Fasting and sports: a summary statement of the IOC workshop

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Fasting—the abstention from eating and drinking—is an integral part of all of the world’s major cultures and religions, though the pattern of fasting and the rate of adherence both vary widely. Fasting is also practised by many individuals in the belief that health benefits will result. A fast may be total or partial and may be prolonged or intermittent: it may be practised at prescribed times of the year for a fixed duration or at the discretion of the individual.

Fasting of short duration or intermittent nature has little or no effect on the health or performance of most athletes, and an overnight fast of 8–12 h is normal for the majority of the population. However, where fasting prevents the athlete from following guidelines for optimum nutrition before, during or after exercise, there may be effects on both health and performance. Even small effects on performance may be sufficient to determine the outcome of sporting contests. Frequent omission of foods or food groups from the diet may increase the risk of an energy deficit or of deficiencies of specific nutrients. Restriction of fluid intake will result in dehydration, and this will be more severe if combined with exercise and environmental stress.

As with any other change to their nutrition regimen, athletes who plan to fast during a period of training or competition should seek professional advice to develop a personal strategy. Those who exercise for recreation or health should also consider the possible consequences of any alteration to their dietary routine. There may be a need for changes to the intensity, duration and timing of training sessions, and for the adoption of legitimate non-nutritional strategies to minimise any potential negative effects. Athletes who choose to fast while competing should do so only when they are sure that this does not cause risk to their health. Those charged with the care of athletes should be prepared to offer such advice, and should assist in the preparation of a strategy that takes account of personal circumstances, including gender, age, experience, environment and, of course, the demands of the sport itself.

Athletes who have had limited opportunities to develop personal strategies should be particularly cautious about undertaking severe exercise in stressful environments when fasting or restricting fluid intake.

The governing bodies of sport must be aware of how individual sports may be affected and take this into account in event management. Those responsible for the organisation of events taking place at a time when some of the participants may be fasting should be aware of the possible implications and should make arrangements to accommodate the needs of those athletes whenever possible. This should include a consideration of the timing of events where such flexibility exists, and the provision of appropriate facilities and food service for the breaking of the fast. Event organisers should be aware of the fact that some athletes, officials, support staff and spectators may be fasting and should be prepared to deal with the possible consequences.

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