Chapter 3

Ways to remineralise teeth

The body has the amazing ability to repair and heal, explains Beata Bishop in her book, 'A Time to Heal'. To manage this incredible process, the body requires an unpolluted environment and an abundance of varied organic food. Today pollution is difficult to avoid, whether in food, air or water, while organic food in any quantity can be difficult and expensive to source but with determination healing is possible.

In a less polluted world, between 1924 and 1932, Dr May Mellanby (wife of Sir Edward) published several articles in the British Medical Journal about food and tooth decay. The children she studied already had numerous cavities. Mellanby found that the best diet to produce essentially no new cavities was a grain-free diet, high in fat-soluble vitamins A and D from cod liver oil. These grain-free children also showed signs of their decayed teeth remineralising. The tooth-healing diet included raw milk, eggs, butter, potatoes and cod liver oil.

In 1928, Dr J. D. Boyd published, in the Journal of the American Medical Association, an article explaining how his diet that was meant to control diabetes in children actually healed their decayed teeth. His diet not only stopped cavities but turned soft tooth enamel hard and glossy. This diet consisted of farm fresh raw milk, cream, butter, eggs, meat from grass-fed animals, cod liver oil, vegetables and fruit. These foods would have been organic, free from pesticides.

In 1938 Dr Weston Price writes about the ability of teeth to remineralise as a natural result of a diet high in vitamins, minerals and a reduced carbohydrate intake: "Dentine and pulp can be restored and remain vital for extended periods... in many cases a hard and even glassy surface resulting." (1)

And as recently as 2012, Ramel Nagel, in his book, 'Cure Tooth Decay', states:

"Holes in your tooth usually cannot be completely filled and restored to their original condition, even with special nutrition, but the holes can be sealed naturally, and the enamel will become hard and protect the tooth pulp from infection."

This idea is repeated in March 2020 by Mark Ryder DMD, Professor and Chair of Orafacial Sciences, UCSF, in an interview for Gateway to Health, when he said that if only the enamel is decayed, it could be reversed.

Dr Mark Buhemme DDS in his book, 'Dr B's Guide to Reversing Cavities Naturally', states that the remineralisation process may require 18 months to two years of good nutrition and care.

The beneficial diets that Dr Burhemme suggests are the Paleo and the Ketogenic (Keto) diets. The Paleo diet eliminates all wheat, dairy and added sugars, and encourages eating lots of animal protein (best from grass-fed cattle), vegetables, fruit, nuts, seeds and healthy fats such as cod liver oil, avocado, olive oil, coconut oil and butter, again from grass-fed cows. (Nuts and seeds are better soaked before eating to reduce the phytic content that hinders absorption of minerals). Author's words in parentheses.

The Keto diet, he says, is more restrictive than the Paleo diet but allows and emphasises dairy. It also eliminates all grains, adding starchy vegetables and most fruits to the 'to avoid' list. You are left with animal protein, lean vegetables, berry fruits, nuts, seeds, healthy fats, and high-fat dairy.

Dr. Dominik Nischwitz, for bone healing, adds Vitamins D3, C, K2, and B vitamins along with magnesium as essential for maintaining good teeth, and thinks that most people should avoid gluten. His holistic treatment plan for adults includes addressing oral interferences such as metal fillings, root canals and cavitations. (2)

Another helpful way to remineralise teeth is the way teeth are cleaned, to encourage saliva, says Dr Elma Jung in his book, 'Shut Your Mouth And Open Wide'. This idea is supported by Dr Joseph Phillip in his book, 'The Toothpaste Wizard'. Both dentists advise a brushing technique using a soft brush to carefully bush in an 'up and down' motion rather than across the teeth. This action encourages saliva to flow freely, cleaning and helping to remineralise teeth and gums naturally. As this can be done any time, even while watching TV, it is great for children who can be in complete control of a gentle technique which leaves their teeth feeling wonderfully clean.

A healthy endocrine system is essential to assimilate nutrients from the gut so that the correct calcium and phosphorus ratio in the blood can be maintained in order to nourish teeth and bone. Anything which disrupts this balance needs to be avoided. The extra phosphate added to so many foods to extend shelf life, to make foods creamier and easier to melt, and to keep powders from clumping may unnecessarily add too much phosphorus to our diet, as it is very effectively absorbed in the gastrointestinal track. Typical foods are processed meats, ham, sausages, canned fish, baked goods, spreadable cheeses, cola drinks, other soft drinks, (canned or bottled) and processed foods in general. Another source of phosphate is from the water

supply as water companies add phosphate to counteract corrosion within pipe works and equipment particularly the corrosive effect from adding fluoride so effective water filters are necessary.

Dental Research

The cause of dental decay (caries), was still a mystery at the turn of the 20th century. In order to gain a better understanding, the American Dental Association (ADA) commissioned Dr Weston Price, who was known to be a thorough and passionate researcher, to look into what contributed to good sound teeth and what caused dental decay. Price worked for 25 years with a team of over 60 professionals, and had at his disposal an advisory board of eighteen of the leading scientists, in a variety of disciplines. His work founded the research arm of dentistry. In 1915, he become the first director of the American Dental Association's Research Institute. By that time, he had been administrating his extensive research program for fifteen years and had already published over one hundred and fifty papers in scientific journals.

What Price discovered and finally uncovered, was both amazing and shocking to the dental profession. His monumental work, published in two volumes in 1923, proved that infections in teeth migrated to other parts of the body to do harm, causing such diseases as arthritis and heart disease amongst others. The experiment that was to be a watershed moment for him was when he took an infected tooth that he had recently removed from a patient and placed it under the skin of a rabbitt. The rabbit quickly displayed symptoms of disease similar to the patient from whom the tooth was extracted and soon died.

Price also noted that those people with a nutritious diet and had 'good' saliva, had the best teeth. These discoveries were at first celebrated, but were subsequently shelved as this bigger picture was just beyond the understanding and vision of many dentists at that time. This was understandable because dentists considered themselves to be technicians, not doctors; they were required to treat people for toothache and to act immediately to relieve this pain.

Price's twenty-five-year research programme, however, was unable to answer a critical question: what were the protective factors that provided immunity to tooth decay? To answer this Question, Price turned to other cultures and spent a further nine years travelling the world looking for answers.

He studied the dietary habits of 14 isolated and primitive peoples. He found that those natives who still ate their customary natural foods – whether primarily fish, meat or vegetables – showed broad facial structures, with virtually no crooked teeth, impacted teeth or dental decay. This whether they cleaned their teeth in any particular way or not. When these natives came into contact with the western world and started eating western type food with its white flour, white sugar, and its canned and packaged foods, within a generation their facial features changed showing narrowing of their faces, crowding of their teeth and a high incidence of cavities. They also showed increasing susceptibility to tuberculosis and other degenerative diseases. Their physical stature, well-being and mental ability also declined. (3)

Dr Price concluded that it was the organic food, unprocessed, that provided all the nutrients the body required to build a strong and resilient body, face and healthy teeth. He was the first to notice that when the calcium-phosphorus ratio was out of balance in the blood, tooth decay resulted. Price published a record of his work entitled, 'Nutrition and Physical Degeneration' in 1938.

Melvin Page, D.D.S (1892-1983) became known as one of the top prosthodontists in the USA because he invented dentures based on engineering principles which diminished trauma, loss of vertical distance, and kept, to a minimum, loss of the alveolar bone. He became a great follower of Price's work and continued to research into the calcium/phosphorus ratio balance in the blood and its relationship to virtually all diseases, including tooth decay. Page, tested thousands of blood samples, and "showed that in order for us to utilize 10 mg of calcium, there has to be 4 mg of phosphorus present in the blood. Any amount less or more than 4 mg would contribute to body degeneration. This doesn't mean that calcium has to be exactly 10 mg and phosphorus 4 mg; what is essential is that calcium be 2.5 times that of phosphorus".

If calcium is without phosphorus it cannot be utilized by the body correctly and builds up in body tissues, in arteries, joints, as kidney stones and cataracts. If there is too much phosphorus, calcium is taken from your bones and this can be a prime factor in the development of rheumatoid arthritis, rickets, osteoporosis (porous bones, reduced bone mass or decreased bone density), and osteomalacia (bone softening). Page noted that the assimilation into the body of calcium and phosphorus was aided by adding vitamins, minerals and

trace minerals to the diet. However, if the endocrines, which regulates food assimilation amongst other things, were not functioning normally then some of the good elements of the food passed through without being utilized by the body. *(The endocrine system is damaged by both fluoride and mercury.)* If the endocrine system was not working efficiently, Page found that thyroid or insulin support may be required.

Dr Melvin Page found that whenever he was able to get patients to achieve a calcium level two and one-half times that of phosphorus, degenerative diseases disappeared and dental decay ceased. In this way excess inflammation was also eliminated. (4)

The greatest enemy of a balanced body chemistry is sugar, refined carbohydrates and processed foods. Whenever there is an imbalance, minerals are 'pulled' from tooth dentine and bones, causing a loss to teeth and bones while at the same time, saliva becomes acidic which adds to enamel erosion. According to Page, sugar causes tooth decay because it causes a disturbance to body chemistry, especially to the calcium and phosphorus levels in the blood, necessary for building strong bones and teeth. (5)

Francis Pottenger was also able to confirm Dr Price's conclusions regarding diet with his cat experiments. In 1946 he reported the results of these experiments. He found that cats' health declined and their teeth structure and shape deteriorated when fed poor food. Pottenger fed one group of cats with raw meat and raw milk, while another group of cats were fed cooked meat and pasteurised milk. There were never more than three generations of cats fed on cooked foods because of the third generation's inability to produce healthy, viable offspring. These cats were also generally more anxious and irritable.

If the cats were given good, nourishing, raw food, however, not later than the second or third generation they began to thrive and, over the next four generations, were restored to full health. Pottenger found that proper calcium utilisation within the body was hindered when foods were heated, even when pasteurised, and that, after only two weeks on cooked foods, there was a marked depletion of calcium and phosphorus levels in the bones (and teeth). This effect was even more pronounced in the second and third generation of deficient kittens on cooked food. Kittens on raw food had two to three times as much calcium and phosphorus in their bones. Pottenger experimented with soil quality and food production and found this to be a major factor in the health, both of animals and humans.

Interestingly, Pottenger's experimental work with animals showed a loss of secondary sexual characteristics after two or three generations on impoverished diets, and he stated:

"Observations of our young people reveals that humans are subjected to the same food deficiencies as we see in the 'Cat Study'. Males lose their heavy masculine frame, and their general contour begins to resemble the female. Females also tend to lose their distinguishing build, so that the sexes approached a physical neutrality. The male no longer has the strength of body that normally makes him the breadwinner and dominant personality. The females no longer have the pelvic capacity required for easy childbearing." (6)

In the 1900s, Sir Edward Mellanby conducted an experiment with dogs and found that female dogs fed a good diet during pregnancy had puppies which, even when given a poor diet, were highly immune to cavities because they had been born with well-built teeth. When female dogs were fed a poor diet during pregnancy and their puppies given a poor diet, the puppies usually formed cavities because the teeth were weak since birth.(7)

In the 1950s, Mr Cox, an animal farmer, found that when guinea-pigs were raised on commercial pellets with a high fluoride content, they began to look ragged and a bit listless as time went on. He found that the health of the babies gradually deteriorates.

At first, the babies were weak and one or two of a litter died. The next phase was that one or two of the babies would be stillborn and, finally, whole litters would be stillborn. After that there would be no more litters at all. Dr H.L. Richardson at the University of Oregon performed more than 200 autopsies on Mr Cox's animals and found lesions in the kidneys and testes. The kidneys had lesions in tubules (tubular nephrosis) and the testes

showed generalised testicular atrophy. (8)

Suggestions to help the body heal from the effects of toxic chemicals are listed in chapter 18.

Chapter 3 References

(1) (Source: 'Nutrition and Degeneration' by Weston Price).

(2) (Ref: 'It's All In Your Mouth: Biological Dentistry and the Surprising Impact of Oral Health on the Whole Body Wellness', by Dr. Nischwitz, pub 2020).

(3) (Ref: George Meinig's 'Root-Canal Cover-Up').

(4) (Source: 'Root Canal Cover-Up' page 70/71, by George E. Meinig).

(5) (Source: WDDTY July 2008. vol 19 no 4)

(6) (Ref: Pottenger's Cat – Page 45).

(7) (Ref: Edward Mellanby, 'Nutrition and disease – the interaction of clinical and experimental work', London Oliver and Boyd, 1934, Chapter 11).

(8) (Ref: Dr Bruce Spittle's book, Fluoride Poisoning 2008, Pages 50/1).