



Behind
Your
Smile

From teeth to toes, a revealing look at what a healthy smile says about the health of the rest of our body

Smiling is good for you! From improving mood and reducing stress, there's a host of research¹ which shows the health benefits associated with smiling.

Thankfully, it is often the little things which can brighten up our day and turn our frowns upside down - whether it's a smiley stranger in the street, hearing a baby giggle, the food we eat, or even coming across a silly meme.

What's in a smile?

The average adult will encounter **11 things a day** that make them beam



Top 10 Reasons to Smile



Spending time with family



Seeing an old friend



Waking up to sunshine



Getting a surprise from someone



Making someone else smile



Spending time in the great outdoors



Finding money in your pocket you didn't know you had



Eating your favourite meal



Getting a bargain



Hearing a joke

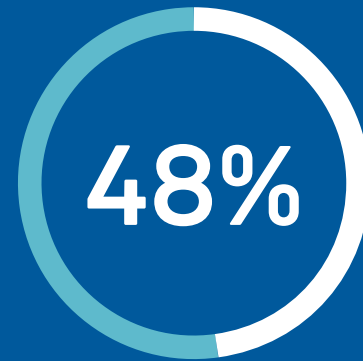
¹ <https://www.waldenu.edu/online-bachelors-programs/bs-in-psychology/resource/the-power-of-smiling>

But do you know the many other ways in which our smiles are linked to our wellbeing?

While most people know that poor oral health can lead to cavities and tooth decay, many are unaware that our teeth and gums can reveal a raft of underlying health conditions.

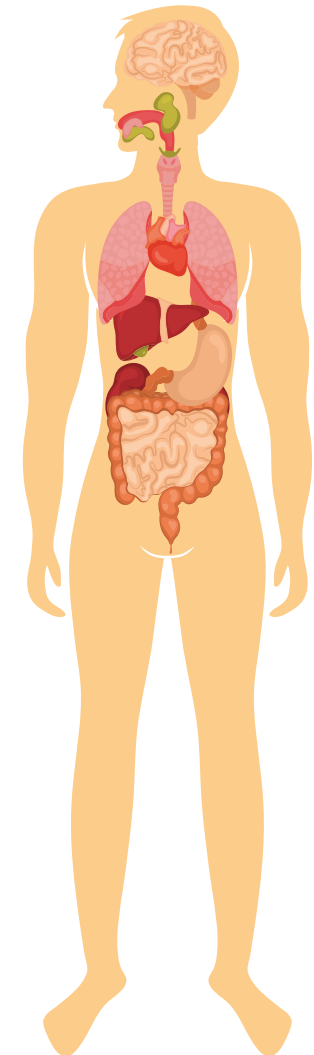
What's more, poor dental hygiene can have unexpected health consequences, possibly leading to increased risk of conditions such as diabetes, arthritis and even heart disease.

That's why keeping your smile in tip top shape is so important!



of people are unaware that **poor oral hygiene** has been linked to **long-term health conditions**

Here we take a revealing look **behind the smile** to explore what a healthy smile says about the health of the rest of our bodies...





Amanda Sheehan

Dental Therapist and
Clinical and Educational
Support Specialist at TePe

Healthy smile, healthy body

Just like regular exercise and eating a balanced diet, looking after your teeth and gums is an essential part of a healthy lifestyle.



 Made in Sweden



But what does a healthy smile look like?

Healthy gums are pale, pink, and fit firmly around each tooth. Healthy teeth are intact and show no signs of tooth decay.

If plaque (the sticky film of bacteria that forms on the teeth) is left to accumulate around the tooth, it causes gum inflammation (gingivitis), one of the most common diseases in the world.

Signs of gum inflammation include redness and swelling, and the gums may bleed when you clean your teeth.

The good news is, with proper oral hygiene gingivitis can be reversed, and your gums will return to a healthy state.

Regular tooth brushing
can only clean up to
60% of the tooth surfaces.
An interdental brush cleans
the areas where your
toothbrush can't reach



Without treatment, gingivitis can develop into periodontitis that can affect the supporting bone and lead to potential tooth loss.

A YouGov survey in 2017 found only 31% of people say they clean between their teeth on a typical day². However, dental professionals recommend cleaning between the teeth everyday with floss or interdental brushes.

Unfortunately, evidence is starting to point to periodontitis being linked to other conditions in the body. It's important to understand these links and equip yourself with the knowledge to keep gum disease at bay.

² <https://yougov.co.uk/topics/politics/articles-reports/2017/10/23/three-ten-brits-only-brush-their-teeth-once-day>

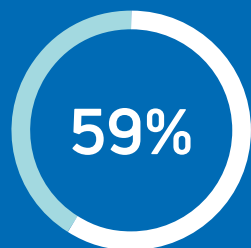


Reasons to smile

Laughter is said to be the best medicine, but don't underestimate the power of a simple smile. When you smile, the brain releases dopamine, endorphins and serotonin, neurotransmitters associated with lowering anxiety and increasing feelings of happiness.

Yet sadly many people feel self-conscious about their smile, whether it's when catching their appearance on a video call or the way their grin looks in a photograph. In fact, just 30% of people in the UK smile with their teeth on show.

This not only highlights the role a healthy smile plays in our social wellbeing, but also raises the important question of just how closely our dental health links to our mental health. Like many conditions, the two often go hand in hand.



59% of people have felt self-conscious about their smile



Reasons people feel self-conscious about their smile



Discoloured teeth



Crooked teeth



Shape of their teeth



Missing teeth



Fillings



How does stress affect our dental health?

- Stress can impair the immune system and be a contributing factor to inflamed gums and bleeding gums
- Grinding or clenching your teeth, known as bruxism, can be a symptom of stress
- If you grind your teeth often, you could experience heightened tooth sensitivity, chips, flattened tips, or sharp edges in the teeth as well as difficulties in opening and closing your jaw. In severe cases, excessive grinding can contribute to tooth loss
- When experiencing stress, you may repeatedly clench and unclench your jaw. This can lead to temporomandibular (TMD) disorders which involve the jaw joints

As much as stress can wreak havoc on your teeth and gums, poor dental health can exacerbate stress because you may be worried about symptoms such as tooth pain or the way your teeth look.

Visit your dentist and hygienist regularly to put your mind at ease.

The lowdown on diabetes

Diabetes is a condition where the body is not able to control blood sugar levels. For people living with diabetes, ensuring healthy teeth and gums is extremely important, with research suggesting a two-way relationship between diabetes and gum disease³. This means that people with gum disease are more likely to develop diabetes and vice versa⁴.

But why?

More than

4.9 million

people have been diagnosed with **diabetes** in the UK⁵



Evidence shows that severe gum disease can increase blood sugar levels in people with diabetes, as well as in those who do not have diabetes.⁶

High blood sugar can result in more sugar in the saliva, making it easier for bacteria and plaque to grow, which can irritate the teeth and gums and lead to gum disease.

High blood sugar can also damage the blood vessels in your gums. Added to this, people with diabetes are more prone to infections because of the effect of high blood sugar on the immune system.

Furthermore, dry mouth (xerostomia) can be a common side effect of diabetes medication. Having less saliva can have a detrimental effect on our oral health because of the saliva's protecting and cleansing abilities, again increasing the chances of gum disease and tooth decay.

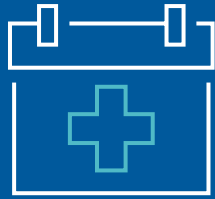
³ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3228943/>

⁴ <https://www.bsperio.org.uk/patients/gum-disease-and-diabetes>

⁵ <https://www.diabetes.org.uk/professionals/position-statements-reports/statistics>

⁶ <https://www.bsperio.org.uk/patients/gum-disease-and-diabetes>

People with type
2 diabetes are
three times



more likely than someone without
diabetes to develop dental issues⁷

If found early by your dental practitioner, gum disease is easy to diagnose and control. If you have diabetes, you should let your dentist know so that they can give tailored advice to your needs.

You should also ask the dentist to check your gums and for a demonstration of how best to brush and clean in between your teeth.

Diabetes can also increase the risk of other oral health conditions such as thrush, burning mouth syndrome and changes in the way food and drinks taste.

Keeping blood sugar well-controlled can help to reduce the oral health risks associated with diabetes, as can good dental hygiene.

⁷ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3228943/>



Have a heart

As with diabetes, a raft of studies has shown a link between gum disease and heart disease, an area which is under constant investigation.

This is thought to be because the bacteria present in gum disease travel through the bloodstream to the rest of the body, where they cause blood vessel inflammation and damage; blood clots, heart attack and stroke may follow⁸.

Other theories propose that rather than the bacteria causing the problem, it's prolonged inflammation, the body's natural response to infection, that causes vascular damage throughout the body, including the heart and brain.

Further studies have found that gum disease may worsen blood pressure and interfere with medications to treat hypertension¹⁰.

⁸ <https://www.health.harvard.edu/diseases-and-conditions/gum-disease-and-the-connection-to-heart-disease>

⁹ <https://www.health.harvard.edu/diseases-and-conditions/gum-disease-and-the-connection-to-heart-disease>

¹⁰ <https://www.ahajournals.org/doi/10.1161/HYPERTENSIONAHA.118.11528>



53%
of people are
unaware that
heart disease
could be
affected by
poor oral care

Dental bacteria are also a known cause of endocarditis, a rare but potentially fatal infection of the inner lining of the heart. If you are at risk of endocarditis, it is vital to take extra care to maintain an excellent standard of oral hygiene and seek urgent medical advice if symptoms develop.

People with gum disease have **two to three times** the risk of having a **heart attack, stroke,** or other **serious cardiovascular event**⁹.

The bottom line?

If you have concerns about heart disease prevention, ask a medical professional for advice to improve your heart health.

And remember, whether the link between gum disease and heart disease is direct or indirect, it's important to keep up healthy lifestyle habits to maintain good oral hygiene and reduce your risk of gum and heart disease.

Amanda Sheehan, Clinical and Educational Support Specialist at TePe, shares her top tips to prevent gum disease:



Brush teeth for two minutes twice a day, before bed and at one other time. Use a toothpaste containing fluoride



Clean between teeth once a day, using floss or interdental brushes



Have regular dental check-ups



From head to toe

Arthritis can cause pain, inflammation, swelling, and stiffness in the joints. There are over 100 different types of arthritis, but many people are unaware that one of the most common - rheumatoid arthritis - has a close association with gum disease.

Both are inflammatory diseases, with research suggesting that people with rheumatoid arthritis have higher rates of gum disease, and gum disease, in some patients, is linked with increasing rheumatoid arthritis activity.

The exact reason for the link is unclear, but it is thought that this may be due to a type of bacteria found in the inflamed dental pockets (the space which naturally exists between the gum and the tooth) in people with gum disease, leading to possible rheumatoid flares.



Just **15% of UK adults** are aware that arthritis may be affected by **poor oral health**

This connection makes oral hygiene all the more important for people living with this condition, but arthritis can make it harder to care for your teeth.

While a good dental routine that includes interdental cleaning is key, for those with limited dexterity, flossing is not always the best option. Interdental brushes also remove plaque from between the teeth and are often easier to use.



Tooth tips!

Amanda Sheehan shares her top dental products to assist people with limited dexterity and strength:

“It’s important to clean all of your teeth, and to reach the up to 40% of the tooth surface normal brushing misses. If you’re dealing with dexterity issues or caring for someone else’s teeth, TePe has a range of products that can help with your grip and make hard to reach areas more accessible. We also offer products such as the mini-flosser and Universal Care brush, and all of our toothbrushes can be adapted and shaped for easier access.”



TePe Interdental Brush is specifically designed to clean between the teeth. The short broad handle makes it easy to hold, and there are nine sizes, so you can find a comfortable fit for your teeth.



TePe Supreme Toothbrush has a broad handle with thumbpad ergonomically designed for a comfortable hold, along with multi-level bristles to reach further between the teeth and along the gumline.



TePe Extra Grip is designed to help people with reduced manual strength by providing a comfortable, stable grip that will fit TePe Select and GOOD toothbrushes and special brushes.



TePe Angle Interdental Brush has a long handle and angled head to allow easier access when cleaning between the back teeth.



TePe EasyPick is a great ‘on the go’ option for removing food and debris from between the teeth. Their design makes them easy to hold, and the flexible silicon tip is ideal for gentle yet effective cleaning.

Cancer considerations

We know a healthy smile can transform our appearance and mindset, but did you know that keeping teeth and gums healthy may reduce the risk of certain cancers, including mouth cancers?

Mouth cancer can affect any part of the mouth, including the tongue, lips, gums, and skin lining the mouth.



1 in 55

UK men and

1 in 108

UK women

will get mouth cancer in their lifetime¹¹

¹¹ <https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/head-and-neck-cancers#heading-Three>

What should you be looking out for?

Visit your doctor if you have symptoms such as:

- persistent white or red patches on the lining of the mouth or tongue
- a lump on your lip, tongue, mouth, or throat
- unusual bleeding or numbness in the mouth
- a change in your voice or speech problems
- unexpected weight loss
- a sore or ulcer in your mouth that doesn't heal
- pain that doesn't go away

Healthy habits for a healthy smile:



Stop smoking



Cut down on alcohol consumption

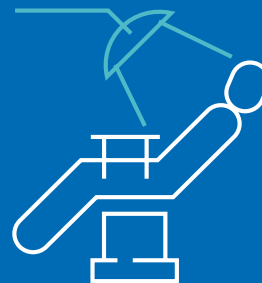


Eat a balanced, healthy diet

Visit your dentist!

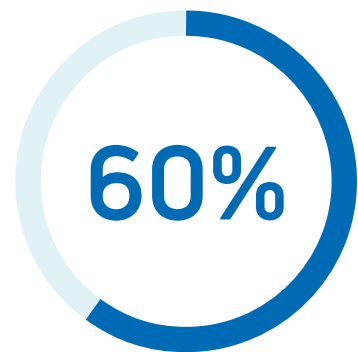
Mouth cancer can often be spotted in its early stages by your dental team during a thorough mouth examination.

If diagnosed early, the chances of a cure are good but sadly, many people go to the doctor or dentist too late.



Keep smiling

The smile is a window to the rest of the body. Keeping your mouth clean and fresh is an investment in your overall wellbeing. For a sparkling smile, prevention is key.



60% of people aged 55 – 64 wish they had taken better care of their teeth when they were younger



Tooth truths

- Brush your teeth twice a day using a fluoride toothpaste
- Clean between the gaps in your teeth at least once a day
- Find an interdental cleaning tool that works for you. Use dental floss if you have tight spaces between your teeth, or TePe Interdental Brushes if the gaps are wider
- Always go to bed with clean teeth – the production of saliva is reduced at night, which lowers the saliva's capacity to protect your teeth
- Change your toothbrush regularly, at least every three months
- Use a tongue cleaner to remove plaque build-up from the surface of your tongue





Fluoride can strengthen the **tooth enamel** and heal early signs of **tooth decay**



Smile friendly tips to keep tooth decay at bay

A good dental routine is just part of the equation, other lifestyle factors have an important role to play.

- Don't rinse after brushing, spit instead of rinsing so you don't wash away the beneficial ingredients in toothpaste like fluoride.
- Avoid snacking between meals. Saliva rinses and neutralises acids but needs time to work. Let your teeth rest!
- Time your mouthwash. Avoid using mouthwash straight after brushing as again, you'll rinse away the benefits of toothpaste. Use it after meals instead.
- Say cheese! Finish a meal with cheese as it restores the pH levels in your mouth.
- Drink up. Sip on water after meals to wash away debris and dilute acids.

Dental care for today and tomorrow

Raising awareness about preventive oral care is more important than ever. For over 50 years, TePe has been designing and manufacturing functional oral hygiene solutions which promote long-term oral health and quality of life.



What you need to know:

Traditional tooth brushing cleans only up to 60% of your tooth surfaces: the top, front and back. However, most dental disease starts between your teeth where food and plaque accumulate. It's important to try to clean the remaining 40% that the toothbrush misses so your teeth and gums are as healthy as they can be.

Enter TePe's Interdental Brushes.

These clever tools are developed in collaboration with dental professionals. With daily cleaning, they can help to prevent gum disease and cavities by ensuring as much debris is removed as possible.

Manufactured at its Swedish Malmö factory, which has the largest solar power plant in the city, TePe's Interdental Brushes come in a variety of sizes, so you can find the perfect tool for getting between all of your teeth.



No wonder **94% of dental hygienists** recommend them¹².

¹² Survey of 201 dental hygienists in the UK, Ipsos (2019)

Be clean and green

Did you know that keeping your mouth healthy is now greener than ever? TePe interdental brushes are made in our factory which is run by 100% green energy. We are committed to reducing our environmental impact and continually find new ways to do this¹³.



GOOD news!

For daily brushing, the TePe GOOD™ toothbrush is the UK's first plant based plastic toothbrush made using sugarcane and castor oil.

The use of renewable raw materials enables TePe to recirculate up to 95% of the CO2 emissions during the product's lifecycle, without compromising on product quality, design, or hygiene.



TePe has been certified to **ISO 14001 environmental standard** for **over 15 years**.

To find out more about how TePe can help to keep your smile healthy, visit www.tepe.com/uk



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