

The effect of FARTLEK training during fasting times on weight loss

تأثير تدريبات الفارتلك خلال أوقات الصيام في انقاص الوزن

DERRADJI Abbes¹, FEGHOULI Samir², GUERROUMI ELhoucine³

¹ University of bouira, Email address. a.derradji@univ-bouira.dz

² Université of chlef. Email address. s.feghouli@univ-chlef.dz

³ Université of bouira. Email address. e.guerroumi@univ-bouira.dz

Received: 20/06/2024

Accepted: 02/07/2024

Published: 18/08/2024

Abstract:

Our research aims to investigate the impact of using Fartlek training on weight loss during fasting times for individuals suffering from obesity. The researcher employed an experimental method on a sample consisting of 36 male participants aged between 30 and 35 years without any chronic illnesses. They were subjected to a training program involving Fartlek exercises before the month of Ramadan with sufficient duration, followed by the same training program during fasting times in the month of Ramadan.

Several conclusions were reached, most notably the significant differences favoring the post-test in both phases, while the results were more effective in weight loss and calorie burning during fasting periods.

Therefore, the researcher recommends individuals suffering from obesity and seeking weight loss to engage in regulated physical exercises, especially long-distance running with low to moderate intensities, along with high-intensity interval training (Fartlek), due to its role in weight reduction.

Keywords:. Fartlek training, fasting, weight loss.

ملخص:

يهدف بحثنا هذا إلى التعرف على تأثير استخدام تدريبات الفارتلك في انقاص الوزن خلال أوقات الصيام لدى

الأشخاص الذين يعانون من السمنة، أمكن التوصل إلى عدة استنتاجات أهمها وجود فروق معنوية لصالح الاختبار

البعدي في كلا المرحلتين، بينما كانت النتائج أكثر نجاعة في خسارة الوزن وحرق السعرات الحرارية خلال فترة الصيام.

Corresponding author: DERRADJI Abbes, e-mail: a.derradji@univ-bouira.dz

I -Introduction:

Sometimes, our body is stagnating through exposure to the same training intensity for a long time. The ideal is to change the routine to "surprise it" and not give it time to relax. Fartlek can make these changes in running.

These exercises can be carried out by people of all levels of fitness, largely anywhere with suitable space. For experienced runners, many resort to running Fartlek as a new challenge breaking their usual routine. Fartlek Joss Holmer, the technical director of the Swedish Olympics, invented in the 1930s, all stemming from the defeats of Finnish hostility against Pavo Normi, and decided to make changes in his training. Holmer abandoned the use of the stopwatch and created Fartlek, a form of training that "plays" with changes in speed and, in fact, fartlek means a Swedish speed game.

Classic Holmer fartlek has evolved into many variables throughout history, depending on the various professionals who applied it. The original was made on natural grounds, with irregularities and obstacles to allow athletes to improvise while flying. If it's done on flat ground, some professionals prefer to simply call it "fast changes."

Meetings may be held according to time and distance. In the case of times, we'll rotate between fast and slow races. As far as distances are concerned, we face the Polish "fartlek," which is a different kind of Swedish and the stages are determined through distances. Either way, we shouldn't be overtrained and not more than an hour of work.

Many studies have shown that the Fartlek training is active in both anaerobic and anaerobic metabolism. Aerobic metabolism is generally used only in short batches of energy, such as HIIT or speed races or when lifting heavy weights.

Although slow intermittent training can lead to some increase in aerobic metabolism, it does not approach the same level as Fartlek. Instead, time intervals (especially rapid periods) are exclusively activated by anaerobic metabolism. The reason Fartlek's targeting is due to his own ways of contrast and the fact that it varies greatly between intensity and speed.

In a sense, we trick the process of food acting into working more seriously in the fartlek than in the breakup training, where they must adapt and activate both metabolism. So, you're burning more calories.

Through this proposal, we have considered in this study the answer to the following general question:

- Is there an effective effect of Fartlek's training during fasting times of weight loss?

To answer this general question, the researcher decided to make the following assumptions:

General hypothesis

- Training using Fartlek exercises during fasting times increases the weight loss rate compared to outside fasting times.

The effect of FARTLEK training during fasting times on weight loss

Partial hypotheses

- Low- and medium-level Fartlek exercises contribute to calorie incineration and thus decrease weight.

During fasting times, the Varlk exercise helps use the body for fat as an energy stockpile.

- There are statistically significant differences between tribal and post-fastle tests during fasting times that are greater compared to non-synchronous towers.

Targets of study

- Knowledge of the impact of Vartuck training on calorie burning.

- The knowledge of the energy stock involved in the training of the Vartuck exercise during fasting times;

- To know which training periods are most effective in reducing weight (during fasting times or outside).

II – Method and Materials

Approach

The researcher used the experimental curriculum, which, as this approach, is the best and most accessible method for achieving the goals of the study.

Search variables

* Independent variable: Fartlek exercises.

* Dependent variables: body weight.

Research community:

The research community included 36 athletes with a marked increase in weight.

Search sample

The research sample is the basis for the work of the researcher and is the model in which the research field is conducted. After the survey, the researcher identified the original community for the study. Given the nature of the research and the methodology used, the research sample was deliberately selected, consisting of 36 persons between the ages of 30 and 35.

Areas of research

:: Human field: The sample of the research-oriented laboratory was found in athletes with a marked increase in weight between 30 and 35 years of age, with 36 persons.

:: Spatial area: the tests were conducted at the municipal stadium of the outer tower.

:: Time area: The training programme was extended during the month of Janvi 2024 and was reinstated during the month of Ramadan in March 2024 and was approximately 3 weeks at 4 training modules per week at both stages.

Tools used in the study

- E-balance WS 50

The WS 50 scale enables you to assess the exact weight of the body. Our accurate and diagnostic balances are considered essential if you wish to find and maintain your healthy weight. Furthermore, knowledge of body composition enables you to combine healthy nutrition with physical activity as a prerequisite for improving quality of life, promoting health and preventing diseases. The WS 50 scale is easy to use and accurate.

The effect of FARTLEK training during fasting times on weight loss

Figure (01): WS 50 balance



- POLAR Sports Hours: Through which the calorie burn rate can be measured and determined during each training class.

Figure (02): POLAR Sports Hours



III - Results

- Results of weight measurements

Table 1. Explains the results of the tribal and remote test of the weight sample.

	The tribal test.		The dimensional test.		Sample number	Significance level	Table T	T calculated	Statistical significance
	X	Y	X	Y					
Before fasting.	85.23	0.3	80.14	0.39	18	0.05	1.74	6.24	It's statistically significant.
During fasting.	80.10	0.49	74.73	0.58				1.96	It's statistically significant.

Through table 01, which shows the results of the tribal and remote test of the sample research in the pre-situation weight test, the pre-situation test obtained an average calculation of 85.23, a standard deviation of 0.3 and a standard average deviation in the remote test respectively (80.14-0.39). The calculated "t" value was 6.24 greater than the scale "t" value estimated at 1.74 at .05 and 17 degrees of freedom, which indicates that the results of the tribal test and the results of the remote test make a moral difference and are in favour of the remote test. During fast time, I received an average of 80.10, a standard deviation of 0.49 in the tribal test, and in the dimensional test I received an average of 74.73 and a standard deviation of 0.58. The calculated "t" of 1.96 is greater than the scale "t" (1.74) at .05 and 17 degrees of freedom. It should be noted that the results of the two tests (tribal and remote) are statistically significant, i.e., there are moral differences between them.

From previous findings, the researcher concludes that the experimental sample to which the proposed training programme was applied was effective in reducing weight before and even during fasting.

- Results of calorie measurement

The effect of FARTLEK training during fasting times on weight loss

Table 02. Shows the results of measuring the calorie burn rate of the research sample before and during fasting.

	The tribal test.		The dimensional test.		Sample number	Significance level	Table T	T calculated	Statistical significance
	X	Y	X	Y					
Before fasting.	585	0.027	644	0.032	18	0.05	1.74	2.92	It's statistically significant.
During fasting.	864	0.028	1043	0.026				1.57	It's not statistically significant.

Through table 02, which shows the results of the calorie incineration rate of the pre-situation sample and during all training classes, we note that in the tribal test, the sample received an average of 585, a standard deviation of 0.027, while in the remote test, it obtained a standard average deviation of 644-0.032 respectively. The calculated "t" value was 2.92 greater than the scale "t" value estimated at 1.74 at 0.05 and 17 degrees of freedom, which indicates that the results of the tribal test and the results of the dimensional test make a moral difference and are in favour of the remote test.

During fast time, I received an average calculation of 864 and a standard deviation of 0.028 in the tribal test, while in the dimensional test I received an average calculation of 1043 and a standard deviation of 0.026. The calculated "t" amounted to 1.57, which is smaller than the scale of "t" (1.74) at the sign level of 0.05 and the degree of freedom 17. It should be noted that the results of the two tests (tribal and remote) are statistically unmanageable, i.e. there are no moral differences between them.

From previous findings, the researcher concludes that the sample to which the proposed training programme was applied was more effective in burning calories during fast times than in the pre-situation period.

V – Conclusion:

Through our study, we have come to the conclusion that Fartuck exercises have an important role to play in reducing weight as well as another advantage: by doing so regularly, we will see that we burn more calories during fast times than we do during normal days, for example.

Fartlik's training means that the drills will be more effective because we'll burn more calories while practicing on an empty stomach without the need to increase the time we spend doing the exercise and thus burn much more calories than we usually burn.

The training of aerobics and Fartlek is part of the air system that exploits the fat stock of the body 's energy supply and thus converts the fat into glycogen and

then into ATP.

So it's also useful to have stronger muscles, and we'll also be able to run longer, which means that Fartlek is a great training exercise for anyone who looks forward to increasing their tolerance.

This exercise has many psychological benefits, as it will help change your thinking. It's not only gonna help us prepare for race day, it's gonna make us feel better.

The mixing of Fartlik training, in its flexible manner and a combination of fast and slow running, trains your muscles to be adaptable and flexible to changing conditions of running. In time, the muscles will become stronger, so we will soon be able to change the speed easily and we will not face the resistance of the muscles as they were when we started.

VI - References:

- Abu Ala Abd El Fattah, Ahmed Nasruddin Sayed, 2003: Physiology of Fitness, Arab Thought House, Cairo.
- Mohamed Ibrahim Shehata, Mohamed Jaber Berikaq, 2005: Manual of Physical Measurements and Dynamic Performance Tests, Alexandria Knowledge Establishment, (P.S.).
- Caiton Hall, 1997: Reference in Medical Physiology, Sadik Crescent Translation, Beirut, Lebanon, International Academy House.
- Qasim Mandalawi, full coverage, 1989: physical and sports education tests and measurements, Baghdad University, Iraq.
- Amr Abu Majid, Ismail al-Namki, 1998: planning of football programmes for buds and young people, i.e., Book Centre for Cairo.
- Chu. A. Donald; 1992 : Jumping Into Plyometrics, Leusure press, USA.

How to cite this article according to the APA method:

A. Derradji, S. Feghouli, E.Guerroumi, (2024), The effect of FARTLEK training during fasting times on weight loss, **International Journal of Studies & Research in Sport Sciences & Training**, Vol : 05 / N°: 01 (2024), p 01–08.