



Letter to Editor on “Taste Changes after Bariatric Surgery: a Systematic Review”

Saeed Shoar^{1,2}  · Fatemeh Alavi Naini³ · Naseem Athari¹ · Habibollah Mahmoodzadeh²

Published online: 8 November 2018
© Springer Science+Business Media, LLC, part of Springer Nature 2018

Dear Editor,

We read with great interest the recently published article titled “Taste Changes after Bariatric Surgery: a Systematic Review” in *Obesity Surgery* journal. The authors have performed an extensive literature review to gather published data of 23 animal and 41 human studies on taste change after bariatric surgery [1]. The topic is very interesting and efforts still continue to find a meaningful association between post-bariatric taste change and weight loss.

Although the authors have established a comprehensive literature review, they have later simplified their data synthesis to just a narrative review of the included studies, and explain the huge heterogeneity in the literature as the reason. Considering the different domains within the included articles, which are human vs. animal studies, gustatory/olfactory vs. taste perception, and restrictive vs. bypass procedures, it is extremely difficult to draw a conclusion from this narrative review. This is even more noticeable in the backdrop of a simple qualitative data presentation.

At the bottom line, this review comes to a conclusion that the increased sensitivity to sweet taste and fatty stimulants, and the subsequent lower preference for sweet foods, might be the reason for long-term durability of weight loss after

bariatric surgery. While such a conclusion is per se premature due to the qualitative nature of this narrative review [2], one might question how the authors can even hypothesize about the effect of increased sensitivity to sweet taste on the long-term maintenance of weight loss following bariatric surgery, considering the fact that most of the data extracted from the included studies are short-term [3], or at the very best, mid-term [4]. Moreover, as the authors have repeatedly presented in the sub-domains of this review [1], post-operative changes in taste perception have steadily diminished over the follow-up period [4, 5]. This can simply undermine the association between post-bariatric taste change and weight loss durability.

In summary, we appraise the authors for their extensive effort in collecting the available data in the literature on post-operative taste/olfactory changes and food preference following bariatric surgery. However, we believe that the conclusion of this article does not clearly reflect the available data on the relationship between post-bariatric taste change and weight loss, and the question continues to remain unanswered.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval This article does not contain any studies with human participants or animals performed by any of the authors.

Informed Consent Does not apply.

References

1. Ahmed K, Penney N, Darzi A, et al. Taste changes after bariatric surgery: a systematic review. *Obes Surg*. 2018;28(10):3321–32.

✉ Saeed Shoar
ssht84@yahoo.com

¹ Clinical Research Scholar and Scientist, ScientificWriting Corporation, Houston, TX, USA

² Imam Khomeini Complex Cancer Institute, Division of Surgical Oncology, Department of Surgery, Tehran University of Medical Science, Tehran, Iran

³ Baylor College of Medicine, Houston, TX, USA

2. Bearman M, Dawson P. Qualitative synthesis and systematic review in health professions education. *Med Educ.* 2013;47(3):252–60.
3. Van Vuuren MAJ et al. Taste, enjoyment, and desire of flavors change after sleeve gastrectomy-short term results. *Obes Surg.* 2017;27(6):1466–73.
4. Erdem N, Oner C. Taste sensory changes in morbidly obese patients who are applied laparoscopic adjustable gastric band. *Obes Facts.* 2016;9:275–6.
5. Coluzzi I, Raparelli L, Guarnacci L, et al. Food intake and changes in eating behavior after laparoscopic sleeve gastrectomy. *Obes Surg.* 2016;26(9):2059–67.