

Corina ȚIFREA,  
Sidi Hassan CHERKAOUI  
National University of Physical Education and Sports of Bucharest

# RAMADAN - THE FAST IN THE LIVES OF MOROCCAN FOOTBALL PLAYERS

Case  
Study

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## Keywords

Ramadan,  
Performance football,  
Physical performances,  
Sport

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## Abstract

*Ramadan (in Islam), the ninth month of the Muslim year. During this period, from the sunrise to the sunset, a total abstinence is practiced, no food, drink, nor any other nutritional substance can be introduced into the body through any method, but after sunset. Practicing daytime ramadan (fats) sport burns primarily the sugars and fatty acids that circulate in the blood and then asks the body to focus on glycogen stores, fats and proteins. The energy deficit leads the body into a "suffering" situation. In such a situation, it is difficult to get performance without the necessary amount of energy. Exercising intense effort calls for other sources of energy, such as fats and proteins. The use of muscle proteins for energy purposes leads to changes in contractile fibers and weakens the muscle tissue. This risk is even greater if the hydration is not correct, a situation often associated with the absence of food intake. Associated dehydration increases the risk of tendon and muscle lesions (tendinopathy, elongation, breakdown). During the Ramadan month, physical and sports performance is significantly reduced. Coaches have to take this into account. Programming competitions during this period is not very compatible with a high performance sports diet and with the idea of performance.*

## THE BENEFITS OF THE RAMADAN (FAST)

Ramadan (in Islam), the ninth month of the Muslim year. During this period, from the sunrise to the sunset, a total abstinence is practiced, it is not allowed to eat any food, drink, or nutritional substance in any way. After sunset it is allowed to eat and drink.

2500 years ago Socrates recommended post for its physiological benefits. It is a method for purifying and balancing the body. More recently, studies done by Californian researchers at Salk Institutes in the United States have achieved astounding results in tests performed on a mouse group where they found that regularity in diet and daily fasts are beneficial to our body.

The effects of Ramadan (fast) on the body during the day:

The effects are more due to the fact that when the glycemic index and the electrolytic equilibrium decrease (because of the lack of water), the following are felt: fatigue, sometimes dizziness, lack of concentration, more towards the end of the day, and the symptoms differ from one person to another depending on the physiological and spiritual factors, the body slowly adjusts as the days pass so that at the end of the month the body completes its detoxification (Avramoff, 1980).

## SPORT DURING RAMADAN

Practising daytime Ramadan (fast) sport burns primarily the sugars and fatty acids that circulate in the blood and then asks the body to focus on glycogen stores, fats and proteins. The energy deficit places the body in a "suffering" situation.

In such a situation, it is difficult to conceive achieving performance without availability of energy. The practice of an effort requires other sources of energy, such as body fat, protein.

The use of muscle proteins for energy purposes leads to changes in the energy contracted fibers and weakens muscle tissue. This risk is even greater if the hydration is not correct, a situation often associated with the absence of food intake. Associated dehydration increases the risk of tendon and muscle lesions (tendinopathy, elongation, breakdown) (Rădulescu, 2007).

During the Ramadan month, physical and sports performance is so significantly reduced. Coaches have to take this into account. Scheduling competitions during this period is not very compatible with a high-performance sporting diet and notion of performance. It is necessary to remain more vigilant, because post-pregnancy training increases the risk of falling or accident by lowering vigilance and exposing to overwork (Volek, 2004).

The practice of daytime sports in Ramadan does not seem to be the best idea, but here we are going to show that our body finds other energy resources when it is deprived of the usual ones and with a proper diet we can help the body to self-benefit from it (Cojocaru, 1995).

Daytime training in Ramadan (fast) increases the body's ability to use oxygen, which will be very useful in the future. Athletes who maintain all their energy inputs and macronutrients, body composition and duration and quality of sleep are unlikely to record a decline in performance during Ramadan.

Coaches who make small adjustments for their Ramadan players ensuring that their needs for sleep and nutrition are assured can be expected to maintain the same level of performance, while those who ease workout create a performance drop.

## THE STUDY

Study was conducted on a group of players by a first league team, Botola Pro, in Morocco in 2017 in the month of Ramadan 27 May -25 June.

**Group 1** - Standard diet normo protein-normo-glucose-normo lipid. A meeting of 1h30 training a day - 2 hours after the sunset is the usual workout session practiced by almost all teams in the Muslim countries.

**Group 2** - Standard diet normo- protein, normo-carbohydrate, normo-lipidic; 2 sessions of 45 minutes training - one hour half before sunset and the other 45 minutes - 2 hours after sunset.

**Group 3** - Hyperproteic diet, normo-glucidic, normo-lipidic; a training session of 1h30min - 2 hours after sunset.

**Group 4** - Hyperproteic diet, normo-glucidic, normo-lipidic; 2 training sessions: one of 45 min 1h30 before sunset and the other of 45min - 2h after sunset.

We mention that this year the Ramadan came at the end of the championship season, for the following years it may extend the after sunset session if 45 minutes are not enough for coaches.

To ensure a good efficiency, we chose high carbohydrate consumption. We chose whole pasta, whole rice to break the post (iftar) at sunset; I chose the soup to compensate for the desiccation, to reach high levels of protein was used a nutritional supplement of wheyprotein (whey protein) with milk. The measures have been adjusted for each player according to their weight (Manno, 1996).

## RESULTS

**Group 1 and 2:** Performance indices were roughly the same, but for group 2, the training during the

day of fast improved their performance after Ramadan.

Group 3 which had the hyperproteic diet had a better recovery and their performance indices were better than those of Group 1.

As far as group 4 is concerned, it had a better mood for training from the first session, a resistance during the post-day effort towards group 2 and improved their performance after Ramadan. Athletes training during the day in Ramadan have seen a significant increase in hormones growth.

Supplementing with protein brings the body another source of energy that it uses during the fast; for better recovery and regeneration of muscle tissue, some amino acids with essential protein components such as leucine have pancreatic insulin release stimulating effects (Weight & Noakes, 1988).

### CONCLUSION

Ramadan is an opportunity for athletes to detoxify their body and optimize performance. For those who apply a proper diet, have their training at the

right time and have a healthy lifestyle hygiene, the many benefits of training are felt right after its end. The Ramadan may be a good time for physical training.

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