



AUSTRALIAN ISLAMIC
MEDICAL ASSOCIATION

Ramadan & common GI issues



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شَهْرُ رَمَضَانَ الَّذِي أُنزِلَ فِيهِ الْقُرْآنُ هُدًى لِّلنَّاسِ وَبَيِّنَاتٍ مِّنَ الْهُدَىٰ وَالْفُرْقَانِ ۚ فَمَن شَهِدَ مِنْكُمُ الشَّهْرَ فَلْيَصُمْهُ ۖ وَمَن كَانَ مَرِيضًا أَوْ عَلَىٰ سَفَرٍ فَعِدَّةٌ مِّنْ أَيَّامٍ أُخَرَ ۗ يُرِيدُ اللَّهُ بِكُمُ الْيُسْرَ وَلَا يُرِيدُ بِكُمُ الْعُسْرَ وَلِتُكْمِلُوا الْعِدَّةَ وَلِتُكَبِّرُوا اللَّهَ عَلَىٰ مَا هَدَاكُمْ وَلَعَلَّكُمْ تَشْكُرُونَ

- [Surah Baqarah Ayah 185](#). The month of Ramadhan [is that] in which was revealed the Qur'an, a guidance for the people and clear proofs of guidance and criterion. So whoever sights [the new moon of] the month, let him fast it; and whoever is ill or on a journey – then an equal number of other days. Allah intends for you ease and does not intend for you hardship and [wants] for you to complete the period and to glorify Allah for that [to] which He has guided you; and perhaps you will be grateful.

Overview

- What happens to the gut during Ramadan?
- What are common GI symptoms Muslims feel during Ramadan, why and how to manage them
 - Reflux, GORD
 - Constipation
- How to manage other GI diseases during Ramadan

What happens to the gut in Ramadan?

- Most human studies indicate positive effects of fasting on the composition of the gut microbiome
- Body enters mild state of nutrient stress, stimulates cellular processes- improves process of elimination of toxins from the colon



What happens to the gut in Ramadan?

- Reduced inflammation & pro-inflammatory cytokines (IL-1b, IL-6 & TNF- α) stimulate **autophagy** (cancer prevention), helps the body recycle, remove degraded cellular components
- Shift in night eating, however, has an effect on Circadian rhythm – release of Leptin (appetite inhibiting) and Ghrelin (appetite stimulating) hormones

Ramadan is a temporary lifestyle change, nocturnal eating pattern

Normal Routine:

- Morning coffee, breakfast
- Lunch
- Keep up with water intake
- Exercise
- Dinner at time that suits us
- Sleep

Ramadan:

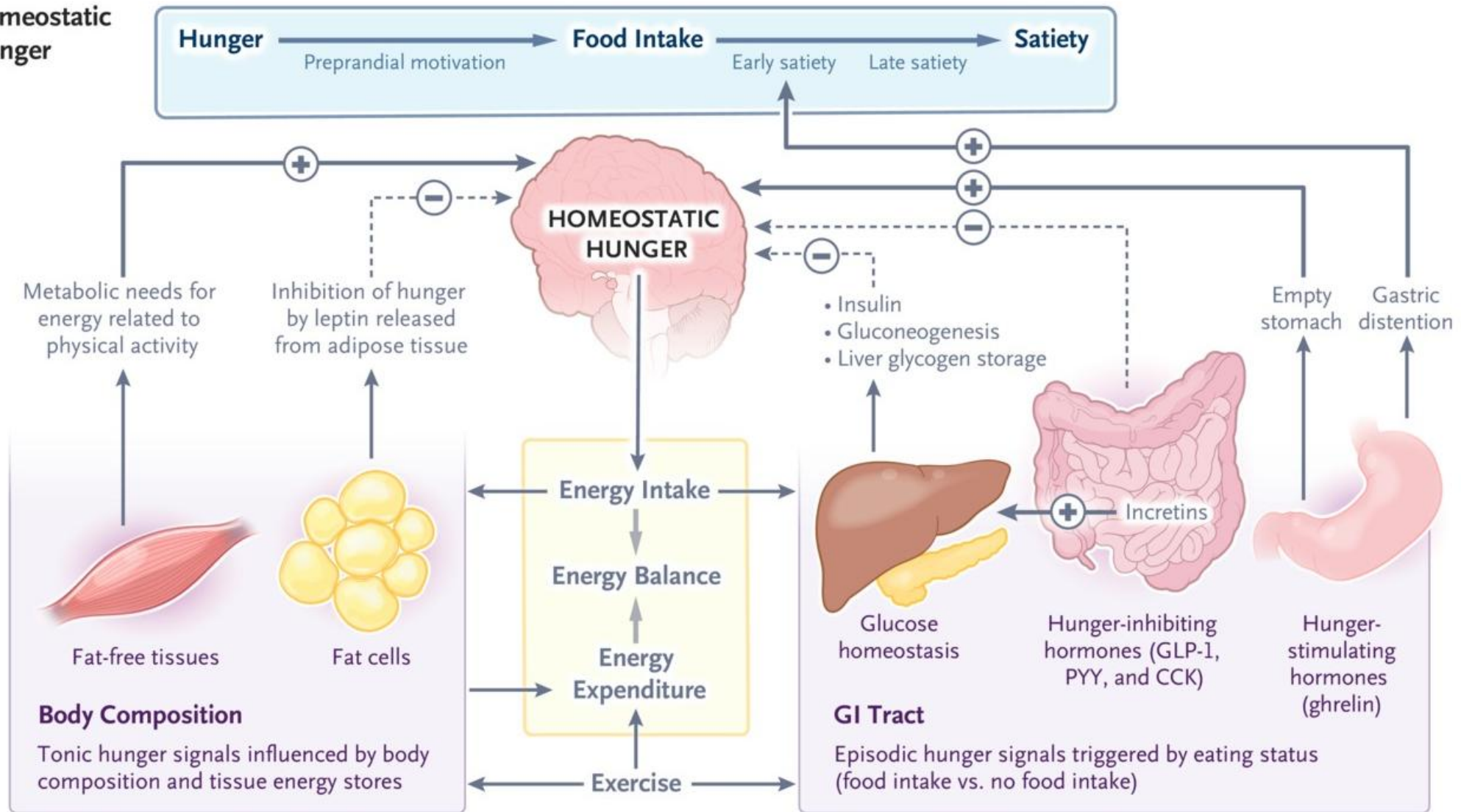
- Early morning feast (suhoor)
- Fajr and then sleep
- No fluids for up to 12 hours
- Eat at iftar (A lot)- can't change the time
- Maghrib, Isha and eat again
- Sleep soon after eating
- Sleep deprived

All for Allah

Hunger vs Appetite

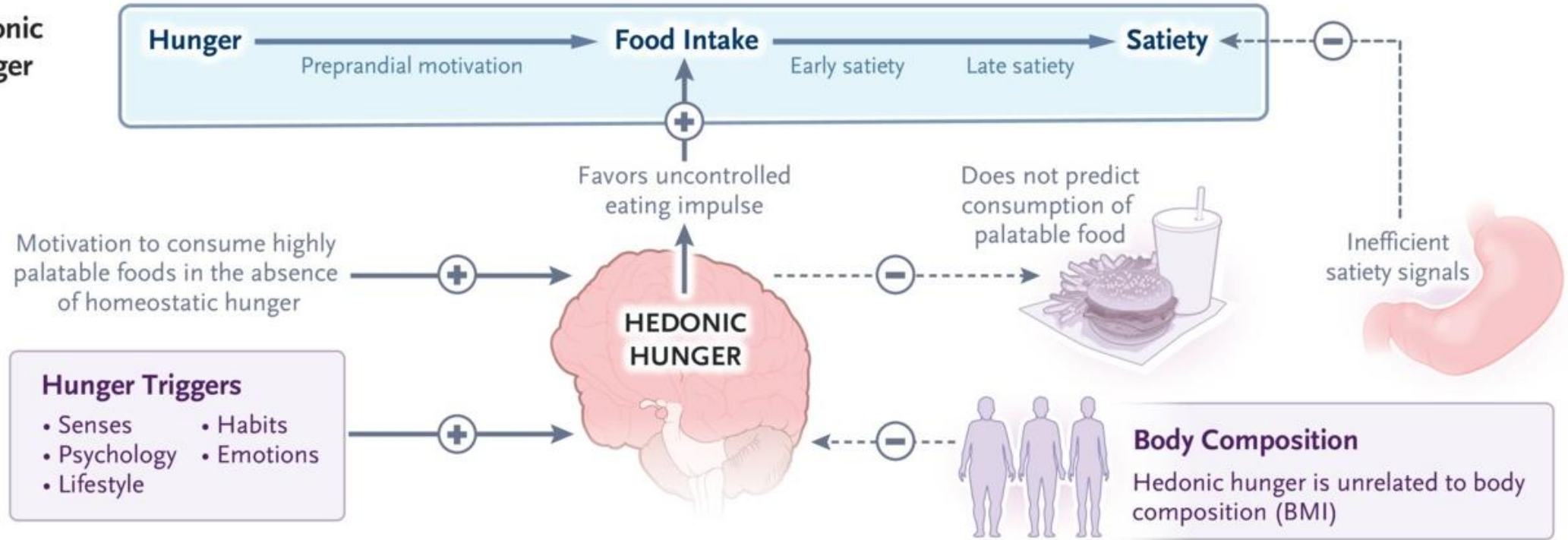
- Hunger: physiological impulse to eat, triggered by starvation (acute energy deprivation) in order to maintain energy balance
- Appetite: or *hedonic* hunger, food intake driven by pleasure rather than metabolic necessity
- In either situation eating requires exquisite coordination between the brain and the gut -> functionally hunger can be characterised through three distinct interconnected mechanisms:
 - Homeostatic
 - Hedonic
 - Microbiota-driven

A Homeostatic Hunger



Mechanisms Controlling Hunger and Satiety

B Hedonic Hunger



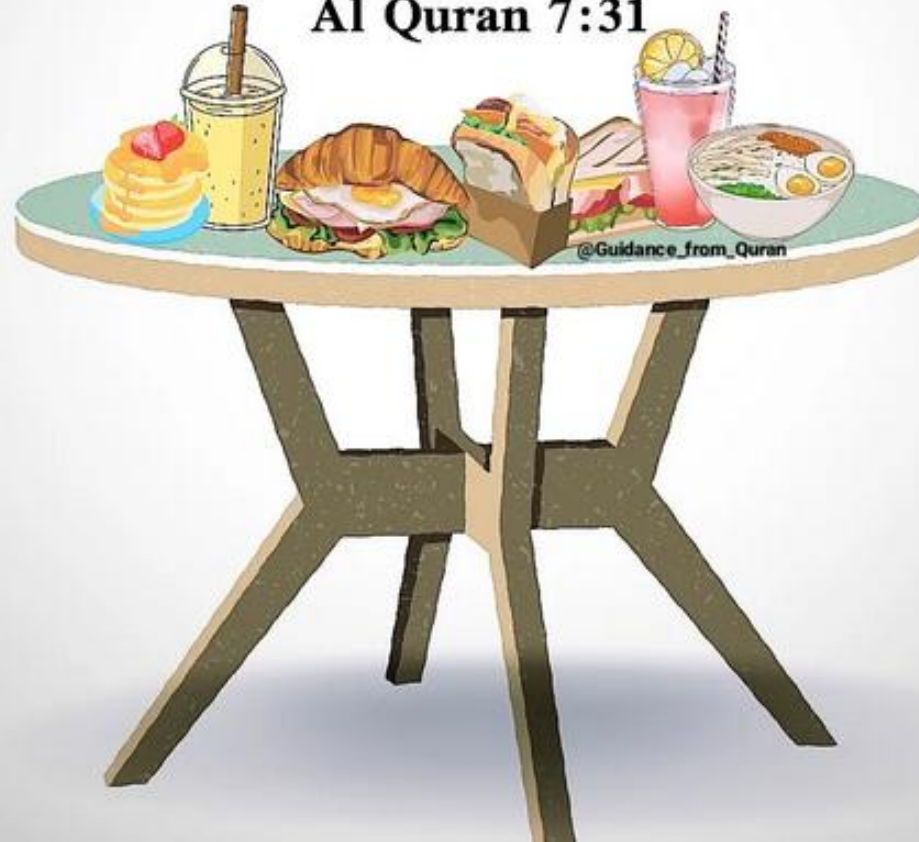
Do not binge eat!

وَكُلُوا وَاشْرَبُوا وَلَا تُسْرِفُوا إِنَّهُ لَا يُحِبُّ الْمُسْرِفِينَ

and eat and drink, but be not excessive. Indeed,

He likes not those who commit excess.

Al Quran 7:31



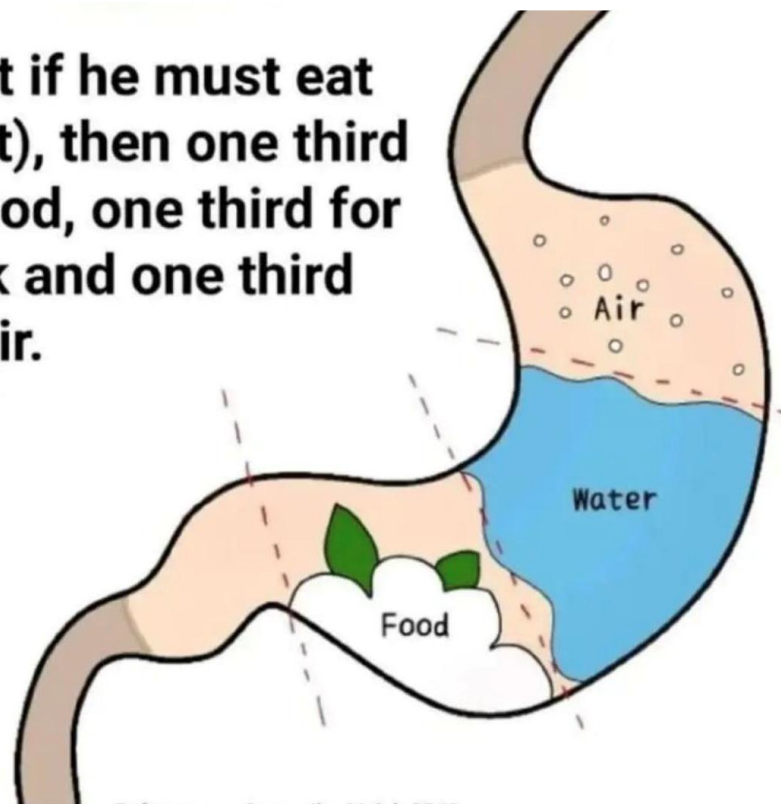
The one third rule



The Messenger of Allah ﷺ said,

“The son of Adam cannot fill a vessel worse than his stomach, as it is enough for him to take a few bites to straighten his back.

**...But if he must eat
(fill it), then one third
of food, one third for
drink and one third
for air.**



Reference : Sunan Ibn Majah 3349
In-book reference : Book 29, Hadith 99
English translation : Vol. 4, Book 29, Hadith 3349

Common symptoms: Reflux/GORD

- Fasting can alter circadian rhythm and stomach acid secretion
- Main factor is lifestyle and diet related
- Stomach distention:
 - Stimulates acid reflux
 - Worse with late night heavy meals (stomach produces acid at a time when you're usually asleep)
 - Spicy food
 - Lack of fibre

What can be done?

- Suhoor:

- Wake up early, drink plenty of water at least 15 min before eating
- After eating stay upright for at least 30-60 mins
- If you need to take PPI (e.g. Nexium) take on empty stomach 15-30 mins before meal

- Iftar:

- Take dates and beverage/water for thirst and preferably don't eat straight away
- Maghrib
- Eat in moderation
- If need to take acid suppressants then liquid or chewable tablets far more effective than PPIs
- Sleep on right side
- Avoid smoking, caffeine and carbonated beverages
- Food recommendation: dietician

Common symptoms: constipation

- Common in Ramadan
 - Changes in lifestyle factors that affects gut motility
 - Change in gut microbiome
- Gastro-colic reflex
 - Usually occurs within one hour of eating
 - Need to pay attention- if opportunity missed then leads to constipation
- Major factors in maintaining gut motility:
 - Water
 - Fiber intake

IBD and Ramadan

- Studies show no significant difference in self-reported symptoms of Crohn's disease or Ulcerative colitis before and after Ramadan and no correlation between number of days fasted & disease severity
- Fasting poses no risk to patients with mild or uncomplicated IBD
- Fasting does not pose risk to develop or flare of IBD



Chronic Liver disease

- Improvement in liver enzymes, but reduced albumin and protein levels in patients with fatty liver disease (MASLD). Fasting can be considered in early disease
- Improvement in BMI, fasting cholesterol and in some cases systolic blood pressure
- For chronic liver disease depends on stage – fasting high risk in advanced liver disease (Child Pugh B, C; post liver transplant)
- Reduced protein caloric intake associated with worsening disease outcomes
- Pre-Ramadan patient counselling and close follow-up suggested

Summary

- Ramadan has lots of benefits to gut health
- Common symptoms we experience most often due to lifestyle or dietary choices
- General tips:
 - Drink plenty of water, 2-3L per day, small sips over a long period
 - Avoid fizzy drinks that cause bloating
 - Avoid caffeine- as it is a diuretic & affects gut motility
 - **Avoid over-eating-** acid reflux. **Eat for hunger not for appetite**
 - **Avoid foods high in fat-** take longer to digest, cause nausea
 - **Don't sleep on full stomach**
 - **Eat more fibre-** reduces bloating and constipation
- Consult your doctor if medication modification needed, timing of meds

Acknowledgements

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Thank you for your attention



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