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The Impact of Fasting during Ramadan on the Sleep and Nutrition Patterns of Adolescents

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Dear Editor

Adolescence is a crucial developmental stage characterized by significant physical, psychological, and cognitive changes, making adequate sleep and balanced nutrition essential for overall well-being (1). As Ramadan is an important religious observance for many adolescents, understanding how fasting affects their sleep and nutrition patterns is vital for promoting their health during this period (2). This letter highlights these effects and proposes strategies to mitigate potential challenges.

Impact on Sleep Patterns

Fasting during Ramadan requires adolescents to wake up early for Suhoor, which disrupts their sleep schedules and may reduce sleep quality (3). Adolescents aged 12–18 typically need between 8 and 10 hours of sleep each night to support optimal growth, cognitive function, and emotional well-being (1). However, frequent sleep timing and reduced sleep duration alterations can result in daytime drowsiness, negatively impacting concentration and academic performance (4). Studies have shown poor sleep quality can hinder neurological development and memory retention, exacerbating the effects of fasting-induced fatigue (2).

Impact on Nutrition Patterns

Transitioning from three regular meals to two main meals—Suhoor and Iftar—alters adolescents' dietary intake (5). While Iftar often involves the consumption of high-calorie, processed foods due to hunger, Suhoor presents an opportunity to consume nutrient-dense foods that sustain energy levels throughout the day (6). Proper hydration is also crucial; inadequate water intake during non-fasting hours can lead to dehydration, fatigue, and decreased physical endurance (2).

The negative effects of fasting on sleep duration and quality are preventable, provided appropriate strategies are implemented. Adjustments to sleep schedules, improved nutritional intake, and heightened awareness of hydration needs can significantly reduce the adverse impact of fasting on adolescents' health (3).

Recommendations for Maintaining Health

Given these impacts, comprehensive strategies are essential to help adolescents navigate Ramadan while minimizing health risks (5). To further improve the effectiveness of existing recommendations, the following actionable steps are proposed:

Regulating Sleep Timing: Parents should encourage adolescents to maintain a consistent bedtime, ensuring sufficient sleep duration despite disruptions from Suhoor (2).

Optimizing Nutrition: Balanced meals during Suhoor and Iftar should include fresh fruits, vegetables, lean proteins, and whole grains while minimizing high-fat and processed foods (7).

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Ensuring Proper Hydration: Adequate water intake during non-fasting hours reduces fatigue and enhances physical endurance (6).

Managing Physical Activity: Light to moderate physical activity can help sustain energy levels while preventing excessive exhaustion from fasting (3).

By fostering collaboration among parents, educators, and healthcare professionals, adolescents can maintain their physical and mental health during Ramadan while respecting their cultural and religious practices.

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