

Coins should be banned from Christmas pudds



New research has confirmed that concealing coins within Christmas puddings is hazardous to teeth and can also pose a fatal choking risk.¹

Researchers at the University of Waterloo, Harbour Dental School, served 40 Christmas puddings each containing one silver coin to 320 students in the university canteen. Ten of the silver coins were 50 pence pieces; ten were 20 pences; ten 10 pences; and ten 5 pences.

Of the 40 hidden coins, 23 caused dental trauma (58%), four were swallowed and one caused a choking incident that was resolved with a

Heimlich manoeuvre. The smaller hidden coins tended to cause the worst injuries, as they were more likely to be bitten into, whereas the 50 pence in particular was quickly detected in the mouth or was seen in the dish of the consumer, peeping out of the custard.

Of the 23 dental traumas, nine were chipped incisors; five were broken fillings (three composite, two amalgam); four were chipped molars; two were broken crowns; one broken bridge; one got trapped under a mature student's partial denture causing damage when she continued to chew; and one got caught up in a drama student's fixed brace.

Lead researcher Dr Pamela Uddin said: 'Secreting currency within Christmas desserts is an age-old tradition, but one that dentists can do without. We hope to spread the word on the risk of baking coins in puddings to take some of the pressure off our colleagues come January.

'If you must add a coin to your pudding, then choose the 50 pence for its visibility and detectability in the oral cavity.'

The students who took part in the study were compensated for their dental injuries with an unlimited supply of *glühwein* in the canteen and free dental treatment from Harbour Dental School's first year students.

1. Uddin P, Sultana A, Peel C, Cherie B. Dental trauma as a result of hidden currency in seasonal desserts. *Dental Explorer* 2017; [in press].

Study examines the gingivae of gummy bears

The edentulousness of the species known as gummy bears (*Ursus jellius*) is an evolutionary mystery which has bamboozled biologists and zoologists since the bears were first discovered in Germany's Black Forest by Professor G. Haribo in 1922. However, we may now finally have a clue as to the origin of their so-called 'gummy' state.

Research reported in the *Journal of Bear Nutrition* indicates that a single gene, GBS-yum16, might be responsible for inducing this feature in the bears. The German scientists, headed by Dr Goldbären, University of Bonn, have linked the gene to the production of gelatinose, a protein-like substance which inhibits tooth formation in the womb by blocking the development of odontoblasts from the dental lamina.

The team suspect the gene may also be responsible for the bouncy nature of the bears and their fruity flavours. It is indeed the flavour of their meat which almost led to their extinction by human hunters in the 1950s. The introduction of a specialised farming technique, known as 'Haribo production' after the discoverer of the species, saved the gummy bear. The technique involves housing the bears in a protected wooded environment away from predators and game-hunters. Food is provided to the bears in pureed form for ease of ingestion.

The GBS-yum16 gene has been found to be present in other members of the bear family but until now has appeared to be quiescent in all but the gummy bear. The team are now investigating whether there is a link between this gene and the abnormally high frequency of conjoined twin births found in this bear compared to its bear cousins, but are keen to stress that further research is required before any such conclusions can be drawn.

