

# Sports Activities during Ramadan Fasting: A Need for Guideline Recommendations to be Incorporated into Practice

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Today, worldwide Muslim athletes fast one month each year during the month of Ramadan. Although several studies have been conducted on fasting during the month of Ramadan, there is little data on athletes' performance during Ramadan and this data is greatly inconsistent (1). Some findings demonstrate that intermittent fasting will affect body composition, blood lipid profile, glucose, hormones as well as cognitive function in fasting athletes. Existing data on athletes are mostly limited to laboratory performance tests but not to real world competitions. However, findings are mixed and inconclusive on discovering whether Ramadan may interfere with the level of performance in athletes. Furthermore, we are generally unaware of effects of Ramadan fasting on performance variables in competitions (2). There is also a lack of data regarding the sports related consequences, particularly rate of injuries during Ramadan; given that many people surprisingly, in Islamic countries (e.g., Iran) will adhere to the recreational sport activities on concrete or dirt fields during Ramadan. These people, mostly with low readiness for exercise, might be at greater risk of sports-related injuries when practicing sports between Iftar and Suhur (3).

Through this article we are going to address a few critical issues that may impact the strategies athletes use to deal with Ramadan fasting and sports activity participation. The following list includes several questions that merit attention by future researchers:

- To what extent athletes will experience diminished cognitive performances (e.g., vigilance, memory or attention) in response to Ramadan fasting? Is it evident that athletes with higher cognitive abilities are less likely to experience the induced cognitive impairments compared to those with lower cognitive abilities?

- Which time period of Ramadan fasting (early vs. late days) poses a greater threat to athletes' performance? Might athletes show a pronounced deterioration only at the beginning of Ramadan, which is progressively re-

versed across the fasting period?

- Why are a number of athletes resilient to fasting and do not display adverse deterioration of cognitive performance, activity, sleep, and mood? Conversely, who is at greater risk of possible adverse effects of Ramadan fasting?

- To what extent and how might athletes have a better physiological or psychological recovery during Ramadan—specifically in restoring sleep pattern and quality?

- While there has been a negative outlook towards the effects of Ramadan fasting on athletic performances, what is the main characteristic or feature of an intervention that may enhance performance of athletes during Ramadan?

- How can we develop a guideline document, specifying who, when, and how to participate in different levels of training or competitions during Ramadan?

As many international or Olympian athletes are committed to Ramadan fasting, research efforts are warranted to focus on close monitoring and developing interventions to enhance athletes' performance during Ramadan. However, it is expected to develop a guideline of recommendations for athletes on how to (or not to) participate in their training sessions or competitions during Ramadan fasting.

## References

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