OBJECTIVE: Identify most common methodologies used to examine all attributes of hunger and appetite within the adult human population.

• Separate examination of homeostatic and hedonic hunger promoted and supported by the research community’s assumption that hedonic influences override homeostatic principals3,6,7
• Whilst homeostatic hunger is regulated by hypothalamus, control of eating behaviour extends to other brain regions corresponding with attention, emotion and memory, reward, and cognitive control1
• Increasing support for examining homeostatic and hedonic systems mediating hunger and appetite in tandem; individual neuronal pathways within the two systems do not operate independently3 and are both activated to varying degrees in any given situation associated with food intake7
• Broad range of methods to assess and define both homeostatic and hedonic aspects of hunger and appetite; how is this topic currently being defined and examined within academia?

CONCLUSIONS

• Studies using methodologies associated with homeostatic energy balancing principles are greater in number and often do not include cognitive influences also known to be associated with hunger and appetite in their analysis.
• The use of select approaches in different studies potentially leads to an incomplete understanding and reporting, and could be adversely impacting public policy and other areas addressing associated mental and physical conditions.
• Depending on how hunger is defined and what methods are used, study results are likely to be an incomplete account of what makes up perceived hunger and appetite.
• A more holistic understanding of individual experiences and perceptions of hunger and appetite as well as what influences these perceptions, can potentially provide a more solid platform of integrated definitions and measurements from which to address associated policy and treatment questions.
• By providing an overview of the range and limitations in how research is currently conducted, results can inform areas where further reviews or research may be necessary.

REFERENCES