Chewing It Over: Does Chewing Gum Affect Appetite?



Sophie Hannon | BSc Nutrition | Dept. of Sport, Health Sciences & Social Work | Supervisor: Dr Sarah Hillier

Approximately 43% of the UK population regularly chew gum¹. Previous research suggests that chewing gum may help control short-term food intake through satisfying appetite^{2,3}.

AIM

To investigate the effects of chewing different flavoured gum on self-reported appetite ratings and food intake of an *ad libitum* (as much as desired) breakfast.

Am I hungry?

METHODS

11 participants @ OxBCNH





3 separate visits: chewing peppermint gum, strawberry gum & no gum (control) for 15 minutes

Ad libitum breakfast



Appetite ratings taken before condition, after the condition but before breakfast & after breakfast

FINDINGS

Results indicated that chewing peppermint gum significantly reduced subjective hunger ratings compared to control, however, this was not reported for strawberry gum. Desire to eat was significantly reduced in the strawberry condition versus the control. No difference was reported between each condition for subjective fullness and prospective food consumption ratings.

Food intake did not differ during the *ad libitum* breakfast between each condition.

CONCLUSION

The current study suggests that chewing gum before breakfast reduces subjective hunger and desire to eat ratings but has no effect on food intake during breakfast. Thus, there is reasonable evidence to suggest that chewing gum might aid in appetite regulation.

REFERENCES

- 1. Statista. (2018). 'Chewing Gum Market Statistics and Facts'. Available at: https://www.statista.com (Accessed: 4th April).
- 2. Hetherington, M.M. and Boyland, E. (2007). 'Short-term Effects of Chewing Gum on Snack Intake and Appetite'. Appetite, 48, pp. 397-401, DOI: 10.1016/j.appet.2006.10.001.
- 3. Hetherington, M.M. and Regan, M.F. (2011). 'Effects of Chewing Gum on Short-term Appetite Regulation in Moderately Restrained Eaters'. *Appetite*, 57(2), pp. 475-482, DOI: 10.1016/j.appet.2011.06.008.
- 4. De Graaf, Q. (Unknown). Unsplash [Photograph] with permission.