

## DEFLUORIDATING WATER

Sir, fluorosis is an important clinical and public health problem in several parts of the world where natural levels of fluoride are high, with global prevalence of about 32%.<sup>1,2</sup> Water fluoride levels in India range from 2–29 ppm, whereas the permissible level in drinking water according to the WHO standard is 1.0–1.5 ppm.<sup>3</sup>

The conventional methods of fluoride removal include: precipitation, ion-exchange, reverse osmosis and adsorption but all these methods are relatively expensive.<sup>2</sup> Consequently, there is continuous research into a relatively inexpensive, easy and faster method of defluoridation. The use of natural products has recently been rediscovered by water-supply technologists and is being further developed with more scientific rigour.<sup>1</sup> Recently, researchers in India have developed a filter system based on a medicinal herb, which can quickly and easily remove fluoride from drinking water. *Tridax procumbens* – a medicinal herb has been tested for the extraction of heavy metals from water. Singanan

has suggested this medicinal herb as a biocarbon absorbent for fluoride.<sup>4</sup> When this herb is loaded with aluminium ions it is possible to create a safe biocarbon filter that readily absorbs fluoride ions from water. These trials show that it takes just three hours to remove 98% of fluoride with just 2 g of the biocarbon filter, which might provide an inexpensive way to defluoridate water in regions where the natural level of this mineral is high including in India, China, Sri Lanka, the West Indies, Spain, Holland, Italy, Mexico, North and South America.<sup>4</sup>

N. Anand Ingle, H. Vardhan Dubey,  
N. Kaur, A. Nagpal, by email

1. Kharb P, Susheela A K. Fluoride ingestion in excess and its effect on organic and certain inorganic constituents of soft tissues. *Med Sci Res* 1994; **22**: 43–44.
2. Puthenveedu Sadasivan Pillai Harikumar, Chonattu Jaseela, Tharayil Megha. Defluoridation of water using biosorbents. *Natural Science* 2012; **4**: 245–251.
3. Anurag Tewari, Ashutosh Dubey. Defluoridation of drinking water: efficacy and need. *J Chem Pharm Res* 2009; **1**: 31–37.
4. Malairajan Singanan. Defluoridation of drinking water using metal embedded biocarbon technology. *Int J Environmental Engineering* 2013; **5**: 150–160.

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considered together the results for both questions suggest that all professional bodies associated with professional investigations should be aware of the potentially severe psychological effects on the dentist. They also suggest that there are grounds for early referral to appropriate support services in such circumstances.

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1. Renshaw J. Dentist suicides. *Br Dent J* 2013; **215**: 593–594.

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## We live longer than politicians

Sir, the debate about the apparently high suicide rate of dentists is nothing new and just as inaccurate now as it has always been. Public perception, for as long as I can recall, is that dentists have the highest suicide rate of all professions but this is not so and never has been the case.

In the early 1990s the *BDJ* acknowledged the need for a book compiling an index of risks and hazards to the dental team and in its own words to list 'an indication of when to flap or not'. Subsequently a book was published by *BDJ Books: Occupational hazards to dental staff*, which included a review of causes of early death.

I was asked to review this book in 1993 for a professional dental journal, and clearly recall that we fare much better than other health professionals including doctors, opticians and pharmacists, all of whom have (or had?) a higher incidence of suicide, heart disease and cirrhosis than the dental team. My only concern was that even then, these statistics were compiled in 1972.

However, perhaps we should be more gratified to learn that the life expectancy of a dentist is actually marginally better than an MP!

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## FACT OR FICTION

### Horse-chestnut toothpaste

Sir, I attended a school in the early 1960s which had many horse-chestnut trees within the grounds. We were told that during WWII, conkers were collected by staff and students alike for use in toothpaste manufacture.

Was this true? Or were they in fact being used for cordite production, with the toothpaste story a cover? Can any reader enlighten me?

M. Yewe-Dyer, by email  
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