

RAMADAN FASTING: THE TRUE REJUVENATION OF BODY AND MIND.

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ABSTRACT

Ramadan, the ninth month of the Islamic calendar, is a period of immense significance for Muslims worldwide. Beyond its religious and cultural dimensions, fasting in Ramadan stands as a remarkable example of a practice that intertwines spirituality with physiological and psychological well-being. This editorial delves into the effects of Ramadan fasting on mental and physical impacts on health, cognition, emotion, and lifestyle.

KEYWORDS

Cognition; Fasting; Life Style; Mindfulness; Psychological Well-Being; Rejuvenation; Spirituality.

The ninth month of the Islamic calendar is known as Ramadan, which is the holy month of Fasting (Sawm, the fourth Pillar of Islam) observed by Muslims around the world. This month not only has religious and spiritual connotations but is also a potential period of physical and mental rejuvenation. Abstinence from food and drink from dawn to dusk for a month in Ramadan can bring about significant changes in the body and mind, promoting overall well-being.¹

The practice of fasting in some form or another is found in every major religion in the world, such as Hinduism, Buddhism, Judaism, Christianity, besides Islam. Even in ancient Greece, Hippocrates believed this act aided the body in repairing itself. Ramadan fasting by Muslims is a dawn-to-dusk (sunset) dry or absolute fasting that is not only physical,³ but is also a deeply spiritual practice that has profound effects on both the mind and body, besides promoting self-discipline, empathy, and spiritual reflection. It is also a significant cultural and religious tradition that promotes social connection, contributing to mental rejuvenation. . Fasting causes changes in the body's biochemical parameters and reduces the risk of metabolic disorders (diabetes, hypertension, and obesity), thus leading to physical rejuvenation.⁴

PHYSIOLOGICAL CHANGES

The health protective effects of Fasting in Ramadan are associated with metabolic adaptations, that induce improvements in biochemical parameters, body weight, metabolic parameters, and reduced risks of metabolic disorders such as diabetes and obesity.⁵ Blood pressure regulation is another notable physiological effect of Ramadan fasting, as shown by the findings of the London Ramadan Study (LORANS). This meta-analysis suggests beneficial effects on blood pressure independent of changes in body composition, affirming the safety and efficacy of Ramadan fasting regarding cardiovascular health.⁶ Fasting induces variable physiological changes at the cellular and organ levels, enhancing alertness, altering mood, and well-being and boosting both mental and physical revitalisation.⁷

PHYSICAL REJUVENATION

Cellular Detoxification and Metabolic Reset in Fasting are the outcomes of the metabolic state of ketosis that is induced by fasting, and triggers cellular detoxification through autophagy, thereby reducing the risk of chronic diseases such as cancer and Alzheimer's.⁸ Moreover, fasting promotes a metabolic reset, improving insulin sensitivity and regulating blood sugar levels, which has implications for metabolic disorders like diabetes and obesity. Studies show decreased fasting blood sugar and HbA1c levels in diabetics during Ramadan.⁹

Gastrointestinal (Gut) Health Boost

Gut health is a crucial aspect influenced by Ramadan fasting that positively impacts gut microbiome composition. The increase in beneficial bacteria and reduction in pathogenic bacteria contribute to digestive health and overall well-being. Furthermore, studies indicate that intermittent fasting, as observed during Ramadan, enhances microbiome diversity, with specific bacterial families showing advantageous changes.¹⁰ The anti-inflammatory bacteria, *Lactobacillus* and *Bifidobacterium* favourably increase, while pathogenic bacteria decrease.¹¹ Intermittent fasting during Ramadan enhances the microbiome diversity that specifically helps in up-regulation of the Clostridiales order-derived Lachnospiraceae and Ruminococcaceae bacterial families. It is important to note that upon the cessation of an intermittent fasting regimen, the microbiome composition returns to baseline levels.¹²

IMPACT ON MENTAL WELL-BEING

The psychological implications of fasting in Ramadan extend far beyond the physical realm, affecting emotional balance, cognitive function, and stress reduction. Caloric restriction in the form of fasting helps the nervous system by affecting the synthesis of neurotrophins, neurotransmitters, and oxygen radical metabolism.¹⁵ Fasting is associated with heightened levels of alertness, improved mood, and enhanced mental clarity, fostering emotional well-being and mental rejuvenation.^{16,17}

Neurological and Cognitive Benefits

These benefits include the stimulation of Brain-Derived Neurotrophic Factor (BDNF), which contributes to enhanced cognitive function during Ramadan fasting.¹⁸ This protein plays a crucial role in neuron growth and learning, highlighting the potential for cognitive enhancement and improved mental acuity.¹⁵

Stress Reduction

The spiritual focus and mindful eating habits cultivated during Ramadan can promote stress reduction, by lowering the stress hormone, cortisol levels. Decreased cortisol levels have been observed in Ramadan studies¹⁹

Increased Self-Control

The Arabic term for fasting is “Sawm” which has the literal meaning of “self-control” and “restraint.” The discipline and self-control practiced during Ramadan can translate into improved willpower and decision-making in other areas of life. Thus, fasting fosters emotional resilience and inner peace, nurturing a sense of mindfulness and self-control. By promoting tolerance, willpower, and self-discipline, Ramadan fasting serves as a catalyst for managing a variety of desires, emotions, and behaviours, including anger, aggression, violence, substance use/addiction, gambling, infidelity, etc.²⁰

LIFESTYLE AND DIETARY CHOICES

Fasting promotes healthy lifestyle practices, including mindful eating, hydration, balanced nutrition, and regular physical activity, contributing to overall well-being

Dietary Consciousness and Mindful Eating

The act of breaking the fast with a regulated meal promotes healthy eating habits and mindful consumption, which are conducive to well-being. The fasting period encourages dietary consciousness, promoting selective food choices and nutritional awareness that augment mental and physical health.

Sleep duration and diet

The duration of sleep and amount of dietary cholesterol intake are significantly decreased during the month of Ramadan compared to the levels in the pre-fasting period, while total sugars, polyunsaturated fats, vitamins C and E, omega-3 fatty acids, and lycopene levels are significantly increased.¹⁹

Sustainable Well-being

Fasting supports sustainable well-being, emphasising the importance of holistic health and self-care, promoting wellness as a whole.

HARNESSING THE POWER OF FASTING

Fasting encourages mindful reflection, spiritual growth, and a deeper connection with one's inner self, contributing to mental rejuvenation. The fasting period is an ideal opportunity for spiritual renewal, self-discovery, and inner peace, nurturing well-being, in general. It is also a time for emotional cleansing, fostering mental clarity and emotional well-being, thus leading to mental revitalisation.

The impact pivotal to Ramadan fasting is its spiritual dimension, which encompasses self-reflection, mindfulness, and a deepening of one's relationship with the divine. The practice of fasting encourages individuals to engage in acts of worship, prayer, and charitable deeds, fostering a sense of spiritual connection and purpose. Mindful living practices cultivated during Ramadan extend beyond the fasting period, emphasising the importance of conscious choices and emotional well-being in everyday life. By integrating spiritual and physical well-being, fasting fosters mind-body harmony, promoting holistic wellness and sustainable health.

Key Principles to Maximise the Benefits of Ramadan Fasting for Mind and Body

- **Gradual Preparation:** Before Ramadan, gradually adjust eating habits to avoid the shock of sudden fasting.
- **Hydration is the key:** Drink plenty of water after Iftar (the post-fast meal) to prevent dehydration and optimise bodily functions.
- **Balanced Pre- and Post-Fast Meals:** Prioritise nutrient-rich, wholesome foods during Suhoor (the pre-fast meal) and Iftar to replenish essential nutrients and fuel the body.
- **Prioritise Sleep:** Maintain a regular sleep schedule to enhance cognitive function and improve well-being.
- **Engage in Mindful Activities:** Practice meditation, prayer, or other spiritual activities to deepen self-awareness and manage stress.

In conclusion, Ramadan fasting represents a holistic approach to mental health and well-being, producing an amalgamation of physiological, psychological, and spiritual dimensions. Scientific endeavours highlight only some of its profound impacts on bodily and mental rejuvenation, cognitive enhancement, and emotional resilience. As we delve deeper into understanding the mechanisms underlying fasting, it becomes clear that its benefits extend far beyond religious observance. By embracing the principles of mindful living and self-care inherent in Ramadan fasting, individuals can cultivate a greater sense of well-being and inner peace.

For the future, continued research and exploration are essential to understand and unlock the full potential of fasting as a therapeutic intervention for mental health and general well-being. With the integration of evidence-based practices and spiritual insights, it is possible to harness the transformative power of fasting in Ramadan to promote holistic health and mental well-being in individuals and communities all over the world.

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