is time specific when to eat. It is more dependent on one's lifestyle. It is important to know that eating normally doesn't mean you can eat anything. You are asked to avoid junk food and have nutritious food.

2.4] Alternate day fasting:

Alternate fasting day is a method in which you can eat as much as you need on one day and fast for the next day. The day of fasting is restricted as you can only have liquid that too in calorie limit that is 500. You can have calorie free beverages like water, unsweetened coffee and tea. Studies claim that ADF is effective at reducing harmful belly fat. Research has proved that this diet helps in weight management, regulate insulin, blood, sugar and inflammation in the body.

3. HEALTH BENEFITS OF INTERMITTENT FASTING:

A study shows that when you consistently practise intermittent fasting, it may have various benefit. Experts know the fasting improves metabolism and lowers blood sugar and benefits a wide range of health issues.

Banish brain fog that is forcefully getting energy from stored fat instead of sugar. There is increase in the BDNF hormone due to fasting. Intermittent fasting helps the growth of new nerve cells and it can also protect against Alzheimer's disease. Intermittent fasting decreases the risk of diabetes as it controls blood sugar and reduces body's resistance to insulin. In a diabetic state, the plasma concentration of glucose and insulin is reduced by intermittent fasting and elevates adiponectin levels. The effect of intermittent fasting and glucose homeostasis is different in non-diabetic and non-obese subjects. Overall, intermittent fasting has been beneficial in the diabetic state. However, there are risk of hypoglycaemia, malnutrition of proteins and vitamins and also dehydration. In an animal study, intermittent fasting, improve glucose, homeostasis by preserving pancreatic cell mass. It can also lower blood sugar by 3% to 6% and injuring level 20% to 31% which protect against type 2 diabetes. (Cho, Y .*et.al*). The intermittent fasting helps in losing the harmful fat around the abdomen that causes disease and also visceral fat. It can help you lose weight and belly fat without the need to actively cut calories. The food we eat is broken down by enzymes in our gut and end up as molecule in our blood stream. You lose weight as you let your insulin level go down the scenario of intermittent fasting is to allow insulin level to go so down that you burn of the fat.

When you go without food for a while, your body starts making adjustments to keep going. For example at first, your blood sugar drops, and you might feel a little tired or irritable. Then your body taps into stored energy, burning through glucose and eventually switching to fat for fuel. If you go even longer, hunger fades, but your body keeps working hard to protect your muscles and keep your brain sharp. Its like your body has a built – in survival plan, doing everything it can to keep you moving, thinking and functioning. The three types of intermittent fasting (Alternate day fasting, 5:2 Diet, and TRE) averagely reduce systolic and distolic blood pressure. Time restricted feeding has been linked to weight loss, total cholesterol level, glucose level and shows improved insulin sensitivity. The one-meal-a-day method has been shown to lower fasting glucose levels while improving both LDL and HDL cholesterol. It also triggers beneficial changes in various genes and molecules linked to longevity and disease prevention. One major factor in aging and many chronic diseases is oxidative stress. This occurs when unstable molecules called free radicals react with essential proteins and DNA causing damage. Intermittent fasting can help reduce oxidative damage and inflammation in the body. It also supports heart health, which is specially important since heart disease is the leading cause of death worldwide. Intermittent fasting helps to improve several risk factor for heart diseases, including blood sugar level, blood pressure, blood triglycerides, total LDL cholesterol and inflammatory markers. It may also help prevent cancer. Cancer involves uncontrolled growth of cells. The intermittent fasting has shown to have several beneficial effects on metabolism that may lead to reduce risk of cancer. There are also some evidence that intermittent fasting may reduce the side-effect of chemotherapy in some cases. Intermittent fasting improves various metabolic features which are important for brain health. Intermittent fasting helps in reducing oxidative, stress, inflammation, blood, sugar level, insulin resistance. This fasting has important benefits for brain health, including increasing growth of new neurons and protecting your brain from damage. Alzheimer's disease is the world's most common neuro degenerative disease. There is currently no cure for this disease so preventing it from developing in the first place is critical. A review concluded that intermittent fasting me delayed onset of this disease or reduce is severity. the most exciting application of intermittent fasting may be its potential to extend life span. in a research on rodents showed that intermittent fasting extends lifespan in a similar way to continuous calorie restriction.

4. CONCLUSION:

Today intermittent fasting has emerged as an alternative dietary to calorie restriction which has equivalent benefits to lose weight, improve glucose and homeostasis and anti-inflammatory effects. So basically avoiding sugar and refined grains will help for a better health. We consuming fruits, vegetables, beans, lentils, etc will be a part of healthy diet, which will let body burn fat and helps to lose weight. Avoid eating at night as Time is also important factor to be noticed. A proper modified schedule will help for a better intermittent fasting plan. Intermittent fasting plays an important role in weight loss, reduce the risk of diabetes also reduces oxidative, stress and inflammation. It is also important for heart health and to prevent cancer and it has benefits for your brain. even a single fasting interval can reduce Basal concentration and hence a proper, intermittent fasting, will give much more health benefits to you.

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