You can greatly influence your lifespan

Thanks to the astonishing state of knowledge today, we know that we can greatly influence our lifespan and health through the lifestyles we adopt. Our genes determine at most 25 per cent, while our lifestyle determines 75 per cent or even more. We also know that the appearance of major diseases and ageing is caused by one and the same inflammation, which occurs in our body in different ways.

As a general practitioner and researcher, I became interested in identifying the crucial factors of our lifestyles, which can strengthen the immune system and both slow down and prevent inflammation. I then found ten areas that had the potential to extend our lives for ten healthy years. These findings I compiled in my book The Nordic Guide to Living 10 Years Longer.

Significance of oral health to general health and longevity

One field that plays a role in inflammation and general health is oral health. As we know, there is a strong correlation between the two, and research has shown that people with healthy oral cavities live about six years longer than those with oral inflammation. Bleeding gums, periodontitis and oral lesions that last for weeks, months or years constitute an inflammatory strain for the entire body, resulting in damage to blood vessels and thus causing an increased risk of heart attacks, strokes and premature death.

Therefore, in addition to brushing, it is important to keep interdental spaces clean to reduce the risk of periodontitis. Dental floss or other tools have been recommended worldwide, for example in the US since 1979.

However, a few years ago, a debate on dental floss arose. US authorities considered the research showing the effect of dental floss on periodontitis insufficient. Nevertheless, dental floss is recommended by the country’s two leading dental associations, the American Dental Association and the American Academy of Periodontology. The associations relied on studies other than those included in the federal government’s review, claiming that flossing helps to prevent plaque, gingivitis and dental caries. Prof. Björn Klinge of Karolinska Institute, a medical university in Sweden, said that there are generally very few reliable scientific studies in medicine and dentistry that demonstrate convincing value of different methods of interdental cleaning. However, according to Klinge, proven experience shows that dental floss and other similar tools help against periodontitis and dental caries.

Simple tips for a longer and healthier life

Another important tip that may result in a long and healthy life is regular exercise. It has been found that the major effect on health already occurs at 30 minutes of fast walking per day. It is just as beneficial to do housecleaning or gardening—in this way, you combine benefit with pleasure. You do not have to run a marathon; on the contrary, there are studies that indicate risks for this. Another important and new understanding of physical activity is to avoid a sedentary lifestyle. Sitting still is as harmful as smoking! Therefore, stand up and move around for a few minutes after 30–45 minutes of sitting.

Of course, diet also plays a major role in both dental and general health. The phrase “you are what you eat” is absolutely true. You can eat in a way that ages you quickly or slowly; it is up to you! My book includes many simple tips on how to choose a good diet, which ideally contains antioxidants, omega-3 fatty acid and fibre. The book gives suggestions for diets that suppress inflammation and strengthen the immune system. In addition to food, beverages have to be considered. Coffee, for example, though this is not widely known, contains beneficial antioxidants and has been shown to reduce the risk of diabetes, cardiovascular disease and Alzheimer’s disease.

Other interesting tips are that optimism live seven years longer than pessimists, social contacts are important to maintain a good health and you should not forget to sunbathe for 15–20 minutes each day during the summer to absorb the vital vitamin D.

One area that is not widely known is that the appearance of major diseases and ageing is caused by one and the same inflammation, which occurs in our body in different ways. Additionally, during the winter months, a vitamin D supplement may be of great value.

Changing your lifestyle is not the easiest thing to do because we tend to fall back into our habits. The most important and, perhaps, the most difficult thing is, therefore, to take the first step. This action will come more naturally if you begin with a habit that is easy to change. Therefore, the book is filled with simple tips that can be applied right away. The transition to a healthy lifestyle should not be a torment, but should be perceived as something positive and meaningful.

This way, the new resolutions can be adhered to long term. Make sure you eat healthily, brush and floss on a daily basis—and experience how fresh your mouth feels—as in the sun and have a cup of coffee and look ahead positively. As a result, the chances of your new choices becoming habits will increase.

Dr Bertil Marklund

is a general medical practitioner and an adjunct professor in general medicine and public health at the University of Gothenburg in Sweden.

Information about the book: Marklund’s book titled The Nordic Guide to Living 10 Years Longer: 10 Easy Tips to Live a Healthier, Happier Life was published in 2017 by Piatkus and has been translated into 27 languages.
The University of Iceland (HÍ) and the Directorate of Immigration are currently finalising a work agreement on determining the age of asylum seekers based on dental examinations. The assessment method has been heavily criticised as being imprecise.

While asylum seekers may refuse to undergo a dental examination for this purpose if they wish, they must do so with the understanding that this may affect whether their application is accepted or not, although it is stipulated that their application will not be rejected solely for refusing a dental examination.

Since the European refugee crisis began in 2015, an increased number of people have come to Europe via the Mediterranean Sea or south-east Europe in order to apply for asylum. Most of them have come from Syria, Afghanistan and Iraq and have been forced to flee because of persecution, war and violence.

The University of Iceland may soon perform dental radiographs in order to assess the age of young asylum seekers, even though this method is highly disputed.

The association clearly opposes the use of dental radiographs for assessing the age of asylum seekers because it is an inaccurate method. Furthermore, the BDA believes it is inappropriate and unethical to take radiographs of people without them gaining any health benefit therefrom.

According to the association, radiographs taken for a purpose other than a clinical reason should not be used without the patients’ consent and they should be fully informed about how and by whom the radiographs are going to be used.

The Royal College of Paediatrics and Child Health produced a publication titled Refugee and Unaccompanied Asylum-Seeking Children and Young People in April 2018 to support paediatricians in the assessment of children with a refugee background. The document states that the use of radiological assessment is very imprecise and can only determine an estimated age within a range of two years in either direction. Same as the BDA, the college regards the use of radiographs for this purpose as inappropriate. Therefore, it is important for paediatricians to inform social workers that dental radiographs will currently not contribute to the age assessment process.

Further, the science ethics regulations of the University of Iceland stipulate that participants in any study at the university cannot have been pressured to take part, nor can the results of the study have any negative impacts on the participants’ lives.

The student council at HÍ was both surprised and disappointed to learn the news. “My personal opinion is that the university should not have anything to do with this,” said Elísabet Brynjarsdóttir, president of the university student council. “I believe dental age determination is in conflict with the university’s science ethics regulations, and the procedure is very controversial in academic circles due to inexact results and from an ethical point of view,” she added.

In the UK, the Home Office has abandoned the practice altogether upon the recommendation of the British Dental Association (BDA). The association clearly opposes the use of dental radiographs for assessing the age of asylum seekers because it is an inaccurate method. Furthermore, the BDA believes it is inappropriate and unethical to take radiographs of people without them gaining any health benefit therefrom.

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It is fantastic to have implants as a treatment option

An interview with Prof. Ann Wennerberg, Sweden

A world-leading authority on dental implant surfaces, Prof. Ann Wennerberg, from the University of Gothenburg in Sweden, recently led a systematic review of 62 clinical studies in which she analyzed a total of over 17,000 implants with at least ten years of follow-up. The study compared the long-term clinical outcomes of treatment with implants with different surfaces, including sandblasted, titanium plasma-sprayed, turned, sandblasted and acid-etched, and anodized. At the 2018 EAO congress in Vienna, Dental Tribune International met with Prof. Wennerberg to discuss her research and its findings.

Prof. Wennerberg, in your study you compared five implant surfaces, including the TiUnite implant surface by Nobel Biocare. Could you please explain what TiUnite is exactly?

TiUnite is an anodized surface. An electrolytic bath is used to create those pores and those very typical structures on the implant surface. It is very easy on an image to detect that it is an anodized surface and not a blasted or etched one.

What do you think are the main advantages of implants with the TiUnite surface and were any of these investigated in the study?

Since the well-known company Nobel Biocare produces it, I think the fact itself is an advantage. There are a number of moderately rough surfaces that function well, but to assess their safety and so on, as also stated in the paper, it is helpful and important to work with companies that have collected clinical data. TiUnite has been followed for many years now, so it is quite safe to say that it has been proven to be safe to use. That is an advantage.

Nobel Biocare implants with a turned surface have been very well documented over the years. In this study, we were particularly interested in how TiUnite, which is relatively new, performs in the oral cavity. There had been some concerns that, because this surface has so many underruts, that it may be difficult to clean and thus may harbor bacteria that may cause bone resorption over time.

What are the limitations of the TiUnite surface?

I do not know if there are any limitations. We do not have any proof that it causes more bone resorption or other problems, but I cannot say that it is absolutely impossible that it does. I have no idea how the implant would perform over the course of 25 or more years. As of now, we have not been able to confirm this concern though.

As for the financial aspect, of course, a lot of the major companies, which have spent a great deal on the development of these surfaces, expect some form of profit. Therefore, some implant systems are more expensive, but you quite often get more documented data on these systems compared with cheaper ones. Therefore, you know what you are buying. What do you think are the main advantages of implants?

That is a difficult question for me to answer [smiles] because there have been many developments. From a material standpoint, we now have better mechanical properties and better prosthetic solutions, and we are able to better compensate for misalignment. And then there are some things that have really improved over the last 30 years, but I would not say it happened in one big leap or anything, more like a step-by-step approach, which has been influenced by many players in the field that have provided us with very good clinical results. Overall, I think it is fantastic to have implants as a treatment option for patients.

Thank you very much for the interview.


“...it is helpful and important to work with companies that have collected clinical data. TiUnite has been followed for many years now...”
The picture is becoming clearer regarding the chronic oral pain condition known as burning mouth syndrome (BMS), which mainly affects women who are middle-aged and older. A scientist at Sahlgrenska Academy at the University of Gothenburg has reported results on dissertation work that is part of a larger research project aimed at finding a model for BMS that can facilitate diagnosis and treatment in the future.

BMS affects approximately 4 per cent of the Swedish population. The condition is characterised by a burning sensation of the oral mucosa in a person with otherwise apparently normal oral health. The tongue is most often afflicted, but the palate, lips and gingivae may also be affected. Other common symptoms include xerostomia and altered taste perception, such as a bitter or metallic flavour in the mouth.

In her doctoral dissertation on oral microbiology and immunology at the Institute of Odontology, Dr Shikha Acharya connected clinical findings and self-reported findings from questionnaires from patients with BMS about their symptoms and background (other diseases, use of medications, etc.) along with saliva-related factors. These were compared with a sex- and age-matched control group.

The researcher found that 45 per cent of the BMS patients had altered taste perception and 73 per cent experienced burning or stinging or a combination of the two, but stinging and numbness also occurred. In addition to BMS, the examination of the study participants showed a higher incidence of other types of diseases, use of more medications, proneness to bruxism and more allergies than the control group. However, more advanced analyses showed that BMS was strongly associated with self-reported skin disease and subjective oral dryness.

That the BMS patients reported they suffered considerably more from skin disease and skin problems, compared with the control group, is a new finding. The study also found that mucin proteins in BMS patients’ saliva were altered and contained lower amounts of carbohydrate structures that affect the oral cavity’s immune system, constituting another novel finding.

“Our hope is that the new findings will contribute to the development of objective diagnostic criteria and effective individualized treatment that are both currently lacking. It’s important because the afflicted patients often feel that their surroundings and healthcare professionals doubt their ailment,” explained Acharya.