

Review of: ""Mealtime Hydration's Impact on Digestion": An Editorial Article"

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Mealtime Hydration's Impact on Digestion

This article raises an important issue, but there are numerous factors that must be considered when interpreting the results; thus, it should be regarded as a hypothesis-generating exploration of human digestion physiology. One aspect highlighted in this article review is the information regarding the digestive physiology relevant to humans with a monogastric digestive system. Several factors, such as food consumption, water intake, timing of water consumption, meal temperature, and dietary composition, impact gastric physiology. The conclusions drawn from the collection of information on intragastric factors may guide nutritionists, yet extra-gastric factors, such as environmental temperature, which vary between tropical and temperate zones, can also influence digestive function. Therefore, considering the interplay among temperature, food texture, and digestion is crucial. Even when caloric content and total volume are matched, gastric emptying times may differ due to compositional differences among people living in different zones. The physiological mechanisms underlying alterations in digestive function among individuals exposed to high temperatures remain unclear. These results indicate an inconsistency in conclusions regarding the interaction effects of nutritional composition and environmental temperature on digestive function between people living in tropical and temperate zones. It is believed that during high temperatures, an increase in the rate of liquid flow from the stomach leads to increased water absorption in the lower gastrointestinal tract to maintain optimal body temperature. This increase in total body water helps minimize the effects of heat stress, but it is uncertain whether the flow rate of digesta from the stomach will sustain sufficient nutrients to support potentially increased body utilization. Therefore, it is essential to study digestive function in humans living in different ambient temperature zones.

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