

How to Keep Well---Oral Hygiene

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IN AN address given before the Royal College of Dental Surgeons, London, shortly before his death, the late Sir William Osler said—"You have one gospel to preach, in season and out of season, early and late, and this is the gospel of oral hygiene, in the whole realm of hygiene there is nothing so important as that." And again on another occasion—"Unhygienic mouths and diseased teeth and gums are responsible for more physical degeneration than alcohol."

These are sweeping and unqualified statements, yet Sir William Osler was the foremost authority in medicine of his time and knew whereof he spoke. Let me explain as briefly as possible, the reasons which underlie his terse opinions, and the need for diligent care of the mouth and its contents, will be apparent.

The mouth is the vestibule of the digestive tract. In it the first step in the process of digestion takes place, the chief factor in this being the tongue, the teeth and the saliva. When food is taken it is cut, torn and ground into a pulpy, finely sub-divided mass by the teeth. At the same time the salivary glands are stimulated, their secretions are poured into the mouth and intimately mixed with the food, converting the starchy granules into sugar and at the same time the food is thinned and lubricated so that with the assistance of the tongue it may be swallowed without injury or irritation to the delicate membranes with which it comes in contact. This is what is meant when we speak of mastication.

Thus mastication is the first of a series of processes whereby properly selected food is changed into nourishment suitable to the needs of the body and it may be safely assumed that the success or failure of the succeeding processes is largely dependent upon the thoroughness of the first.

Regarded from this point of view as an important factor in the digestive process good teeth are essential to good health. For without good teeth there cannot be perfect mastication; without perfect mastication there cannot be good digestion; without good digestion there cannot be perfect assimilation; without perfect assimilation there cannot be proper nutrition; and without proper nutrition there cannot be good health.

But there is another angle from which the mouth must be considered. No incubator ever devised can equal it in efficiency for the growth of bacteria. Even

when carefully cared for it still has all the requirements necessary to luxuriant growth. The temperature is exactly right and nourishment in the form of physiological debris and decaying food stuffs is always present. The mouth is never free of organisms. They may or may not become pathogenic as conditions of health vary. Being microscopic in size they may be present in tremendous numbers with little evidence to that effect.

Now all of these minute organisms, whether plant or animal are very much alive; they reproduce themselves a thousand fold in an incredibly short space of time; they assimilate what they need and later excrete the non-essentials, these end products known as toxins, are, as their name indicates, highly poisonous.

If, then, when the greatest care is used, it is found difficult to keep under control the bacterial flora of the mouth, think what the conditions must be where oral hygiene is not practiced at all! Broken down food stuffs in all stages of putrefaction, loaded with dead tissue cells and teeming with germs and their end products form a sticky semi-solid mass around, between and over the teeth and under the gum margins; the saliva becomes saturated with organisms, toxins and debris—A disgusting picture certainly but representing the rule rather than the exception with the great majority.

But all the truth has not yet been told. There are still other after-effects both local and systemic, due to neglect of oral hygiene. As has already been described bacteria in countless numbers cover and stick to the surfaces of the teeth. As a result, through the agency of acid production the teeth themselves are attacked, the enamel dissolved and access made for the organisms to the underlying dentine which in turn succumbs. That well known phenomenon, tooth decay is now in full swing—as it progresses, approach to the tooth pulp is heralded by intense pain sometimes neuralgic in character. Eventually the pulp too is overcome by the infection and with its death the dreaded but only too familiar alveolar abscess makes an appearance usually finding a vent into the mouth where the discharging pus helps still further to derange digestion. Frequently, however, alveolar abscesses do not develop true form. They will give no evidence of their presence locally by pain or swelling, there will be no discharge of pus into the mouth. Technically such abscesses are known as "focal infections"; their discharges find their