

Other journals in brief

A selection of abstracts of clinically relevant papers from other journals.
The abstracts on this page have been chosen and edited by Paul Hellyer.

Oral nutritional supplements may be undeclared...

Coffey N, O'Leary F, Burke F *et al.* Oral Nutritional Supplements: Sugar Content and Potential Dental Implications. *Gerodontology* 2022; **39**: 354–358.

...but many have a high sugar content.

Patients with chronic medical conditions, such as COPD, Crohn's disease, depression, anxiety and cancer, and at risk of malnutrition, may be prescribed Oral Nutritional Supplements (ONS). Patients are encouraged to sip the ONS during the day and the sugar content can be high.

During history taking, patients may not inform their dentist that they are taking ONS, as they do not view them as medication. Dieticians in the UK can prescribe ONS and are influenced by nutritional factors, patient acceptability and hospital contracts in their choice of supplement. Sugar content is largely ignored.

Although the sugar content varies from 7 g per 250 ml to 27 g per 200 ml between different pre-formed drinks (powdered forms, mixed with milk, have similar variations), the calorific value across the brands is broadly similar. Recommendations for dental management include asking the patient specifically about ONS in the medical history and/or diet records, liaising with the dietician or GP to discuss the possibility of prescribing a lower sugar preparation with similar calorific value and considering prescribing high-fluoride toothpaste as well as additional fluoride mouthrinses and/or topical fluoride application.

<https://doi.org/10.1038/s41415-023-5527-0>

Communicating with parents and grandparents

Burgette J M, Lu K C, Dahl Z T *et al.* Factors affecting maternal decision making about grandparents' cariogenic dietary choices for children: A qualitative study. *J Am Dent Assoc* 2022; DOI: 10.1016/j.adaj.2022.10.003.

Family relationships can be difficult.

From semi-structured interviews of 126 parents of children in the USA aged between 3 and 5, relationships with those who had responsibility for their children's oral health were discussed. Most (n = 107) described relationships with grandparents and 85% of those said that the grandparent gave their children cariogenic food. About one-third addressed this issue with grandparents but another one-third didn't. Reasons for not addressing the issue were infrequent contact (once a month is a special time with Grandma so it's not a big deal) and total dependence on the grandparent for childcare. The fear of loss of childcare was greater than the fear of carious teeth. A strong relationship with the grandparent encouraged discussion and resolution of the issue but a weak relationship had the opposite effect.

Parents may need additional assistance with interpersonal skills and conflict resolution. Wider family-based intervention strategies may relieve pressure on the parents alone to address the issues.

<https://doi.org/10.1038/s41415-023-5529-y>

Bulk fill and traditional composites compared

Schoilew K, Fazeli S, Felten A, Sekundo C, Wolff D, Frese C. Clinical evaluation of bulk-fill and universal nanocomposites in class II cavities: Five-year results of a randomized clinical split-mouth trial. *J Dent* 2023; DOI: 10.1016/j.jdent.2022.104362.

Similar outcomes after five years *in situ*.

To overcome polymerisation shrinkage, composite restorative materials have classically been inserted in cavities in 2 mm increments, light curing each stage separately and generally accepted to be time-consuming and technique-sensitive. Newer bulk fill composites, however, can be inserted in one 4 mm layer, thus reducing clinical time. Long-term survival studies of newer materials are unusual.

This study compared two 3M products, FilTek Supreme Universal Restorative and FilTek Bulk Fill, in 60 patients (120 restorations). Patients needing two or more Class II cavities restored were treated by five calibrated dentists following a standardised treatment protocol. Each patient received two restorations, one of each material. After five years, four restorations in each material had failed. The authors conclude that: 'The use of bulk-fill resin composites seems to be an aesthetically, functionally and biologically satisfactory alternative (to universal composite) in the posterior dentition.'

<https://doi.org/10.1038/s41415-023-5528-z>

Communicating with the staff team

Davidson M, Oeppen R S, Hardie J, Al-Gholmy M, Brennan P A. Briefings: what can surgical and minimally invasive interventional teams learn from airline flight deck practice? *Br J Oral Maxillofac Surg* 2022; DOI: 10.1016/j.bjoms.2022.11.006.

Team briefings break down barriers.

Cockpit checklists are compulsory in the aviation industry before, during and after flights. Introducing the principles learnt from such checklists may reduce errors in an operating theatre or dental practice. The principles are facilitated by team briefings and include:

1. Lowering authority gradients – giving nurses and other staff permission to speak up if something doesn't appear right. Whilst leadership is essential, it is equally important that others in the room are not cowered into silence by an authoritarian leadership style. Each team member should be aware of their delegated responsibilities
2. Building situational awareness by discussing 'what if' scenarios and discussing options before a situation deteriorates. Awareness of time passing in a lengthy procedure is important to prevent avoidable tiredness, hunger or thirst
3. Distractions are well recognised and have a negative impact on performance. Local rules to prevent unwanted disturbances while a procedure is being carried out should be in place.

<https://doi.org/10.1038/s41415-023-5530-5>