

This triggered a debate in my head and it occurred to me that as dentists I feel we have a duty to inform patients of this and offer an alternative if available. Consequently, do we universally ask all patients prior to an extraction if they consent for a product containing gelatin to be used to achieve haemostasis?

This debate was recently brought up as part of our special care dental general anaesthetic newsletter to dentists and nurses. Sixteen people responded and 87.5% voted to have this question added to our consent forms, indicating we should consider changing our practice.

There is a lot of conflicting information out there regarding the subject and a variety of opinions especially when products are being used for life saving medical reasons or if no alternative is available.<sup>1</sup>

Each faith has its own rules and I am certain there would be variations within each as well making it hard to have a clear answer. Furthermore, as health professionals we often have difficulty obtaining information relating to the origins of the ingredients in the materials we use, and is it practical to do this for each and every material?

Food for thought. Vegan gummy bear anyone?  
*J. Thakrar, London, UK, by email*

## References

1. Eriksson A, Burcharth J, Rosenberg J. Animal derived products may conflict with religious patients' beliefs. *BMC Med Ethics* 2013; **14**: 48.  
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## Dental amalgam

### Illogical dental amalgam policy by WHO and UNEP

Sir, Fisher *et al.* have briefly commented on mercury-free materials for dental restoration.<sup>1</sup> Dental amalgam, an alloy of mercury and silver, has been in use for over 150 years for the treatment of dental cavities, due to its excellent mechanical properties and durability.<sup>2</sup>

Dental amalgam toxicity has been investigated by reliable research institutes including US FDA (Food and Drug Administration),<sup>3</sup> European Commission,<sup>4</sup> and the American Dental Association.<sup>5</sup> They have concluded that dental amalgam is regarded as safe.<sup>3,4,5</sup>

However, in the Minamata Convention, dental amalgam is the only mercury-added material subject to a phase-down.<sup>1,6,7</sup> All other mercury-added materials addressed in the Convention are subject to a ban or

phase-out. The conclusion is based on aiding mercury pollution policy.

However, according to the data by United Nations Environment Programme (UNEP) which has initiated the dental amalgam policy,<sup>8</sup> a large part of produced mercury has been used in small scale artisanal gold mining which has been seriously causing mercury pollution – 1,735 tons per year.<sup>8</sup>

The global mercury supply in 2015 was in the range of 3,850–4,400 tonnes.<sup>8</sup> Therefore, the mercury pollution has been largely from gold mining. Natural emissions, such as those from volcanic activity or forest fires, are estimated to be at around 87 tonnes per year in 2010.<sup>2</sup>

Releases into the air from dental practices are estimated to be at around 19 tonnes per year.<sup>2</sup> In other words, WHO and UNEP have made the illogical conclusion on dental amalgam policy.

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## References

1. Fisher J, Selikowitz H S, Mathur M, Varenne B. Strengthening oral health for universal health coverage. *Lancet* 2018; **392**: 899-901.
2. European Commission. Mercury from dental amalgam. Available at [https://ec.europa.eu/health/scientific\\_committees/docs/citizens\\_dental\\_amalgam2\\_en.pdf](https://ec.europa.eu/health/scientific_committees/docs/citizens_dental_amalgam2_en.pdf) (accessed February 2018).
3. USA FDA. About Dental Amalgam Fillings. Available at <https://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/DentalProducts/DentalAmalgam/ucm171094.htm> (accessed February 2018).
4. European Commission. Final Opinion on Dental Amalgam. Available at [https://ec.europa.eu/health/scientific\\_committees/consultations/public\\_consultations/scenihnr\\_consultation\\_24\\_en](https://ec.europa.eu/health/scientific_committees/consultations/public_consultations/scenihnr_consultation_24_en) (accessed February 2019).
5. American Dental Association. Dental Amalgam: What Others Say. 2016. Available at <https://www.ada.org/en/press-room/press-kits/dental-fillings-press-kit/dental-amalgam-what-others-say> (accessed February 2019).
6. FDI World Dental Federation. Dental amalgam: The Minamata Convention on Mercury. Available at <https://www.fdiworlddental.org/what-we-do/advocacy/dental-amalgam> (accessed February 2019).
7. World Health Organisation. The Minamata Convention and the phase down of dental amalgam. 2018. Available at <http://www.who.int/bulletin/volumes/96/6/17-203141/en/> (accessed February 2019).
8. United Nations Environment Programme. Global mercury supply, trade and demand. 2017. Available at [https://wedocs.unep.org/bitstream/handle/20.500.11822/21725/global\\_mercury.pdf?sequence=1&](https://wedocs.unep.org/bitstream/handle/20.500.11822/21725/global_mercury.pdf?sequence=1&) (accessed February 2019).

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## Sugar tax

### Sugar off the shelves

Sir, it is with great interest we write in response to the *BDJ* November 2018 editorial titled 'Sugar; tax and reformulation'. As highlighted in the article, the introduction of the sugar tax in April of 2018 has led to a considerable reduction in the consumption of high sugar containing beverages.<sup>1</sup>

Although this is a start in the changes we can make, the outcome gives us insight into only one element in the war against sugar.

There are other important ways in which the population's consumption patterns can be shaped. In recent years, due to the influence of concerned campaigners, supermarkets have actioned policies to lower the amount of unhealthy foods at checkouts.<sup>2</sup>

A recent UK study has collected data from 30,000 households and compared their consumption of sugary snacks before and after these changes were made in major UK stores.

The most noteworthy results were that around 17% less sugary snacks were brought home directly after the policies were put into place. In addition to this, 76% fewer sweet snacks including chocolate and crisps were bought and eaten immediately after checking out from the stores with checkout policies.<sup>2</sup>

These alterations have potential in subtly shaping consumer habits and diets. The future could see the replacement of sugary foods with healthier alternatives at checkouts. Furthermore, supermarket layouts can be extended to other shelves – by placing foods and snacks with high sugar content on higher shelves, it means they are out of reach and sight of young children.

With the government's endeavour to reduce obesity amongst youngsters in the next decade, they may consider a permanent ban on sugary snacks at checkouts.<sup>3</sup>

The pressures that supermarkets will face to make changes might not only affect obesity but also caries incidence in the UK. Although the sugar tax appears to be promising, this may lead to expansion of tariffs to other areas as mentioned in another *BDJ* editorial.<sup>4</sup>

We expect there to be some more interesting findings in the future as new transformations are brought into action and hopefully a reduction in decay rates in children.

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## References

1. Hancocks S. Sugar tax and reformulation. *Br Dent J* 2018; **225**: 905.
2. Ejlerskov K T, Sharp S J, Stead M, Adamson A J, White M, Adams J. Supermarket policies on less-healthy food at checkouts: Natural experimental evaluation using interrupted time series analyses of purchases. *PLoS Med* 2018; **15**: 12.
3. Banning sweets at checkouts 'works'. BBC News. Available at <https://www.bbc.co.uk/news/health-46591181> (accessed February 2019).
4. Hancocks S. We are what others eat. *Br Dent J* 2017; **222**: 907.

DOI: 10.1038/s41415-019-0039-7