

Intermittent Fasting and Its Effects on Athletic Performance

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Editorial

Intermittent fasting (IFast) has been around for much of human history, and ancient cultures have discussed its health benefits. However, there has recently been a resurgence of public interest in IFast. Given the importance of nutrition in maximising athletic success, the effects of IFast on athletes are a source of concern. The majority of studies on performance and fasting focus on athletes who observe Ramadan.

Intermittent fasting (IFast) is the practise of not eating for a period of time during the day and then consuming calories as required during the eating hours. For much of human history, the concept of IFast and its potential benefits has existed in various forms, especially in the context of religion. Weight loss, blood pressure reductions, and improvements in metabolic disease risk markers have all been identified as IFast benefits.

The word "intermittent fasting" refers to calorie restriction at specific times of the day (time-restricted eating) as well as partial or full caloric restriction for several days of the week (alternate day fasting or whole day fasting) (8). The 16/8 diet entails fasting for 16 hours and then eating as much as you like for the remaining 8 hours. Time-restricted eating is another

choice. Fasting for 20 hours and eating ad libitum for four hours is recommended by the protocols. The 5:2 diets are an alternate-day fasting regimen in which one consumes no calories on one day and consumes food and liquids ad libitum on the other. Fasting regimens ranging from 16/8 to 5:2, such as 18/6 and every other day fasting are also available. Many religions emphasise fasting, with Muslims fasting during Ramadan, a month-long time during which no food or liquid is eaten during daylight hours. Clinicians have gained a greater understanding of IFast and sports thanks to studies on Ramadan.

The effects of fasting on the body have been studied in a number of research and reviews (8, 10, 11). The post absorptive period of fasting lasts around 12 to 18 hours and starts about 3 to 8 hours after the last meal (depending on the composition and quantity of the previous meal). The blood glucose level is regulated during this period by glycogenolysis in the liver. Whole-body lipolysis and fat oxidation increase to keep up with the body's metabolic rate (which tends to remain constant during fasting). As a result, the blood contains more free fatty acids, which serve as a source of fuel for muscles. IFast combined with a reduction in energy intake and body weight could result in a loss of lean body mass and power, and thus, potentially, a loss of resistance training capacity.

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