



The effect of western diet on facial and dental development *Dr Prue King BDS*

The work of Dr Weston Price

Many people may be familiar with the work of Dr Weston Price, a U.S. dentist. In the 1930s he travelled the world and studied all the 'primitive' cultures of the world. At that time there were many pockets of people not exposed to western civilization and in particular, the Western diet of processed foods such as white flour and sugar.



He was very interested in the effect of diet on growth and development. He studied groups of Inuit, Pacific Islanders, Australian Aborigines, New Zealand Maori, Swiss Highlanders and South American Indians and he made some very astute observations. Those

not exposed to the 'Western' diet as children universally had broad, attractive faces and wide dental arches with beautifully aligned teeth and no tooth decay.

Within one generation of the mothers and children consuming white flour, sugar and other nutrient-poor foods, the faces became narrower, the dental arches irregular with crowded teeth and they began to develop tooth decay. This Dr. Weston Price put down to poor nutrient absorption interfering with growth and tooth strength.

He also posited that this change in dietary habits possibly encouraged the development of allergies and airway obstruction causing mouth-breathing, a change in tongue posture and the associated development of a long and narrow face.

The interesting thing was that in studying so many diverse cultures and diets he was able to pinpoint common factors in **all** the traditional diets that ensured that the children grew up strong and straight, maximising their genetic potential:

- All of them consumed a complete range of minerals and fat soluble vitamins from either high-vitamin **butter, seafood, cod liver oil, seal oil or animal organs** with their fat.
- All consumed some daily **raw, unaltered protein** from sources such as meats, seafood, nuts, cheeses, eggs, milk or high quality sprouted seeds.
- Most diets contained some form of **fermented** foods – milk cultures, pickles, and other fermented foods.
- Everyone ate **naturally organic wholefoods**, grains were freshly ground. The plants they ate had a very high mineral content.
- People spent most of their day exposed to **fresh air and sunlight**, and were engaged in vigorous **physical exercise** on a regular basis.
- Each culture observed periods of **partial abstinence** from food or regulated periods of under-eating as part of natural seasonal shortages of food or else as rituals involving **fasting**.
- Sweets (even good, natural sweets) were used **rarely or sparingly**, only for occasions of ritual, celebration or special feasting.

How changes in diet can halt and even reverse dental decay

He noted that every culture had adapted its diet over many hundreds of years to ensure that all of its people's nutritional needs were being met.

In the case of the Andean Indians, who lived far from the sea, their traditional diet would have lacked one vital nutrient – iodine – if they had not journeyed to the sea yearly to collect fish eggs and kelp. These they dried and were known to be such an essential source of good health that they were available at every trading post and used like currency in bartering for goods. One wonders how they knew to do this.



In his research into tooth decay Weston Price discovered that a diet high in fat-soluble vitamins, fats (especially butter) and minerals could enhance the health of malnourished children, and even halt the progress of tooth decay.

Why is this so? Consumption of fats helps with the absorption of minerals and fat-soluble vitamins, such as vitamins D, A, E and K, essential to good tooth and bone health.

Practical observation in an orphanage

He treated a group of malnourished children from an orphanage with a diet of butter, cod liver oil, rich meat and vegetable stews (with the bones included) and seafood chowders (prepared with the fish bones and organs) along with fermented foods such as sauerkraut and cultured dairy products.

At the same time the amount of sugar in the diet was reduced and raw dairy products increased.

Decay in their teeth was arrested and their teeth began to remineralize. New decay was prevented and their general health improved.

REFERENCES:

Price Pottenger Nutrition Foundation
www.ppnf.org

The indigenous groups with the **highest immunity from tooth decay** all consumed some of the following:

- dairy products from grass-fed animals
- organs and muscle meat from fish and shellfish
- yellow butter
- fish eggs
- organs of land and or sea animals, including cod liver oil.

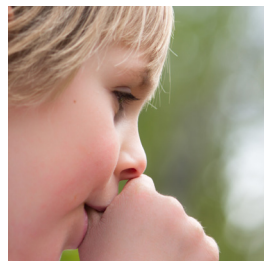
Groups using at least 2 or 3 of these primary vitamin sources had the highest immunity from dental caries.



The role played by bad habits

Even with a perfect diet there are some habits that can result in distortion of the dental arches, facial asymmetry and crooked teeth.

Thumb and dummy sucking



Habits such as thumb or dummy sucking will change the swallowing pattern and tongue position, putting pressure on some teeth and almost invariably creating a malocclusion. Breast-feeding until the child is old enough to drink straight from a cup (6–8 months old) encourages

a more relaxed lip position and swallow in the infant. The tongue sits properly in the oral cavity and will set the child up for a beautiful smile.

Sleeping incorrectly



Sleeping positions can also affect facial growth: if a child falls asleep each night on her stomach with her head to the side, perhaps a hand tucked in under her cheek, that side of her face will be flatter than the other and the canine tooth will most probably be impacted. Babies should be put to

sleep on alternate sides and on their backs to encourage symmetrical development of the facial bones. Some American Indian tribes used 'cradle boards' for their babies and strapped their babies into them to sleep, creating adults with broad beautiful faces and exceptionally straight posture.

Allergies and nasal obstruction

Allergies and nasal obstruction should be treated early so that nasal breathing is established for good health and facial development. Once children are older, interventions for mouth-breathers include learning corrective breathing techniques such as Buteyko, taping the mouth closed, and the use of pre-orthodontic trainers for lip support and swallowing correction. There are also thumb guards and oral appliances for thumb sucking correction. The sooner these habits are stopped, the less likely they are to lead to permanent distortion of the face, teeth and jaws.

Orthodontic correction



If all this fails to prevent a malocclusion and the poor child has inherited mum's small jaw and dad's huge teeth, then early intervention with functional orthodontic appliances to expand the dental arches and reposition the jaw will create a pleasing smile

and face – without needing to extract teeth and also decreasing the time spent straightening the teeth with braces.

Sometimes asymmetry in the face and jaw can be a result of body posture being affected by birth trauma or a congenital difference between left and right sides as in a short leg or hip abnormality. In these cases treatment by an osteopath or chiropractor to correct these is helpful before or at the same time as correcting the dental malocclusion. If the contributing body posture is not corrected the orthodontic correction is most likely to relapse fairly quickly.

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We all want the best for our children physically, mentally and emotionally. This article has some tools you can use to help your child reach adulthood with a well-developed trouble-free dentition and a physically and mentally strong body.

In the famous 'Pottenger Cat Study' it took one generation for the deterioration to occur when diet was inadequate and a further three generations on an optimal diet for their physical condition to return to that of the original cats... Food for thought!



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