

COVID-19 have olfactory/gustatory dysfunctions, they may be more vulnerable to the tooth demineralization process due to the changes in their smell/taste perception and food preferences. Therefore, during this pandemic, dental healthcare workers (DHCWs) should pay more attention to the patients with COVID-19 who have a history of these chemosensory dysfunctions especially older individuals. In addition, appropriate caries prevention recommendations such as instruction to reduce the amount and frequency of carbohydrate consumption, limiting sugary snacks between meals, having healthy diet that limits added sugars and

acidic foods, chewing sugar-free gum with Xylitol, maintaining regular oral hygiene (brushing teeth with fluoride toothpaste twice a day and flossing), and using fluoride-containing mouthwashes should be given with high priority.¹⁰ Nevertheless, since the evidences are not strong enough on the duration and recovery time of chemosensory dysfunctions in patients infected with COVID-19, and there is not enough information in order to conclude a significant association between chemosensory dysfunctions and tooth demineralization/dental caries, further investigations are crucial to prove this hypothesis.

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References

- Hamedani S, Farshidfar N, Ziaei A, Pakravar H. The dilemma of COVID-19 in dental practice concerning the role of saliva in transmission: A brief review of current evidence. *Eur Oral Res* 2020; 54(2): 92-100.
- Tong JY, Wong A, Zhu D, Fastenberg JH, Thau T. The prevalence of olfactory and gustatory dysfunction in COVID-19 patients: A systematic review and meta-analysis. *Otolaryngol Head Neck Surg* 2020; 163(1): 3-11.
- Brandao N, Fornieri MA, Dib C, Di Francesco RC, Doty KL, Wegels RL, et al. Chemosensory dysfunction in COVID-19: Prevalences, recovery rates, and clinical associations on a large Brazilian sample. *Otolaryngol Head Neck Surg* 2021; 164(3): 512-8.
- Paolo G. Does COVID-19 cause permanent damage to olfactory and gustatory function? *Med Hypotheses* 2020; 143: 110086.
- Duffy VB. Causes of smell, taste, and oral somatosensory disorders affecting eating and drinking. In: Meiselman HL, editor. *Handbook of eating and drinking: interdisciplinary perspectives*. Cham, Switzerland: Springer International Publishing; 2020. p. 1281-320.
- Chen L, Zhao J, Peng J, Li X, Deng X, Geng Z, et al. Detection of 2019-nCoV in saliva and characterization of oral symptoms in COVID-19 patients. SSRN [Online]. [cited 2020 Mar 14]; Available from: <https://ssrn.com/abstract=3556665>
- Farshidfar N, Hamedani S. Hyposalivation as a potential risk for SARS-CoV-2 infection: Inhibitory role of saliva. *Oral Dis* 2021; 27(Suppl 3): 750-1.
- Mattes-Kulig DA, Henkin RI. Energy and nutrient consumption of patients with dysgeusia. *J Am Diet Assoc* 1985; 85(7): 822-6.
- Featherstone JD. Dental caries: A dynamic disease process. *Aust Dent J* 2008; 53(3): 286-91.
- American Dental Association (ADA). Caries Risk Assessment and Management [Online]. [cited 2021 Jun 9]; Available from: URL: <https://www.ada.org/en/member-center/oral-health-topics/caries-risk-assessment-and-management>