Let them drink water

Sir, the Scientific Advisory Committee on Nutrition (SACN) has concluded that the recommended average population maximum intake of sugar should be reduced by 50% and not exceed 5% of the total dietary energy intake. The SACN also recommended that consumption of sugar-sweetened drinks should be minimised by adults and children.¹ In 2016 the Soft Drinks Industry Levy aimed to reduce the consumption of sugar-added soft drinks. From 2018, beverage manufacturers will be taxed according to the volume of sugar-sweetened beverages produced or imported. This soda tax encompasses carbonated drinks, non-carbonated drinks, sports drinks and energy drinks. It has been proposed that pure fruit juices and milk-based drinks are excluded from taxation.² The levy directly encourages the producers and importers of sugary soft drinks to refrain from addition of sugar, to promote diet drinks, and to reduce portion sizes for high sugar drinks.

However, with regard to diet drinks while they are not cariogenic and might help to reduce weight, frequent consumption can be a potential risk factor in developing erosive tooth wear as their pH values are very low. Development of new beverages with less erosive potential is still recommended but the high profits on beverages will probably not encourage companies to invest in this. Confronted with the sugar tax, companies mainly seem to invest in the marketing of their currently available sugar-free alternatives with erosive potential.

However, there is a healthy, simple and cheap solution. Just encourage your patients to drink tap water! In New Zealand, caries decreased spectacular when children in primary school only drank water and their parents gave them a healthy lunch.³ The schools were no obstacle for the introduction of 'water only'. Lack of cooperation of parents was the main obstacle.⁴ If their involvement can be increased, the introduction of water-only policies seems an easy way to improve children's health without risk of dental erosion. Promotion of drinking (tap) water could start at very young age. Offering fancy reusable bottles might help the acceptance by children.

D. L. Gambon, H. S. Brand, the Netherlands

1. Tedstone A, Targett V, Allen R and staff at PHE. Sugar Reduction: The evidence for action. Public Health England, 2015.
2. Soft Drinks Industry Levy: 12 things you should know. Available at: [https://www.gov.uk/government/news/](https://www.gov.uk/government/news/soft-drinks-industry-levy-12-things-you-should-know)

soft-drinks-industry-levy-12-things-you-should-know (assessed 28 August 2017).

3. Thornley S, Marshall R, Reynolds G, Koopu P, Sundborn G, Schofield G. Low sugar nutrition policies and dental caries: A study of primary schools in South Auckland. *J Paediatr Child Health* 2017; **53**: 494–499.
1. Mansoor O, Ali R, Richards R. Regional survey supports national initiative for 'water-only' schools in New Zealand. *Aust N Z J Public Health* 2017 doi: 10.1111/1753-6405.12705.

DOI: 10.1038/sj.bdj.2017.1008

Patient safety Swallowed objects

Sir, I recently came across an article regarding a lady who ingested a piece of orthodontic archwire during her treatment ten years previously. She had no recollection of this occurring but presented to hospital with abdominal pain as the archwire had pierced her intestines in multiple places and she required emergency surgery to remove the 7 cm piece of wire.¹

I wondered about the chances of a patient swallowing brackets or small pieces of arch wire during the process of orthodontic treatment and our position as clinicians. A similar scenario would be a patient inhaling or swallowing an endodontic file but it is well known that defending the dentist in such a case is very difficult if no rubber dam is placed. Obviously rubber dam placement while undergoing bond-ups or wire changes for a patient is not possible, so if this were to occur, in what position would the provider find themselves if the patient decided to pursue litigation?

Jane Merivale from Dental Protection offered me the following advice which I would like to share: 'sit the patient in an appropriate position to protect the airway and allow you the best possible vision and dextrous control of the wires and brackets. It is always important to keep detailed contemporaneous notes and if adverse event materialises such as the swallowing of a small object, then this should be thoroughly documented and the patient advised as per the usual protocol to have a chest X-ray to identify the location of the object and for necessary steps to be taken for retrieval'.

I am grateful for this advice and would be interested to hear other readers' thoughts or experiences on the matter.

V. A. Argent, by email

1. Knight V. Piece of dental braces removed from woman's intestine after 10 years. *CNN*, 7 August 2017. Available at: <http://edition.cnn.com/2017/08/07/health/dental-braces-intestine-10-years-study/index.html> (accessed 9 August 2017).

DOI: 10.1038/sj.bdj.2017.1009

Anaesthesia

A sense of balance

Sir, I would like to thank Hopman and colleagues for a thoroughly illuminating review on the potential neurotoxicity of dental local anaesthetics (2017; **223**: 501–505). They highlighted a worrying legal precedent in the Netherlands in which a dentist's administration of articaine LA was linked to a plethora of medical complaints, for which no organic cause could be found after investigation by medical colleagues. It seems that in this legal case association was somehow proved and taken to be causation; however, I respectfully disagree with the author's assertion that written consent should be obtained before administration of a local anaesthetic. The authors themselves state that complications from dental LA administration are 'very rare' and cite estimations for persistent paraesthesia in the range of 1:160,571¹ to 1:4,156,848.² Thankfully, we have only just been relieved of the useless and scientifically unsound burden of having to record LA batch numbers within individual dental records.³ I would urge my colleagues in the dental community to ensure that we fight for a sense of balance and proportionality in these matters, otherwise a clear path to madness lies. Where exactly will we allow the line to be drawn for us? Will there be an expectation for written consent before a scale and polish? Or perhaps written consent before we expose an intra-oral radiograph, after all there may be a 1:1,000,000 risk⁴ of a radiation-induced stochastic genetic mutation, from every bitewing/periapical, causing a fatal malignancy? If we are to start producing half a dozen written consent forms before every examination and treatment session, this will lead to unnecessary anxiety, alienating patients and the likelihood that important dental procedures are refused – leading to more serious dental and medical problems. This cannot be in anyone's interest and especially not the patients'.

A. Mehdizadeh, by email

1. Pogrel M A, Thamby S. Permanent nerve involvement resulting from inferior alveolar nerve blocks. *J Am Dent Assoc* 2000; **131**: 901–907.
2. Garisto G A, Gaffen A S, Lawrence H P, Tenenbaum H C, Haas D A. Occurrence of paraesthesia after dental local anaesthetic administration in the United States. *J Am Dent Assoc* 2010; **141**: 836–844.
3. Dental Protection, Riskwise UK 36.
4. Whaites E, Drage N. *Essentials of dental radiography and radiology*. Fifth edition. p 67. Churchill Livingstone Elsevier, 2013.

DOI: 10.1038/sj.bdj.2017.1010