

# DENTAL HEALTH

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**Oral-B**



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# DENTAL HEALTH

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## CHILDREN'S DENTAL HEALTH

# More work needed to tackle tooth decay early

A proactive, holistic and nationwide approach to improving dental health is key to preventing a tooth decay crisis among UK children

Magda Ibrahim

There are times I have cried after taking 20 teeth out of a four-year-old's mouth," says Sandra White, national lead for dental health at Public Health England.

"It is sadness about that child's future, as well as the inequalities around dental decay, and its social and health impacts."

Despite tooth decay being entirely preventable, it is the leading cause of hospitalisation for children in this country, while globally around 486 million children suffer.

In addition to the pain, potential infection and missed school that can go with tooth decay, children are more likely to continue with poor dental health into adulthood.

Although local authorities have a statutory responsibility to improve oral health in their areas, national policy also plays a key role, along with nurseries, schools and consistent evidence-based messaging.

Preventing tooth decay has to start early, says Claire Stevens, NHS consultant in paediatric dentistry at the University Dental Hospital of Manchester.

"One in eight three year olds already has signs of decay, so we need to be promoting this before school," says Dr Stevens, who represents the British Society of Paediatric Dentistry (BSPD). "We need to look at what happens from conception: what advice is a mum getting during pregnancy, are health visitors encouraging families into dental surgeries?"

The BSPD's Dental Check by One campaign, supported by NHS England's chief dental officer, aims to get all children seen by a dentist before their first birthday. The idea is to get youngsters used to an oral health routine from when their first baby teeth come through at a few months old.

Meanwhile, the new NHS Long-Term Plan, launched earlier this month, outlines an ambition to target more young children through its Starting Well core initiative, a programme which initially aimed to improve oral health in 13 priority areas.

"We need to ensure the profession all deliver the same message and ideally you would have supervised brushing in all nurseries," adds Dr Stevens. "Some people will say 'Isn't that a bit nanny state?' and in an ideal world all children



British Society of Paediatric Dentistry

would have their teeth brushed at home twice a day, but that doesn't always happen."

Communities are grasping the nettle, with results that show a difference. In Blackpool, 46 children's centres, nurseries and childminders carry out supervised brushing each day, while primary schools provide fluoridated milk to pupils.

"The children love the supervised brushing and are taking a proactive approach to brushing their teeth at home," says Alan Shaw, public health practitioner at Blackpool Council. In the first two years of Blackpool's programme, tooth decay in five year olds dropped from 42.5 per cent to 24.9 per cent, just above the national average of 23.3 per cent.

In the London Borough of Brent, a similar programme was so successful it has now been extended, with

more than 3,000 children receiving free toothbrush and toothpaste kits and supervised brushing sessions.

Meanwhile, Leicester City Council's Healthy Teeth, Happy Smiles programme pledges to give all children, by the time they are five, five oral health packs, containing toothbrushes, fluoride toothpaste and information for families.

But there is a lack of consistency across UK regions, with national schemes in Scotland and Wales, but no single co-ordinated approach in England.

British Dental Association chair Mick Armstrong explains: "Deep inequalities are persisting and we shouldn't accept that a child born in Pendle will enter primary school with 20 times the levels of decay as one born in Surrey."

"Prevention is better than cure, but we are still waiting for a

dedicated, national effort to end the scandal of childhood decay."

Oral Health Foundation chief executive Nigel Carter agrees there needs to be "a commitment to greater financial investment by the government" for a significant impact. While region-wide schemes such as water fluoridation have cut tooth decay, as well as being widely used in other countries such as the United States, the policy can be controversial despite evidence of its efficacy.

Public Health England's Ms White says the simple mantra "less sugar and more fluoride" is the cornerstone of success.

The body's latest Change4Life campaign focuses on sugar reduction, but is "realistic about encouraging baby steps rather than saying your child can only have carrot batons as a snack", she points out.

However, the introduction of the sugar levy on soft drinks is a positive step and "must now be rolled out to other sugar-based drinks and confectionery", adds Mr Carter.

Experts agree that digital media could prove a major force for delivering the dental health message, as mobile phone usage booms.

The new NHS Digital Apps library includes the Brush DJ dental app aimed at children, and plans are under way to develop content with television doctor and star of *Strictly Come Dancing* Ranj Singh, with a series of videos optimised for social media expected to go live in the coming six months.

Meanwhile, YouTube sensation *The Singing Dentist* parodies popular music with his own dental health-driven lyrics, with the videos receiving up to three million views each.

Augmented reality has also hit the dental sphere, with Colgate launching its Magik toothbrush developed by French firm Kolibree to make brushing more fun using a connected app and games.

Ultimately, improving dental health is about tackling societal inequalities, stresses Dr Stevens. "Geographical differences and socio-economic issues have an impact, with determinants like poverty levels and financial inequalities," she concludes.

"The focus nationally is to raise a generation of children free of tooth decay and we can't just continue to do things in the same way. We have to look at tackling things in a holistic way."

**1 in 4**



five year olds have tooth decay with an average of three or four teeth affected

**£836**

average cost of a tooth extraction in hospital for children aged five and under

**3**

average number of school days missed by children due to dental problems

Public Health England 2018

Public Health England 2018



# Strong teeth and a smile for life

A new generation of care is helping British children develop healthy teeth and a bright future

**C**hildren in the UK are experiencing poor dental health with nearly half of eight year olds having obvious tooth decay in their primary teeth and record numbers of young children having extractions.

Sadly, 35 per cent of 12-year-old children are too embarrassed to smile or laugh due to tooth decay or missing teeth, according to major research aimed at assessing the nation's oral health and providing support to develop the right tools to help tackle the crisis.

Poor dental health in children makes them four times more likely to experience serious decay as a teenager, leading to pain, discomfort and a lack

of confidence. Each child with dental problems misses between two and fifteen days of school a year, according to studies.

But experts are showing that the right support can prevent dental issues and promote good oral teeth-cleaning habits for a healthy and confident smile for life.

Oral-B, leaders in dental healthcare, are collaborating with experts at the University of Leeds; together they have worked with parents and dentists to understand the fundamental and systemic issues that are causing this crisis.

The findings, although alarming, have provided the framework for a response that includes helping parents adopt good home-based dental habits. Dental teams already work very hard to engage in conversations with parents around the importance of good regimes, such as brushing twice a day for two minutes, and paying attention to sugary food and drink intake.

The StrongTeeth programme supports dental teams across the UK and provides them with high-quality resources and insights into how to increase the impact of these conversations.

"Decay levels are coming down slowly, but they are still unacceptably

high," says Dr Peter Day, associate professor in paediatric dentistry at the University of Leeds. "The result is that thousands of children are enduring the discomfort and pain of tooth decay in their primary teeth, making it more likely they will have problems with their adult teeth."

"Having a healthy set of teeth growing up is crucial to children's happiness and wellbeing. The important thing to note is that almost all tooth decay is preventable."

Oral-B, which has been developing oral-health products for more than 65 years, has a mission to reach, educate and support all parents and

encourage good oral-health habits in young people from early on.

"We were shocked when we first learnt about the state of dental health of British children. With many of the issues broadly preventable, Oral-B is partnering with dental professionals to equip parents with advice to help their children develop the right habits and to lay down a strong foundation for good oral health, for a healthy and confident smile for life," says Tom Moody, general manager of Procter & Gamble UK, the company which develops Oral-B.

Working with the University of Leeds, the Strong Teeth programme is based on sound evidence and psychological theory.

"Following this rigorous and collaborative development process, we are working hand in hand with dental professionals, providing over 20,000 of them with simple and engaging educational resources to relay to parents and their kids during routine check-ups," says Ciara McEvoy, brand management Oral-B UK.

"Oral-B has also developed dedicated resources online - [oralb.co.uk/StrongTeeth](http://oralb.co.uk/StrongTeeth) - to support parents with their kids' oral-care

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**Thousands of children are enduring the discomfort and pain of tooth decay in their primary teeth**



With many of the issues broadly preventable, Oral-B is partnering with dental professionals to equip parents with advice to help their children develop the right habits and to lay down a strong foundation for good oral health, for a healthy and confident smile for life

practices. Oral-B is committed to take on this challenge to improve kids' dental care in the UK."

Combined with the right dental-care products, these positive messages are designed to encourage parents to lead the way by learning that decay and poor teeth are mostly preventable with changes to their family's daily oral-care routine.

Establishing good toothbrushing habits should start as soon as the first tooth arrives and should include a first visit to the dentist before the age of one.

"The perception that you get a second chance with your adult teeth is common among some families, but key research shows that if you have decay in your baby teeth, you are far more likely to get decay in your adult teeth," says Dr Day. "Research, which followed children into their teens, found that the state of their teeth, good or bad, was heavily influenced by the habits their parents formed for them as young children."

Oral-B's educational resources, which support dental teams to have these conversations with parents and for families to appreciate the need for good oral-health routines, have been distributed around the UK. Since May 2018, enough leaflets to support more than 300,000 conversations between professionals and parents have been distributed through this programme, sustainably helping to improve families' approach to dental health.

Parents are also provided with informative leaflets and other resources to support them on how

## 12.1%

of children from birth to the age of one received NHS dental care during the 12 months to September 2017

## 46%

of children aged eight in the UK have tooth decay

NHS 2013

## 35%

of children aged 12 are too embarrassed to smile or laugh

NHS 2013

## 4x

more likely for children with cavities in their baby teeth to have cavities in their permanent teeth

J Dent Res 2017

## 2-15 days

of school are missed for each child with dental problems

Public Health England 2017

to make toothbrushing fun, graphics for the correct toothbrushing techniques, and how to include family friends and carers so the routine is consistent. Establishing good routines needs motivation, skills and time management, which are an increasing challenge in modern society.

"Setting up a routine can be challenging, which is why people want to get habits right at the beginning rather than correcting poor habits later on in life," says Dr Day. "Many parents face lots of competition for their time and children are often looked after in family or care settings so it is important to reach out to all these carers."

"Advice and guidance from dentists is great, but shared learning from respected adults in the community and neighbours, who have similar lifestyles, can be very powerful."

"The joy of working with Oral-B is that it can reach the wider community. Providing the information and motivation for good oral habits is important. It is not just about tooth brushing; the healthy eating and drinking messages are vital too."

"The best thing you can do is give your children a happy and healthy smile."

For more information please visit [www.oralb.co.uk](http://www.oralb.co.uk)



## Brushing is fun

Toothbrushing can be fun and Oral-B is at the forefront of product design to foster a positive relationship between children and brushing teeth

It may be a traditional signal for bedtime, but toothbrushing can be a great bonding moment for the family.

Oral-B offers a range of products for children featuring *Frozen* and *Star Wars*-themed electric toothbrushes that can be used from the age of three. The striking colours and designs help make brushing a journey for the imagination.

Youngsters can even time their recommended two minutes' brushing time with a Disney Magic Time app that reveals secret images as they brush and the longer they brush, the more is revealed. Animated with *Frozen* and *Star Wars* characters, and featuring albums with stickers awarded for brushing, these new-generation products make it easier for children to develop the good habits that will last a lifetime.

The *Frozen* and *Star Wars* Kids' Electric Toothbrush is available from major retailers nationwide at RRP £35. The Disney Magic Timer app by Oral-B is free to download from Google Play and the App Store.

From the age of six, children can use the purple or green Oral-B Junior Electric Toothbrush available from major retailers nationwide at RRP £49.99.

The fun and friendly colours and characters put the power of a great clean into little hands and create natural motivation to learn proper oral-care habits.

This is about more than brushing; cleaning teeth is one of the pillars of future health and an understanding of the benefits of a good regime can drive awareness of general health, while helping children gain confidence with strong teeth and a good smile.

## Five top tips

Oral-B smile director **Dr Uchenna Okoye** has five tips that will help parents support their children on their journey to strong and healthy teeth

@druchennaokoye

# 1

### Use the right products

From the age of three, children can use an electric toothbrush with a round brush head as standard practice. This is generally the best option for plaque removal.

# 2

### Help with brushing

Parents should actively brush their child's teeth from the eruption of the first tooth up to at least the age of eight. Of course, the brushing relationship will change over time from a parent-led approach to a more collaborative effort, but parents should maintain this responsibility.

# 3

### Brush twice a day

Parents should ensure they use a fluoride toothpaste of the appropriate strength and amount, such as the Oral-B Kids' Toothpaste range. Brushing should last for two minutes twice a day, using the Oral-B Power Kids' Electric Toothbrush, for children aged three to five, or Oral-B Junior Electric Toothbrush, for children aged six to twelve.

# 4

### Make regular visits to the dentist

Parents should take their children for regular dental check-ups so any problems can be identified early on and extractions can be prevented. It is recommended that parents take children for their first check-up before their first birthday.

# 5

### Switch sugary juices for water

Wait a minimum of 45 minutes to an hour before brushing your teeth after eating anything sweet or acidic as such food and drink soften tooth enamel, and it takes this long for teeth to recover and return to their original state. Water is best once teeth have been brushed. Avoid other drinks; even milk has sugar.



Jose Luis Pelaez/Getty Images

INSTAGRAM

# Assessing the Insta impact on dental care

Those in search of the perfect smile need look no further than Instagram, but the rise of DIY whitening kits and unhealthy attitudes to dental care are worrying industry professionals

Daniela Morosini

## Cons

Instagram is to beauty ideals as fashion magazines and glossy advertisements were before it: sometimes a scapegoat, sometimes an arbiter, but undoubtedly a leader. Countless trends have begun and been shaped by Instagram and selfie culture, with perhaps the most pervasive being the perfect smile.

A cursory scroll through the average Instagram feed will throw up innumerable images of “piano-key” smiles from influencers and celebrities alike, their teeth unbelievably

neat and white. On Instagram, where a megawatt smile appears, a promotional code for an at-home LED whitening kit or charcoal toothpaste is never far behind.

“I used to have people who would come in and say they wanted teeth like Kate Middleton or Margot Robbie,” says Dr Rhona Eskander, a cosmetic dentist. “But now they come and want to look like the filtered version of themselves: teeth very large, very white and very neat.”

The ability to manipulate images on Instagram through the use of so-called “pretty” filters or photo-editing apps such as FaceTune

“

The normalisation of extreme beauty only serves to increase the capacity for dissatisfaction

creates another hard-to-reach standard within the app itself. “The levels of perfection you can reach with one of those filters is startling,” adds Dr Eskander.

“The normalisation of very extreme beauty looks, such as a perfect, faultless smile, only serves to increase the capacity for dissatisfaction with yourself,” says Dr Melissa Atkinson, researcher in body image at the University of Bath. “There’s no way to reach these standards without resorting to extremes and the influence of these images is often subconscious.”

It’s a viewpoint echoed by celebrated cosmetic dentist Dr Uchenna Okoye. “There’s an unhealthy obsession with so-called perfection,” she says. “With these apps, users have access to easy tools to whiten or reshape their teeth in ways that are unrealistic. Because it’s so visual, only the most perfect and pleasing images get shown, whereas we are imperfect people.”

The stars of *Love Island*, especially the crowned winners of the 2018 season Jack Fincham and Danielle

“Dani” Dyer (2.5 million and 3.5 million followers apiece), are often cited as being smile-inspiration for the millennial set. “It’s a very obvious veneers look and I worry that young people are getting a very skewed idea of what is normal,” adds Dr Okoye.

Katherine Ormerod, influencer and author of *Why Social Media Is Ruining Your Life*, says there’s an almost instantaneous reaction within us when taking selfies. “A 2017 study by Yonsei University [in Seoul, South Korea] showed that the actual act of snapping a selfie made people immediately more self-conscious and more aware of how others view them. Respondents also revealed a drop in self-esteem at the very moment of taking the image of themselves,” she says. All of which leaves users especially vulnerable to the hyper-edited images they see after posting their own.

Once the desire to have a perfect smile is so strong that not even FaceTune will scratch the itch, there are two choices: see a dentist or instead why not use the 20 per cent discount code your favourite influencer is offering on an at-home whitening kit? Kits offer an LED device that promises whitening without the sensitivity, while whitening hydrogen peroxide “gels” are easily purchased online.

“These at-home options are so dangerous,” cautions Dr Okoye. “In January, Amazon had to pull sales of their most popular whitening product, as it was found to contain banned chemicals which can be really damaging. The suggested ads and sponsored content on Instagram make it easier for people to find these kits which they might not otherwise.”

Dr Eskander adds: “You have no way of knowing if it’s even safe for you to do the whitening; your teeth and gums might need serious attention first. And that’s without mentioning that the strength could be perilously high.”

Buying a potentially illegal whitening kit – in the European Union, hydrogen peroxide strength is capped at 6 per cent compared with up to 35 percent elsewhere in the world – may sound extreme, but as Ms Ormerod notes: “Beauty standards which were once reserved for celebrities are now showcased by ‘normal’ people.”

The dangers don’t stop there. Dr Eskander says she’s observed a worrying rise in the popularity of so-called “alternative” treatments. “There’s so much misinformation about fluoride that some people are buying non-fluoride toothpastes,” she says. “Charcoal toothpastes are very popular on Instagram and they do not work; likewise, coconut oil pulling does nothing.”

### Influence of Instagram



60%

of users learn about new products through Instagram

Instagram

83%

said a friend’s Instagram post about a brand has influenced their decision to look up the company

Yotpo

30%

have bought something they first spotted on Instagram

Yotpo

25%

have admitted to editing a photo before uploading to social media in order to eliminate or modify so-called “problem areas”

TRUEPIC

55%

of influencers use Instagram Stories for sponsored campaigns

Yotpo

# Pros

**+** Despite worrying trends, Instagram serves as a great resource for both education and connection. After all, it's not just influencers and celebrities giving out cues; many dentists are garnering sizeable followings, too.

"In the past, if someone wanted a recommendation, they'd ask friends who their family dentist was and go to them. But now, it's like Instagram makes us all family dentists," observes Dr Eskander. "I often have patients who have followed me on Instagram for a long time and watch my Instagram stories daily who tell me they already feel like they know me. I like that patients can get a feel for me and my aesthetic before coming in."

Dr Okoye is of a similar view. "I have so many direct messages with people I would not normally have met asking for advice which is positive," she says. "I can educate and point them in the right direction, and I think that's great for the profession and the nation's health as a whole. It's an easy way to educate and share knowledge."

While in the past patients were limited to the dentist in their area, patients can now simply send a direct message or leave a comment for a dentist and get quick, easy information.

"It also helps people get an idea of a dentist's work and vet them based on others' experiences," says Dr Eskander. "It promotes education about how much certain procedures cost, what they look like and how long they take."

If a celebrity dentist can lure people in with a dramatic transformation, they also have the space to pepper in hygiene advice among all the before-and-after images.

"I've always said that if I could invent a floss that whitens teeth, I would never need to advise anyone to floss again; the nation would be obsessed. When a patient comes in wanting me to improve their smile, it provides an opportunity to get them into good habits and oral health provides that foundation," says Dr Okoye.

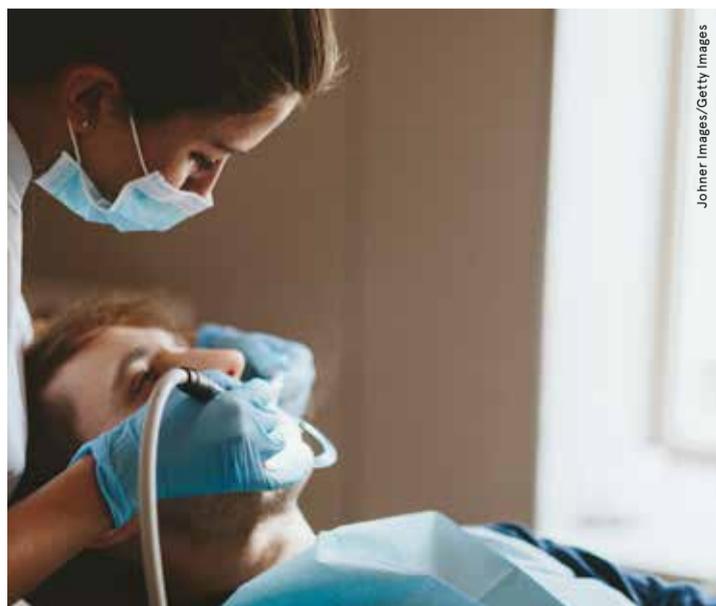
Dr Eskander sees the captions on Instagram as good ground for education. "If I post a smile makeover, I'm very upfront about how long it took, what the procedures I used were exactly, in the caption. I don't want to misinform anyone," she says.

Of course, low self-esteem or risk-taking behaviour doesn't happen in a vacuum, even on Instagram.

"While the so-called 'selfie mentality' does crop up in research as having a negative impact on self-image, it's important to account for individual differences," says Dr Atkinson at the University of Bath. "People will be influenced by these images depending on how much they personally invest in a certain beauty standard and how much they compare themselves to others outside Instagram."

**“**When a patient comes in wanting me to improve their smile, it provides an opportunity to get them into good habits and oral health provides that foundation

As an education tool, both for practitioners and patients, Instagram's benefits are unparalleled, giving dentists the opportunity to inform users about oral health and build a rapport. The detriments, both psychological and physical, are in no means limited to just the field of cosmetic dentistry. With the rise of body positivity and no-filter posting, we can only hope people will feel emboldened to smile without shame. ●



Johner Images/Getty Images



Queen's Building, Queen Mary University of London, Mile End

## Combat the pain of sensitive teeth

A revolutionary new toothpaste is primed to bring long-term relief to millions of adults and children who suffer from sensitive teeth

**T**he result of more than a decade of scientific research and development, a British-designed toothpaste is the first to gain accreditation from the Oral Health Foundation's expert panel for both sensitivity relief and remineralisation.

BioMin F toothpaste, which also combats early tooth decay, was developed by a team led by Professor Robert Hill, an award-winning advanced materials scientist and chair of dental physical sciences at Queen Mary University of London, and also chief scientific officer of BioMin Technologies.

Around 13.5 million people, almost one in three of the UK population, will suffer from some form of dentine sensitivity at some stage of their lives. This number is growing because of diets loaded with acid content that slowly strips away the enamel coating of our teeth.

Tooth sensitivity, which ranges from sharp reactions to cold and hot to more persistent pain that impacts quality of life, increases with age and is particularly prevalent in women aged 30 to 50, according to research

published in the journal *Clinical Oral Investigations*.

Tooth decay is the most common disease worldwide. Unfortunately, decay affects 60 to 90 per cent of schoolchildren and is the single biggest cause of hospital admissions for children under the age of six.

The benefits derived from regular toothpastes tend to be washed away within 90 minutes of brushing. BioMin's ultra-fine bioactive particles adhere to the tooth surface during brushing and act as a reservoir to release fluoride, calcium and phosphate ions slowly for eight to twelve hours. This creates an effective "armour for teeth" over the enamel and dentine surfaces.

BioMin F toothpaste also helps fill in the tiny defects in the tooth enamel that can, if unchecked, lead to tooth decay and eventually toothache. At the same time, BioMin F toothpaste helps neutralise the effect of acid attack caused by drinking sweet, fizzy and fruit drinks.

Professor Hill, together with his research team, developed BioMin in direct response to the growing numbers of people experiencing tooth sensitivity and unable to find a suitable remedy. Their research resulted in a series of PhD awards, published scientific papers and patent applications as well as winning the 2013 Armourers and Brasiers Venture Prize.

"BioMin F toothpaste operates in a totally different manner to standard toothpastes where the active ingredients, such as soluble fluoride, are washed away and become ineffective less than two hours after brushing," Professor Hill explains.

"BioMin F is able to slowly deliver the required minerals over a much longer period. It is very effective with much

lower levels of fluoride than regular fluoride pastes, and has the capability to enter and occlude exposed dentine tubules protecting the nerve from hot and cold stimuli.

"Additionally, it makes teeth far more resistant to attack from acidic soft drinks like fruit juices and sodas. This breakthrough innovation could significantly reduce dental decay as well as solving tooth-sensitivity problems which are often experienced by people eating or drinking something hot or cold."

Richard Whatley, chief executive of BioMin Technologies, who has more than 30 years' international management experience with market-leading dental industry companies, says: "This is one of the most exciting developments in oral health because of its potential to end the misery of sensitive teeth for millions of people."

"Its ground-breaking technology could transform so many lives around the world, plus it is a fantastic British success story commercialising world-class research for the benefit of the general public."

**BioMin Technologies was established in 2015 as a spin-out company from Queen Mary University of London. For further information please visit [biomin.co.uk](http://biomin.co.uk)**

**BioMin F toothpaste is currently available in 75ml tubes priced at £6.50 from either your local dentists or online at [upbeatcare.co.uk/UBIOMINF5](http://upbeatcare.co.uk/UBIOMINF5)**

**BioMin™**  
Armour for Teeth

**“**This breakthrough innovation could significantly reduce dental decay as well as solving tooth-sensitivity problems

# CRAVINGS AND CAVITIES

Diets are changing and children are exposed to more sugar than ever before. With a standard chocolate bar containing more sugar than a child's daily recommended allowance, it is vital that kids, and more importantly their parents, are educated about good oral care and the dangers of consuming too much of the sweet stuff



# 17%

increase in the annual number of hospital teeth extractions from patients aged 18 and under between 2012-13 and 2016-17

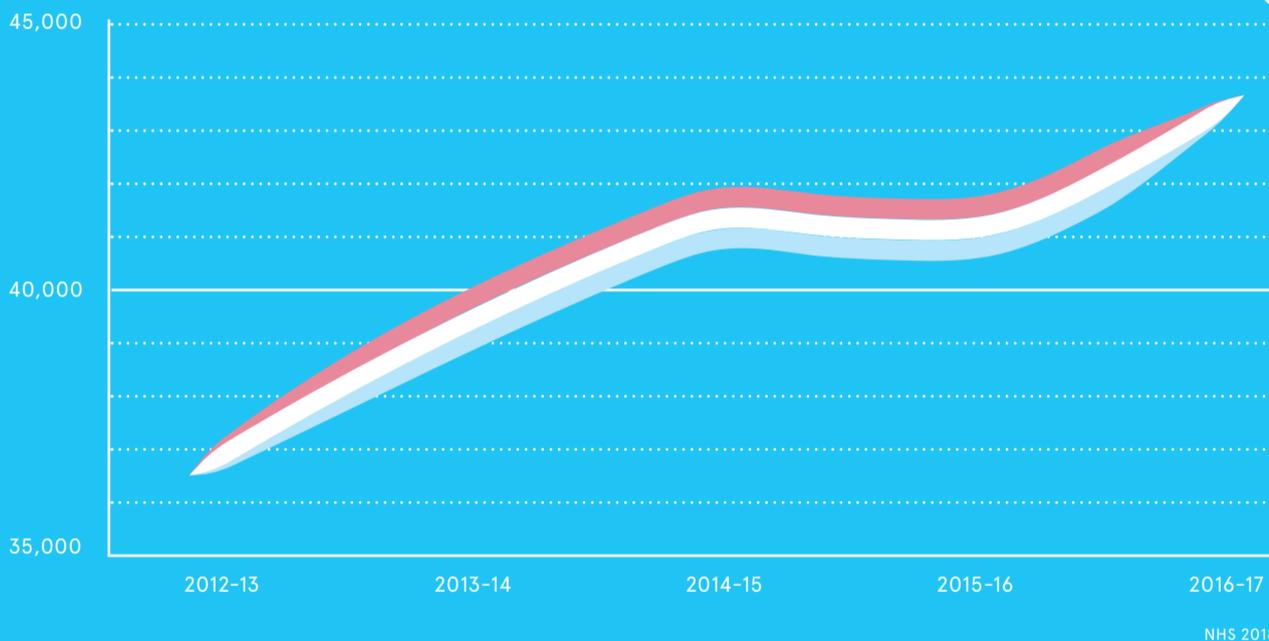
NHS 2018

# 36%

of parents admit they often or sometimes offer their children sugary food/drink as a bribe or reward for good behaviour

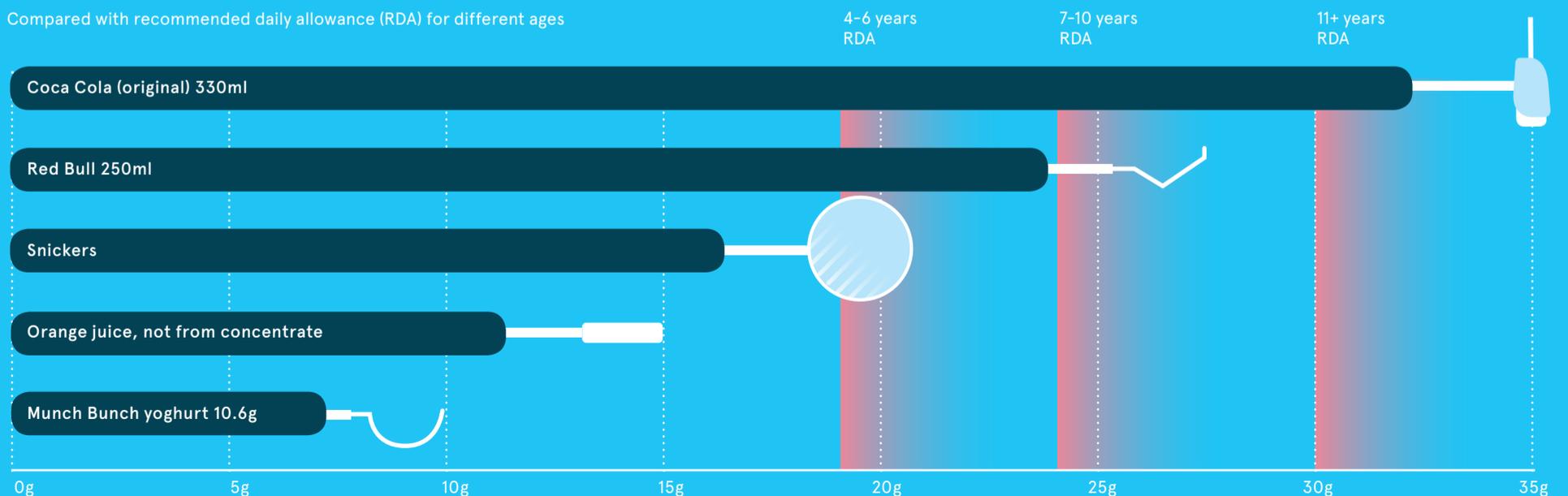
Simplyhealth 2018

## HOSPITAL TEETH EXTRACTIONS FROM PATIENTS AGED 18 AND UNDER



## SUGAR AMOUNT IN POPULAR FOODS/DRINKS\*

Compared with recommended daily allowance (RDA) for different ages

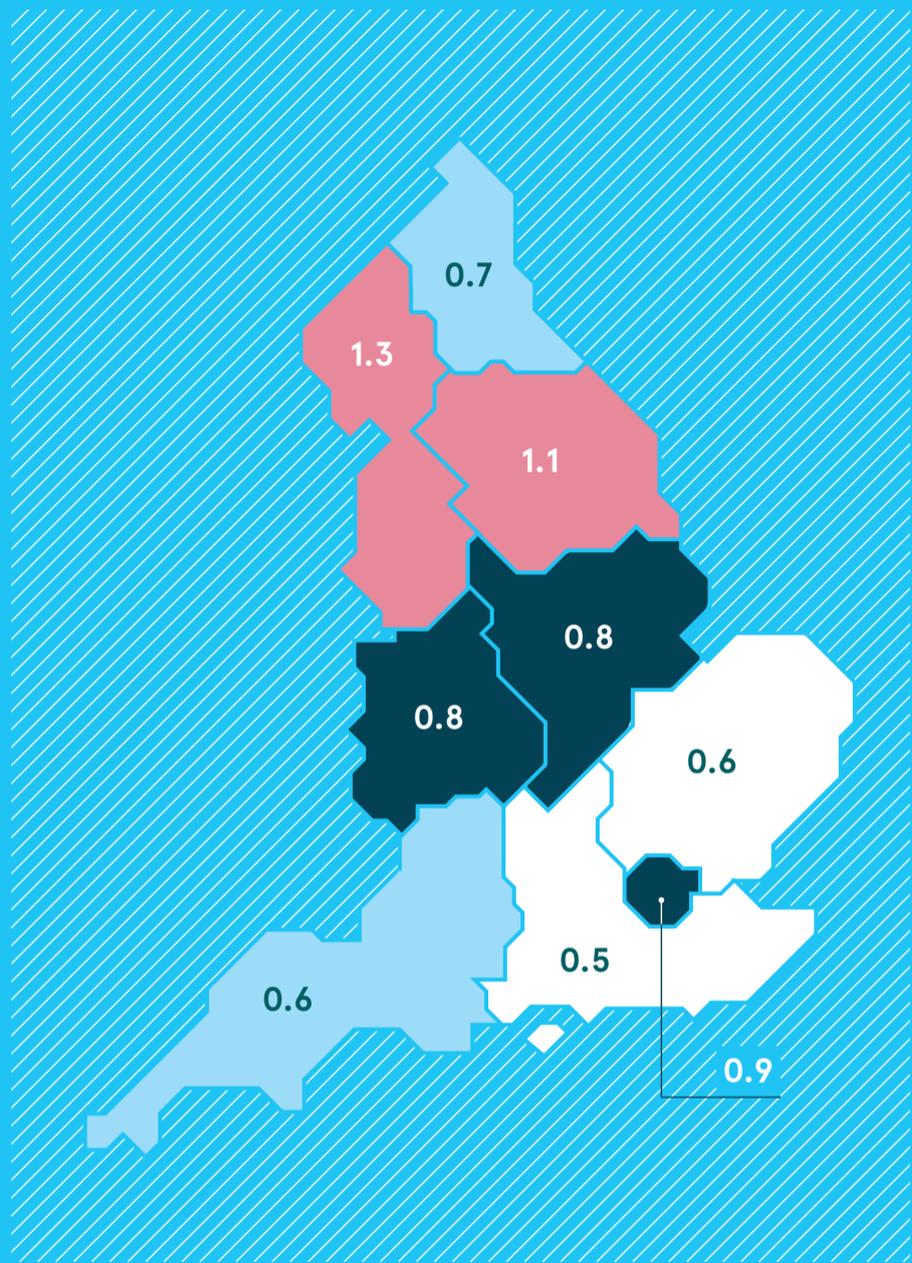


\*One single serving or recommended portion size according to product's nutritional information

### TOOTH DECAY AMONG FIVE YEAR OLDS IN ENGLAND

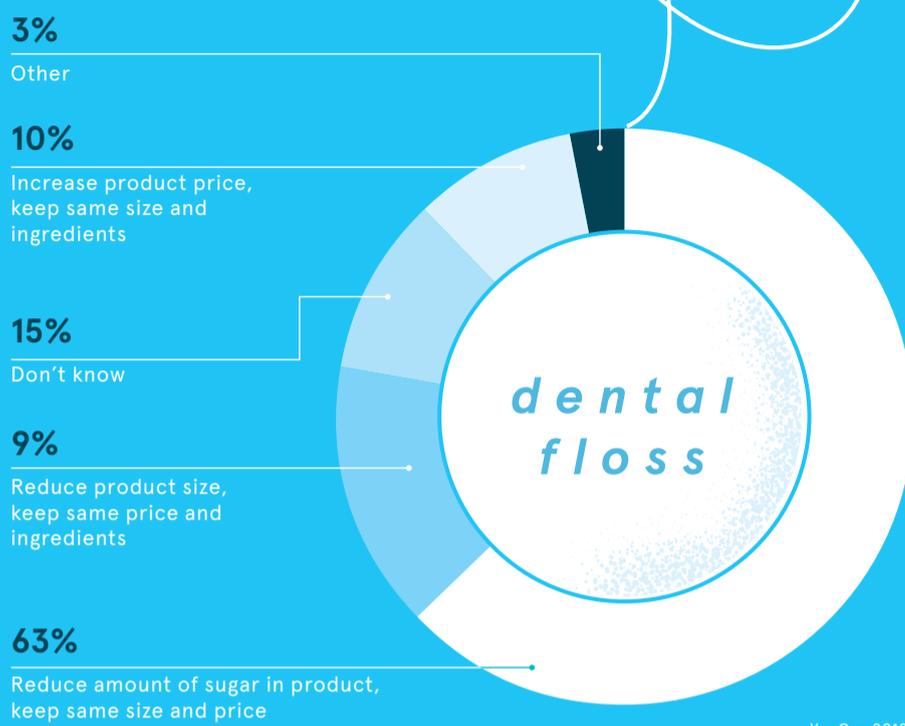
Percentage of children with any tooth decay and average number of decayed, missing and filled teeth

● 15-20% ● 20-25% ● 25-30% ● 30-35%



Public Health England 2018

### PUBLIC OPINION ON HOW SOFT DRINKS MAKERS SHOULD REDUCE SUGAR



YouGov 2018

### TOOTH DECAY AMONG FIVE YEAR OLDS BY DEPRIVATION LEVELS



Public Health England 2018

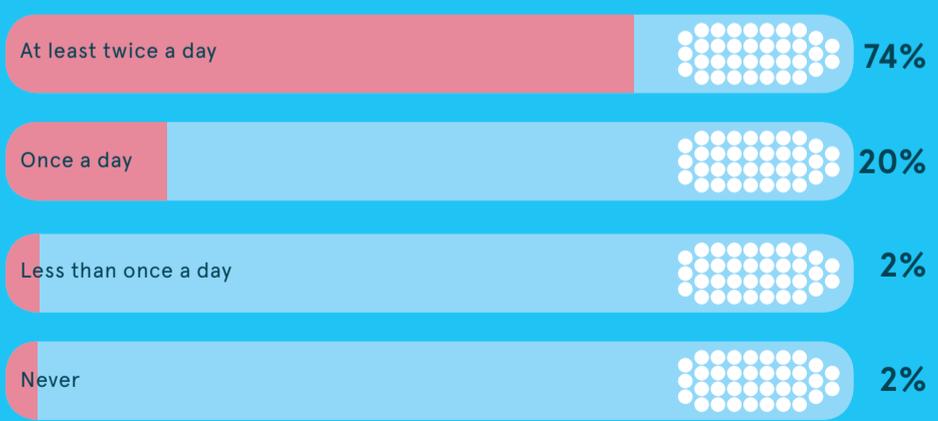
### HOW OFTEN CHILDREN VISIT THE DENTIST FOR A ROUTINE CHECK-UP

Survey of parents of children aged 18 and under



### HOW OFTEN CHILDREN BRUSH THEIR TEETH

Survey of parents of children aged 18 and under



YouGov/Simplyhealth 2018

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## ‘There is no doubt that sugar is the villain posing the biggest threat to the health of children across the country’

It's widely recognised that childhood levels of tooth decay, obesity and diabetes in the UK are far higher than acceptable levels. Regardless of how to approach this problem, we will always come back to how much sugar we are putting into youngsters' bodies.

For British children, excessive sugar consumption is a serious issue that has been apparent for many years. This is reflected in numerous figures which highlight just how pressing the problem is. Today nearly one in three children aged two to fifteen are overweight or obese. There are also more than 700 children with type-2 diabetes, an increase of around 40 per cent compared with four years ago.

Focusing on oral health, a child in England has a rotten tooth removed in hospital under general anaesthetic every ten minutes. This is a heart-breaking and appalling statistic, especially considering it is almost entirely preventable.

Over the course of an average day, countless children across the UK consume well over the recommended daily sugar allowance. Recent figures from Public Health England revealed children exceed the maximum recommended sugar intake for an 18 year old before they celebrate their tenth birthday.

The sugar levy, imposed last spring, has been successful in tackling the fountain of fizzy and sugary drinks wreaking havoc on the health of thousands of youngsters. Government intervention was absolutely necessary to reduce the amount of sugar going into popular soft drinks. It has also been effective in discouraging consumers from regularly purchasing unhealthy drinks in large quantities.

Another cause for concern is oversized packs of products that provide little-to-no nutritional value. Whether they are advertised as being “sharebags” or “family packs” is completely irrelevant. There is nothing stopping a person from gorging on a whole pack of chocolates or sweets and eating dangerous amounts of sugar.

This is not dissimilar to the issue of two-for-one, buy-one-get-one-free products and other promotional offers that can be found across thousands of supermarkets and corner shops around the country. These promote a culture of frequent, high-sugar consumption,

which is the exact opposite habit to that children should be developing as they grow up.

We must continue to teach children about the importance of developing good oral hygiene at home, by brushing twice a day with a fluoride toothpaste. Yet by facing a constant onslaught of sugar through the day, the damage will have been done long before they get around to picking up their toothbrush. Assuming they still have teeth to brush at the end of the day.

Dampening the appeal of these products will also be integral to reducing childhood sugar intake. In the last couple of years, the Committee of Advertising Practice has begun to clamp down on junk food advertising aimed at children. Tightening regulations for the marketing of unhealthy products should see less children beg their parents for them.

Ultimately, continuing to reduce the amount of sugar on supermarket shelves to an acceptable level is the best way of tackling the sugar crisis. Calls for further taxes on confectionery, cakes and other sugary snacks are completely warranted. Existing taxes have already resulted in many manufactures making voluntary changes to reduce the amount of sugar in their products.

For those who are unwilling to change, government intervention will be necessary. This will most likely mean an extension of the sugar levy. With the best interest of children in mind, it is something we must completely support.

There is no doubt that sugar is the villain posing the biggest threat to the health of children across the country. Putting the shackles on it must be high on our list of priorities, otherwise we will face the consequences for generations to come. ●



**Dr Nigel Carter**

Chief executive  
Oral Health Foundation

PATIENT FIRST

# Patient-centric care sets dentists apart

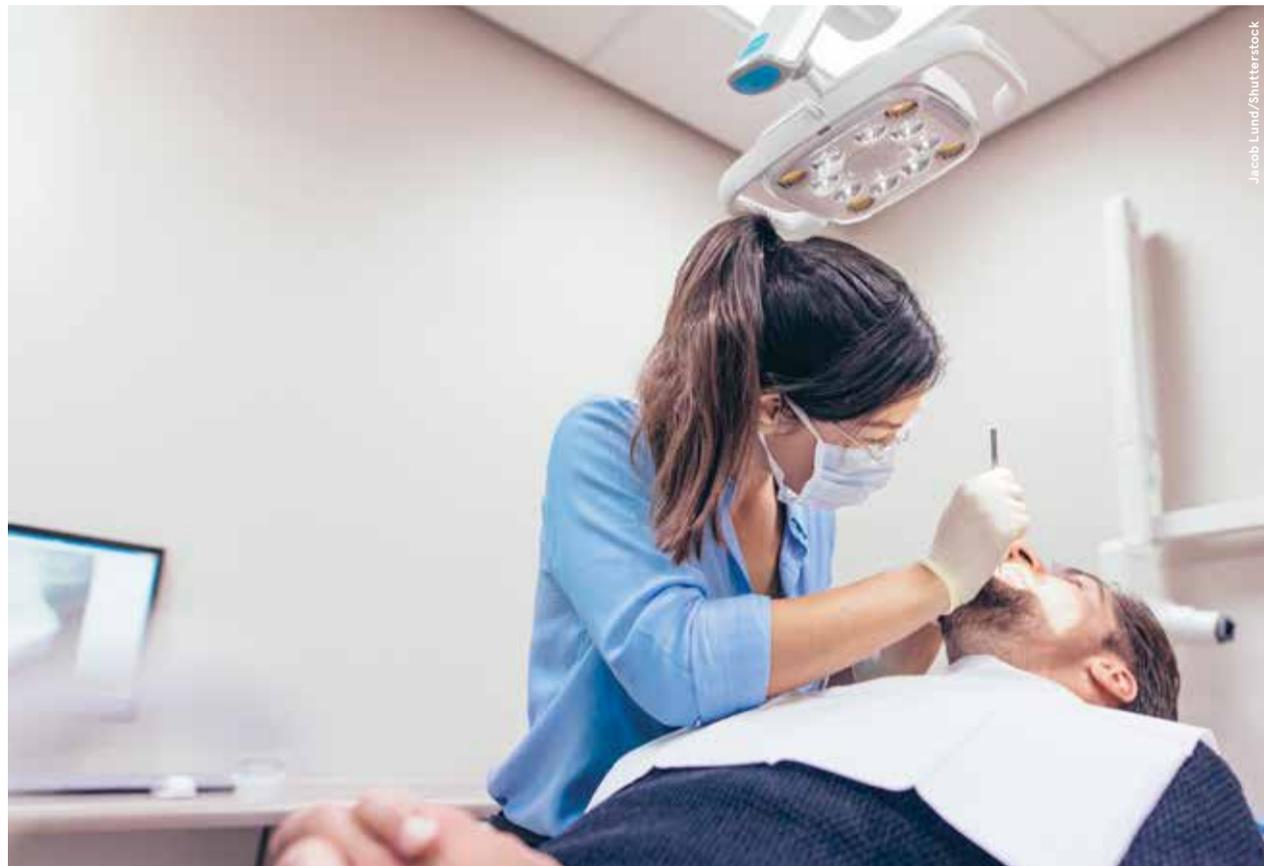
Dedicating time and resources to the comfort and wellbeing of patients, and helping them understand clinical procedures, enables dentists to build lasting relationships

Joel Clark

**W**hen patients book appointments at Blackhills Clinic, a specialist dental referral clinic outside Perth in central Scotland, they are given, among other things, a map that shows the location of speed cameras in the vicinity of the practice.

It might seem an obscure detail, but this is one of a number of deliberate steps the clinic takes to make sure the patient's experience is a positive one. By alerting first-time visitors to speed cameras, dentists at Blackhills believe anxiety levels before and during complex clinical procedures may be reduced.

Other such measures include making sure there is always fresh coffee available in the waiting room, having a full and varied range of up-to-date magazines and giving the patient a choice of music during surgery. These seemingly small details might seem immaterial when set against the technical, clinical procedures of modern dentistry, but they can make the world of difference to the patient's experience.



Jacob Lund/Shutterstock

the chair so, during lengthy procedures, patients can choose their own entertainment.

But above all, he has a cast-iron rule that no patient should ever be allowed to experience pain. "We see patients every day who avoid the dentist like the plague, and yet dentistry can be so pleasant and pain-free. With the anaesthetics we have today, nobody should ever feel pain during treatment," he says.

**“ Sometimes dentists get so carried away with all the gadgets and gizmos of dentistry that they forget the soft skills**

"We try to make sure that the whole patient journey, from the minute they first hear from us after referral to the end of their treatment, works well for them. The list of things we do is actually quite long and covers a whole range of factors. Sometimes dentists get so carried away with all the gadgets and gizmos of dentistry that they forget the soft skills," says Paul Stone, specialist oral surgeon and clinical director at Blackhills.

Soft skills are not just about physical comforts such as music and magazines but, perhaps more importantly, taking the time to talk to the patient and build a relationship, making sure different options and procedures are thoroughly understood.

"For patients who may be anxious, giving time and attention in a

sympathetic and honest way helps to put them at ease," says Marilou Ciantar, specialist periodontist and oral surgeon at Blackhills.

This kind of patient-centric approach to dentistry might seem obvious, but under the constant pressure to stay on top of dental science, comply with regulations and keep waiting times under control, dentists may be driven to cut corners and focus their attention on the procedures rather than the patients.

In NHS practices, in particular, there is pressure to squeeze more appointments into each day, reducing the time available to build long-term relationships and make the patient experience more comfortable and enjoyable. Dr Stone and other specialists believe

the most precious commodity that comes with private practice is simple: time.

"Given the time constraints in NHS practices, where dentists are being encouraged to get as many patients through the door as possible, the concept of a patient-centric approach has been allowed to slide because it is the only way to get the work done," says Jonathan Lack, a specialist periodontist in London's Harley Street.

In his clinic, Dr Lack has also taken care to ensure the patient journey is a positive one, allowing a full hour for initial consultations to give sufficient time to build a rapport. Other comforts include subdued lighting in the waiting room to create a calming atmosphere and an iPad on the arm of

The patient-centric approach might be second nature to some practitioners, but despite its potential to dispel the fear associated with dentistry and engender long-term patient loyalty, it is not always intrinsic, even in private practice. Experts say the important soft skills that put patients at ease in the dentist's chair cannot always be taught, and may be more likely to come with maturity and experience rather than training.

"In dental training, students get very caught up with the hardware and techniques, and learning how to physically carry out procedures, and there isn't time in the curriculum to devote to the soft skills. Newly qualified dentists can sometimes be lacking in this area, but they develop and become more empathetic with time," says Dr Stone. ●



Carolyn Djanogly

## A century of patient care

Treasured files at the Freiberger Dental Practice in central London include a large collection of cards and letters from grateful patients. They express thanks not just for the quality of treatment, but also the high level of care and attention bestowed by the practice's dentists. One patient even declares his surprise at looking forward to his next appointment.

"The culture of caring for the patient pervades everyone and everything at our practice. We are interested in our patients as people and we treat them as we would our friends or family," says Philip Freiberger, who has worked in the family practice since 1982.

Freiberger Dental Practice was founded in Shaftesbury Avenue in 1920 by Israel Freiberger, a Polish immigrant. After his death in 1946, the practice passed to his newly qualified son Vivian and subsequently to two of Vivian's sons, Malcolm and Philip, moving to new premises in Portland Place in 1966.

Not only has the practice benefited from the unique continuity of family dentists over nearly a century, but their shared commitment to patient-centric

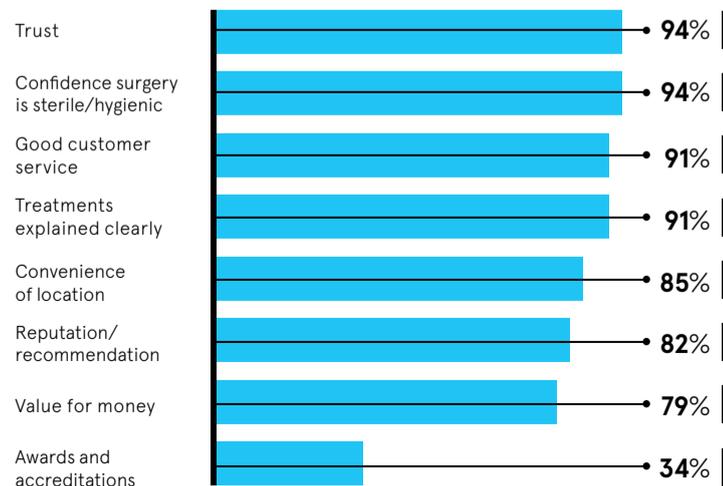
care has allowed the practice to flourish and retain patient loyalty for many years.

"I have heard from one or two people who were patients of my grandfather in the 1920s, when local anaesthesia was far less sophisticated and procedures could be more traumatic, that he developed a personal connection with them, which went far beyond pure dentistry and made them feel at ease in his chair. That connection endures today," says Dr Freiberger.

Philip's daughter Avigail joined in 2011, marking the fourth generation of Freiberger's in the practice. "Coming from a family of dentists, I knew the work would be interesting and challenging, but another key draw is it allows us to build relationships with patients that can last for many years," she says.

## WHAT PATIENTS THINK IS IMPORTANT IN A DENTIST

Survey of more than 5,000 UK adults



## DENTAL PRACTICES

# Six ways dental practices can stay competitive

Simple, forward-thinking initiatives, from offering new services to increasing patient loyalty, may be all that's needed to save dental practices' bottom line

Nick Easen

As practice principals kick off 2019, one eye is firmly on the health of patients, another one is keenly on the books. An empty dentist chair is problematic, and with uncertainty within NHS dentistry and for mixed-practice owners, as well as strong growth in demand for commercial practices, there's an increasing need to find new ways to make surgeries more financially viable.

It doesn't help that there's been scant commitment made in the

government's long-term plan for any additional NHS funding for dentistry and with more professionals moving into private practice each year, competition for patients is on the rise.

More than three quarters of NHS dentists don't see themselves operating within the system in five years' time, according to Practice Plan's *NHS Confidence Monitor*, with nearly half planning to move into private dentistry.

Practices have far too many expenses, while many dentistry professionals just aren't savvy business operators or entrepreneurs.

Forward-thinking initiatives that feed the bottom line are increasingly crucial. Yet unlike other sectors, straightforward mercantile activity doesn't wash.

"Dentistry isn't like buying a shirt off the shelf from Marks & Spencer; you are selling health. Dentistry is an invasive profession and involves a lot of trust; you need to look after people. It's about the patient journey," says Dr Robert Jenkins, who heads up Manor Lodge Dental Surgery in South Devon.

Here are six initiatives offering a lifeline to struggling practices:

“

Some dental practices marry those higher-end services with regular treatments well, offering a suite of skills and dentist proficiencies within one surgery

## 01 New services

A handful of procedures are lossmaking for some practices, whether its periodontal treatments or multiple restorations. Data shows there are now more than 330 NHS practices across the country that have a UDA (unit of dental activity) rate lower than the patient charge, according to the British Dental Association. Offering higher-value private or cosmetic services alongside those that are less profitable can make a difference. These include teeth whitening, implants, bridges, veneers, crowns and Botox. "Some dental practices marry those higher-end services with regular treatments well, offering a suite of skills and dentist proficiencies within one surgery. This is the key to success," says Julie Deverick, president of the British Society of Dental Hygiene and Therapy (BSDHT).

## 02 Skill mix

Historically, the dentist has spearheaded most of the patient engagement functions. For instance, in an NHS setting they are the "provider" and "performer" of the NHS contract. Yet this can be an inefficient way to deploy labour. "To me it seems entirely backwards that the most expensive member of the team – the dentist – is the first person to see a patient. Surely what would be more cost effective would be for a patient to see a dental therapist for assessment or examination," says Sally Simpson, a dental therapist and former president of the BSDHT. "This is the case with general medical practice, where advanced nurse practitioners see patients as a first point of contact and then refer patients on." Today dental therapists, nurses and hygienists are increasingly stepping up. Therapists are able to do fillings, health education, radiographs (X-rays) and deal with patients with complex needs. It would be wrong to say they charge less than dentists. What they do is free up the time of highly skilled practitioners to do more technical and value-added treatments.

## 03 New technology

Innovative devices include CEREC systems that enable tooth restorations to be created in the practice during a single visit and guided biofilm therapy that utilises "air polishing". "It used to be referred to as a 'scale and polish', yet this has revolutionised the way we treat patients requiring gum disease maintenance," explains Ms Simpson. "It has doubled my practice turnover

in a year and is hugely popular, with many NHS patients opting for this as a private treatment." However, the issue is that such equipment involves substantial investment. But, as more practices plough money into the latest technology, patients increasingly expect these services to be provided.

## 04 Patient loyalty

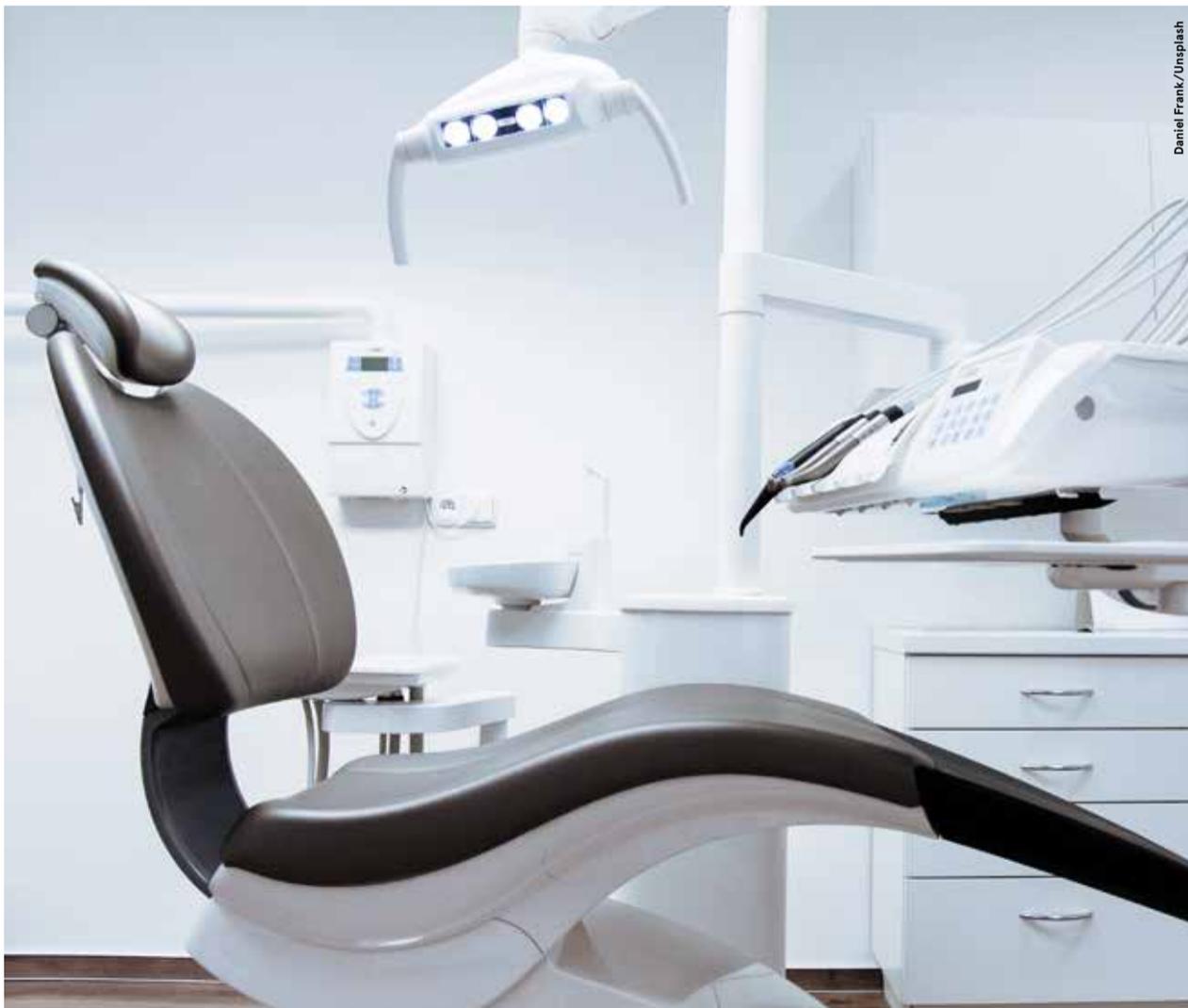
Private payment plans, such as Denplan with 1.7 million patients of 6,500 dentists nationwide, can help build loyalty, repeat visits and lock in patients. These schemes not only provide discounts on standard fee lists, but also lead to predictable cashflows for practices. Other benefits include appointments outside normal working hours and emergency dental treatment funds, if patients need treatment when abroad or are a long distance from the practice. It is also worth having a dental plan coordinator to advocate the benefits of such programmes.

## 05 Management

There are few sectors of the economy, whether you're having your car serviced, windows cleaned or chimney swept, where you lock in an appointment six months in advance. In dentistry, however, this is now required by many surgeries. With such a long lead-in time, forward-looking practices have a fully automated, text and email system to follow up with patients so appointments are not missed. "It means less time on the front desk for our staff and no one wants unfilled appointments," says Dr Jenkins. Many software providers also offer options to enable patients to book their own appointments directly online. While SNOMED CT is a system being rolled out by the NHS that allows dentists and doctors to share and communicate patient data.

## 06 Reaching out

Social media is the latest frontier for dental practices. In particular, this is working for millennials and other digitally savvy cohorts wishing to engage. At the same time, the message is changing: "The NHS and traditional dental care have been very treatment-driven. Now we are looking at a more preventative model," explains BSDHT's Ms Deverick. There is more public funding for prevention, but promoting dental health involves long-term education. ●



Daniel Frank/Unsplash

## ‘When a dental therapist carries out routine dental treatment on a patient, the dentist is free to focus their time on more complex treatments’

**T**here are many reports in the media of difficulties in recruiting dentists to work in NHS practices, especially in rural areas. Many will have experienced this first-hand as this has major implications for patients seeking NHS dental treatment.

Reasons for this are multifactorial, however, and rather than focusing on why there is a shortage of dentists, maybe we should be asking: “Is there an effective alternative to filling these places right now?” The answer, from the British Society of Dental Hygiene and Therapy (BSDHT), is a resounding “Yes”.

There are other highly skilled dental professionals who are able to offer treatment similar to that of the dentist: the dental therapist. They are trained to provide fillings in children and adults, carry out extractions in children, screen for oral cancer, treat periodontal disease, refer patients to other healthcare providers when required, take radiographs (X-rays)... the list goes on.

However, what they cannot do is make crowns, dentures, bridges or carry out root-canal treatment; these procedures are still within the dentist’s remit. Therefore, when a dental therapist carries out routine dental treatment on a patient, the dentist is free to focus their time on more complex treatments, which is cost effective for the practice.

Around 350 dental therapists qualify from UK dental schools annually and there are now more than 3,000 registered with the General Dental Council. This then seems to be an obvious solution to the problem where there is a shortage in the numbers of dentists. It begs the question: why are dental therapists not being utilised much more widely across the UK?

One obstacle is that within the NHS, only the dentist can open a course of treatment. This means that a patient must be seen by the dentist first for an examination before being referred to the dental therapist, who works under the prescription of the dentist. If the dental therapist saw the patient for the examination, this would be a cost-effective use of everyone’s time; patient, dental therapist and dentist.

Poor remuneration is also cited as an issue for dental therapists as many have to share the treatment

fee, or unit of dental activity, with the dentist. Therefore, some dental therapists find that working as a dental hygienist in a private practice is more lucrative. This means they are not using their dental therapy skills, which is obviously detrimental to all concerned.

There has been a perception among the profession that it is not economically viable to employ dental therapists. As the NHS contract can differ from practice to practice, BSDHT recognises that for some practices it may not suit their needs. But overall we believe it would be beneficial to patient access and treatment, and disagree that utilising a dental therapist’s skills would not be profitable for the practice.

Also, there is some lack of understanding from the dental profession about the abilities and training of the dental therapist, which prevents dentists employing this highly skilled professional to enhance their practice.

During 2017-18, there were 45,077 extractions of multiple teeth in under-18s in England, at a cost of £38.9 million. This is a serious problem compounded by a shortage of NHS dentists, denying dental care for many communities.

It’s BSDHT’s aim to highlight the dental therapist as a valuable resource. We can help reduce these figures and alleviate some of the stress placed on principal dentists. It just requires those who can make these changes to take a leap of faith and trust in a professional who can deliver high-quality clinical care to those in need. ●



**Julie Deverick**  
President  
British Society of Dental Hygiene  
and Therapy

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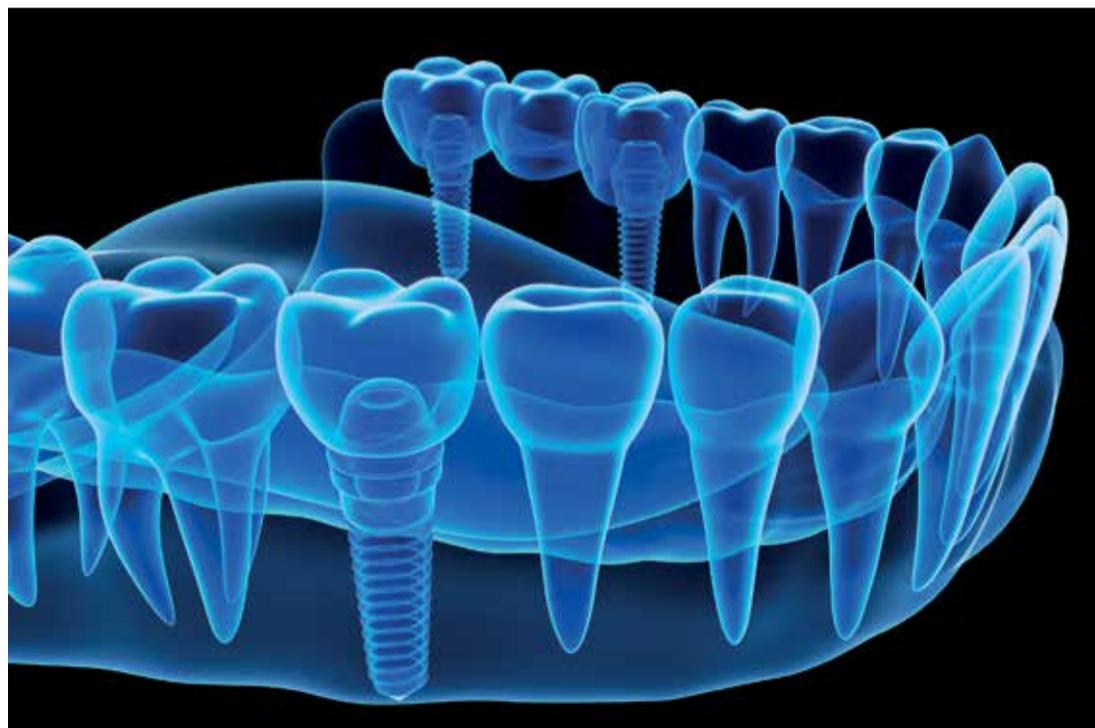
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## REGENERATIVE DENTISTRY

# What the future holds for regenerative dentistry

Growing new teeth may still be a distant prospect, but dental regeneration is opening up exciting opportunities for the industry

James Gordon

**M**outhguards used to be the preserve of the boxing ring or the rugby pitch, but now many of us are wearing them to bed. OK, so I'm not talking about the heavyweight and cumbersome gumshields worn by pugilists. The mouthguards that I'm referring to are lightweight and have been specifically designed to stop a growing number of people, of whom I'm one, from grinding their teeth.

In the United States alone, it's estimated that between 30 to 40 million adults suffer from bruxism or grinding and clenching your teeth. For most people, it occurs in their sleep and many aren't even aware of it until it's too late.

For me, the constant attrition has led to some of my bottom teeth fracturing and unsightly pits where the enamel has fallen away. The repair bill to fix the problem I'm told, if left unchecked, could run into thousands of pounds.

Having a mouthful of crowns and veneers in my mouth is not a prospect I look forward to, so you can

imagine how happy I felt when I came across some research on dental regeneration, which could one day mean that bruxism sufferers could grow new teeth.

But is regenerative dentistry too good to be true? What are its scope and limits, and will it ever be possible to grow our own replacement adult teeth?

Who better to ask than Dr Adam Celiz. Curiously Dr Celiz isn't a dentist. He's actually a material scientist and, remarkably, he's only been working in dentistry for three years. However, in that time he's created a regenerative materials laboratory at Imperial College London.



**Regenerative dentistry will have a tangible and profound impact on how dentists work, and could revolutionise the treatment that patients receive in the future**

He says: "Growing our own teeth is still some way off, but that's not to say we're not making great advances in other areas of regenerative dentistry, which will have a tangible and profound impact on how dentists work, and could also revolutionise the treatment patients receive in the future."

Take Dr Celiz's current research, for example, where he and his team are developing polymers – basically plastic materials – that can be used when repairing teeth to regenerate dental tissues after decay. He hopes it will reduce fillings, crowns and, in the worst-case scenario, root-canal therapy.

So how does it work? "The polymer is inserted into the tooth as a pulp-capping material and not only repairs the pulp tissue but also seeks to repopulate and stimulate the growth of new dentine, which have been lost through dental decay," he says.

But there are some caveats. The synthetic biomaterials are currently being tested on rodents. If these trials are successful, Dr Celiz's team will test them on larger animals before finally carrying out human trials. As a result, it's unlikely that patients will be able to benefit from this revolutionary treatment "for at least another decade even though the results so far have been very promising".

Secondly, Dr Celiz is keen to point out that even if the biomaterials pass strict regulatory requirements, they should not be seen as a panacea for all patients.

"We envisage this technology would be most effective for only minor infections of the pulp tissue," he says. "Therefore, when the dentist has removed the infected tissue, he or she would then place the synthetic biomaterials in direct contact with the pulp tissue, which would then send a signal to the stem cell population to repair the pulp tissue and also the surrounding dentine.

"However, it would not be suitable to use if the decay is regarded as so severe that the pulp tissue is considered irreparable. In this case, root-canal surgery would be the primary alternative."

Regenerative dentistry is not just confined to restoring the health of pulp tissue. Researchers at Queen Mary University of London are currently conducting research into whether it's possible to regenerate non-living tissues such as enamel.

Dr Celiz explains: "They're doing this by encouraging mineralisation at the surface of dental tissues, such as enamel, using protein membranes. If successful, this would help the many millions of patients with sensitive teeth or those who grind them."

But what about those of us unlucky enough to lose a tooth? After all, last year scientists in America took the first steps to create tooth buds that can grow and look like natural teeth.

Dr Nigel Carter, chief executive of the Oral Health Foundation, says: "There is certainly more ground to be covered in this field. However, the possibility of being able to



**It's important to stress that while current research and findings are interesting, we are still a long way away from the reality of regenerative treatment being available**

regrow our own lost teeth is understandably cause for great intrigue and excitement, especially given that we can take some encouragement from scientific breakthroughs in other areas.

"At the same time, it's important to stress that while current research and findings are interesting, we are still a long way away from the reality of regenerative treatment being available."

It's a view shared by Dr Celiz. However, he does not see the technology as the chief barrier to entry. "In terms of the science, we're actually not that far off. There are still huge challenges to navigate, such as growing the tooth in-vitro and planting the early-stage tooth bud in the patient's mouth," he says.

"But many of challenges are common to other areas of regenerative medicine and tissue engineering,

and it is more a matter of when, not if, these treatments will become available."

Making the treatment cost effective will be a much tougher ask. Dr Celiz says: "Regenerative treatments using cell therapy are inherently expensive. When regenerative dental treatments do become available, it will only be open to the very wealthy or those with the most comprehensive dental insurance policies. But when economies of scale kick in and the technology becomes more affordable, more people will benefit. And that can only be a good thing."

Especially when you consider that bridges and dental implants are expensive and often fail. Indeed, in these circumstances, who wouldn't want a natural repair? A bruxism sufferer, like me, for starters. ●



### Multi-disciplinary collaboration

There's no doubt that regenerative dentistry is making great strides and Imperial College London's Dr Adam Celiz says progress lies in collaboration.

He explains: "My background is in chemistry. A decade ago if you told me that I'd be working in regenerative dentistry, I probably wouldn't have believed you. However, it illustrates just how the scientific research community is tackling clinical challenges. The future is working in multi-disciplinary teams, which include chemists, engineers, biologists and, of course, dentists, as this is how you achieve the most innovative technological solutions."

Oral Health Foundation chief executive Dr Nigel Carter agrees. "Increasingly in conventional dentistry, taking a multi-disciplinary approach to scientific research is not only advantageous but also, in many cases, necessary. Evidence accumulated over a number of years illustrates a clear link between our oral health and several medical conditions," he says.

"To better understand these relationships, the dental profession simply must collaborate with doctors of many other disciplines to make progress. Our knowledge of dentistry may be vast, but can only take us so far. At the end of the day, it's the patient visiting their dental practice who stands to benefit the most from this approach, which is ultimately what matters."

### Commercial feature



Biodentine is applied to the cavity to replace the dentine layer

## Getting to the root of the problem

An innovative product can help avoid root-canal treatment and extractions of decayed teeth

**T**he patient in Nick Williams' dental surgery is there for a six-month check-up. Nothing remarkable about that you might think as Mr Williams completes a scale and polish. But there is an extraordinary story here. A year ago his patient was suffering from sensitivity and discomfort in her back molar. An X-ray had revealed wear and tear and deep decay. But thanks to innovative dentistry and a unique restorative material called Biodentine™, the pain has disappeared.

The brainchild of Septodont, a French family-owned pharmaceutical company, Biodentine has the ability to stimulate remineralisation of the dentine. And according to Mr Williams: "Where a cavity is so deep that it exposes the nerve, Biodentine can potentially keep the nerve alive, helping to prevent the need for root-canal treatment or extraction."

However, Mr Williams, who co-owns the Lime Tree Dental Practice near Bristol and has been using Biodentine for eight years, is keen to point out that it is not "a miracle cure that will work for every patient in every situation".

He explains: "We do see patients suffering from the consequences of advanced stages of decay, such as pain or abscesses, when root canal or extraction are the only options. But where possible, we want to try to avoid these more invasive treatments."

"If the tooth is still alive – meaning it's still responsive to a cold test – and if X-rays show that there's no infection around the tooth, we'll offer the patient Biodentine as a dentine replacement treatment.

"In a small number of cases, the Biodentine doesn't work. However, we've found that Biodentine works well in the majority of patients. Our research shows that many of those who opted for Biodentine in very deep cavities, still have healthy and responsive teeth eight years later."

But curiously, not all dentists choose to use Biodentine, a product which is supported by hundreds of independent research papers and has been available to use in UK surgeries since 2010.

This is strange, particularly when you consider its many benefits. For example, dentists don't require any special training, nor do they need any new equipment to begin using it. From a cost standpoint, it's no more expensive than some other dental materials and, best of all, it's 100 per cent mineral, which means it contains no metals, no filled resins, nor does it release any harmful by-products.

So why don't more dentists make use of Biodentine? Mr Williams thinks that many are simply unaware of it, while others are reluctant to make the change. But he is in no doubt that treating his patients with Biodentine "makes good clinical and economic sense for both NHS and private dentists".

Mr Williams, who also teaches undergraduates at the University of Bristol community-based dental teaching unit, admits he had doubts at first. "It seemed too good to be true," he says. But, as a member of the University of Birmingham PREP Panel, which takes an active interest in the development

of dental materials, his initial scepticism didn't last long.

A volunteer crew member for the RNLI at the Portishead lifeboat station, he explains: "I've been using Biodentine for over eight years and treated hundreds of patients with it, always after discussing outcomes with the patient and obtaining their permission. In my experience, it has delivered everything that it has promised. I've seen first-hand how Biodentine can help a decayed tooth, with a deep cavity, to heal before laying down an extra layer of defence against future decay."

Audited over the first two years of use, Mr Williams says that "80 per cent of his patients have avoided further treatment such as root-canal surgery or extraction, when reviewed over three years".

Now that has to be good news for patients and dentists alike, and a compelling reason for any dentist not currently using it to give it a try. So why not ask your dentist about Biodentine from Septodont?

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\*Source: A survey of dental hygienists in the UK, Eaton et al. (2012)