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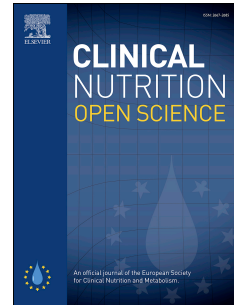
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Editorial Special section “Sensory troubles and altered eating: towards gastronomic solutions for patients, caregivers and professionals.

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Contributions to this special issue of Clinical Nutrition Online were invited from speakers at the Second International Symposium on Altered Taste held at the Institut Paul Bocuse in June 2022. Altered taste is employed as an umbrella expression that highlights a shift or change in the perception of food flavour and eating behaviour that has a negative impact on health. In a wide variety of conditions and throughout the life-course, altered taste may be a life-changing health concern, but it is commonly overlooked and rarely raised as a clinical issue or seen as a condition warranting specialist attention. The Symposium was novel in drawing attention to altered taste as a concern for health care providers and in bringing gastronomy into conversation with clinicians, sensory scientists, providers and patients. The contributions to the special edition reflect this diversity and include i) traditional research papers, as well as ii) examples ‘from the field’ in how this knowledge is translated by users including chefs, cooks and patients and in the final contribution, iii) how this work may continue with a manifesto for a new international consortium on altered taste (I-eAT).

A first series of papers presents research articles from various disciplines and illustrate various potential approaches to address the needed link between clinical care of patients, sciences dedicated to taste alteration and food solutions

Ellender’s contribution draws attention to the need for new approaches and ways to investigate altered taste. Drawing on smell and taste changes with cancer as a case in point, Ellender notes a lack of attention to extrinsic factors that impact motivation to eat and trigger biophysical processes. He suggests drawing on gastronomy and allied expertise in gastrophysics and psychophysiology. This article offers an interdisciplinary ‘biomedical gastronomy’ as means to develop and improve interventions for people with altered eating in health care settings.

Drareni and colleagues provide an example that could well fit within a new discipline of ‘biomedical gastronomy’ in highlighting flavour solutions for cancer patients. Here, they detail how culinary changes could positively impact food liking in patients undergoing a chemotherapy.

A further example of employing sensory knowledge to address sensory losses is offered by Stephanie Hunter. Starting from the Covid-19 pandemic situation, Hunter *et al.* describe the importance of smell loss and the need to focus on “sensory nutrition”. This area of expertise relies on the use of sensory stimulation to improve diet quality and is illustrated here with the trigeminal sensation of capsaicin.

Trigeminal sensation was a key theme of the Second Symposium as one of the least well-developed areas in applying chemosensory knowledge in gastronomy. On the trigeminal, the contribution of Cayeux *et al.* turns to more general concerns of industry to meet growing consumer demand for more

flavoursome healthy foods and the potential of employing trigeminal components in these areas. Sensory approaches are proposed to screen and assess the performances of compounds eliciting trigeminal sensations as cooling, warm, pungent, tingling.

A second series of papers gathers expertise from the field: from patients, from healthcare foodservice, from chefs.

Altered taste issues extend beyond the clinical encounter in Kelly's paper from the patient perspective, knowledge and solutions are being crowdsourced and shared online. Kelly points to the clinically recognised problem of parosmia – distortions in the sense of smell - and how collective social online spaces have been used to increase health literacy and crowdsource sensory solutions and culinary hints and tips. Kelly's paper also demonstrates a novel approach to researching the lived experience of altered taste in a community that, by virtue of its formation during the COVID-19 pandemic, is leading research by and for the community it serves.

The contribution of Mourier offers an example of a process through which gastronomic and nutritional knowledge is actively combined in delivering better food in a care home setting.

Another contribution 'from the field' offers an example of how knowledge is translated and used in practice through a conversation between a chef and a cook. Coveney's article, as a verbatim account that on reading, makes clear the need for, and value of, expertise and knowledge about altered taste.

In a third and last part, the final contribution to the special edition offers a road map for a consortium on altered taste that sets out key research priorities going forward. The manifesto is offered as a starting point for development rather than a 'set menu' for what happens next.

We finish by noting the timeliness of these contributions and how our concerns overlap with the COVID-19 pandemic. It was rapidly apparent that altered taste, principally related to altered olfaction (smell), was a key symptom of the virus¹. Subsequently it has been estimated 47% of all those infected have experienced sudden onset changes to olfaction (and to a much lesser extent gustation) with between 5-10% experiencing chronic difficulties with altered taste lasting months or years^{2,3}. Recent estimates suggest between 18-30 million people are suffering from olfaction related altered taste post COVID-19⁴. The dramatic increase in numbers of people with altered taste (adding to an already underserved population) has increased awareness of the *impact* of altered taste and presents a unique opportunity to bring attention to experience of *living with* altered taste across multiple contexts and illnesses.

Altered taste is a common problem, and one that has been overlooked in the clinical encounter. However, as with altered taste in other conditions we see a similar pattern in how researchers have directed their attention, even as the scale of olfactory losses with COVID-19 continue to grow. The primary focus has been on explaining the mechanics of smell changes and treatment for smell loss^{5,6,7}. Apart from a few studies, altered taste and *living with* an altered experience of food remains understudied. We hope the new consortium will help in addressing this lacuna.

The proposed manifesto will be featured and discussed at the next Altered Taste Symposium in September 2023. The symposium will also be an opportunity to join I-eAT, International Consortium on Altered Taste. Welcome!

In the meantime, we hope this special edition will contribute to raise awareness on the need to develop gastronomic solutions to compensate for altered taste.

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