

Athletic Considerations During Ramadan

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During much of May and into June of this year members of the world's second largest religion; Islam, will take part in one of its most holy observant practices; Ramadan. Ramadan is a spiritual period in which those who follow the Muslim faith practice abstaining from eating, drinking (even water), smoking, chewing from dawn to sunset. In an effort to be culturally conscious of our Muslim student and those participating athletic events, the Athletic Department at Bloomfield Hills Schools has gathered information regarding athletic performance and refueling for our coaches, staff and families to consider as many of our student-athletes enter this time of spiritual reflection.

Ramadan this year will begin in the evening of Sunday May 5th, 2019 and commence on Tuesday June 4th, 2019. As stated above, Ramadan is the practice of abstaining from eating, drinking, etc. (fasting) during the month for Muslims to attain *taqwa* (finding conscious of) with God. As we are aware, those participating on athletic teams and events, it is highly important to maintain a proper diet in order to fuel and refuel for optimal performance during a chosen sport. Along with diet, there is growing evidence on the importance of sleep at a minimum of 8 hours a night to achieve favorable production not only on the athletic field as well as in the classroom. The occurrence of Ramadan during the month of May in Michigan presents two distinct challenges. During May, athletic participation is at its peak with frequency of competitions (including State playoff events) as well as increased temperature (both heat and humidity). In general, these challenges affect the eating and sleeping habits of all student - athletes but create unique challenges to our Muslim student - athletes. Since Muslim student - athletes are only allowed to eat and drink (refuel) after sun down of each day, physical performance, sleep patterns and alertness will be affected in the initial week of Ramadan as students adjust to a new pattern of sleep, fasting and refueling. It could be expected that athletic power and endurance will be negatively impacted but research has shown that it could only be reduced between 3% and 10% in high intensity events that last over 90 minutes. In an effort to combat a reduction of physical and athletic performance as well as reduce incidence of injury, the aim of this paper is to provide recommendations on three best practices for optimal performance during Ramadan; diet, hydration and sleep.

Diet

It has been widely recommended that athletes partake in multiple meals throughout the day in order to maintain energy necessary to participate in athletic

events. Most Muslims will automatically adjust their meal frequency to two meals in a 24 hour period, the Suhoor (early breakfast) which takes place at dawn and the Iftar which takes place just after sunset. The challenge is created as student - athletes find it more difficult to eat healthier meals as each Iftar is generally composed of meals that are high in fat, sugar and salt. It should be noted that meals at both Iftar and Suhoor generally meet the daily caloric needs for student - athletes they may lack proper nutrients that are essential for optimal performance.

Since the daily caloric value is generally met by student - athletes it is important to pay particular attention to the macronutrients (fats, carbohydrates and protein) consumed. It has been recommended that foods high in both fat and protein are consumed during Iftar and that foods high in carbohydrates and low in glycemic index are consumed during Suhoor in order to provide adequate fuel for the day.

Hydration

Lack of fluid intake throughout the day can create significant risks for those who participate in physical activity during Ramadan as most athletic events take place while Muslim student - athletes are fasting. A common occurrence for student - athletes is to ingest a large quantities of fluids during hours of allowed fluid intake. This practice can prove ineffective as it will induce urine loss as well as disrupt sleep. It is recommended to drink water frequently in shorter intervals with solid foods during meals to aid in digestion and water retention. Another recommendation is to drink water with a marginal amount of salt and/or electrolytes prior to dawn to improve water retention and stores. Sugary and caffeinated drinks should also be avoided as they can cause further dehydration.

Sleep

Disruption in sleep will cause daytime fatigue and poor concentration. Coupled with a new fasting cycle, student - athletes may find it difficult to maintain a level of physical performance prior to Ramadan. Student - athletes are recommended to maintain a minimum of 8 to 9 hours of sleep a night. Since meals that break the fasts can often disrupt sleep cycles, student - athletes are encouraged to partake in naps in which they can obtain between 1.5 to 2 hours of sleep in the afternoon when able to in order to negate the effect of nocturnal sleep loss.

Considerations for Coaches and Medical Emergencies

Coaches and staff must always be aware and sensitive to all student - athletes needs both religious and non religious. It is important during this time that coaches routinely collect feedback from student - athletes but not to do so in a way that draws attention to a student who is practicing a religious observation. It is also important for

the student - athlete make the coaches aware of their practice, as fasting during Ramadan without knowledge can be misconstrued as lack of effort or performance without the knowledge of these recommendation.

One consideration to keep in mind is the early days and weeks of a new fasting cycle, is the disruption of a student - athletes ability to self regulate their body temperature during activity without the use of fluids. Student - Athletes will have access to cooling towels during athletic events as well as small cooling tubs in the Athletic Training Room. Student - Athletes are able to rinse their mouths with water in an attempt to stave off thirst but in the event that a medical emergency is believed due to dehydration and/or increase in body temperature, it is allowed to give fluids to the student - athlete and activate the Emergency Action Plan. In any instance, regardless of religious views or practices, all student - athletes should be treated equally as to not draw attention to their needs.

Please inform booster families that student - athletes may attend, but will not be able to participate in pasta or pizza parties that take place during the season. In addition please inform banquet planning families to consider providing a take home option during the postseason banquets. Even though there will be plenty of food for them at home, the notice and consideration will not go unnoticed by the student - athlete and their families.

Any student - athlete or family with questions on how to maintain an appropriate diet to achieve optimal physical performance is free to contact Bloomfield Hills High Schools Head Athletic Trainer; John Cieccko via email at JCieccko@Bloomfield.org

Future Dates for Ramadan

Year	Ramadan Starts	Ramadan Ends
2019	May 5	June 3
2020	April 24	May 23
2021	April 13	May 12
2022	April 2	May 1

Calendar during Ramadan 2019

Date	Sun Down	Sun Up (next day)	Total Time for Caloric Maintenance
May 4	8:35: PM	6:23: AM	9:48
May 5	8:36: PM	6:22: AM	9:46
May 6	8:37: PM	6:21: AM	9:44
May 7	8:38: PM	6:20: AM	9:42
May 8	8:40: PM	6:18: AM	9:38
May 9	8:42: PM	6:17: AM	9:35
May 10	8:42: PM	6:16: AM	9:34
May 11	8:43: PM	6:15: AM	9:32
May 12	8:44: PM	6:14: AM	9:30
May 13	8:45: PM	6:13: AM	9:28
May 14	8:46: PM	6:12: AM	9:26
May 15	8:47: PM	6:11: AM	9:24
May 16	8:48: PM	6:10: AM	9:22
May 17	8:49: PM	6:09: AM	9:20
May 18	8:50: PM	6:08: AM	9:18
May 19	8:51: PM	6:07: AM	9:16
May 20	8:52: PM	6:06: AM	9:14
May 21	8:53: PM	6:05: AM	9:12
May 22	8:54: PM	6:04: AM	9:10
May 23	8:55: PM	6:03: AM	9:08
May 24	8:56: PM	6:03: AM	9:07
May 25	8:57: PM	6:02: AM	9:05
May 26	8:58: PM	6:01: AM	9:03
May 27	8:59: PM	6:01: AM	9:02
May 28	9:00: PM	6:00: AM	9:00
May 29	9:01: PM	5:59: AM	8:58
May 30	9:01: PM	5:59: AM	8:58
May 31	9:02: PM	5:58: AM	8:56
June 1	9:03: PM	5:58: AM	8:55
June 2	9:04: PM	5:57: AM	8:53
June 3	9:05: PM	5:57: AM	8:52
June 4	9:05: PM	5:57: AM	8:52

References:

1 - Quran Chapter 2 verses 183 - 186

2 - Why We Need Sleep: Unlocking the Power of Sleep and Dreams - Dr. Matthew Walker

3 - Participation of Muslim Athletes During the Month of Ramadan - El-Khatib, Tolbert, McIlvain - International Journal of Athletic Therapy and Training

4 - Ramadan and Football - Al Mudahka, Herrera, Farooq - Aspetar

5 - The Impact of Ramadan Observance upon Athletic Performance - Shepard - Nutrients

6 - Achieving Optimum Sports Performance During Ramadan: Some Practical Recommendations - Maughan, Zerguini, Chalabi, Dvorak - Journal of Sports Science

7 - Sport Participation and Ramadan Observance: Advice for the Athlete - Shepard - Journal of Fasting and Health