#### Spontaneous Swallowing

It is a permanent, involuntary, unconscious and unconditional action, which is present at birth together with breathing and reflex to protect the respiratory tract.

# A description:

It is a functional act which involves automatic swallowing every 3 to 4 minutes throughout one's life, both when awake and during sleep. This function is defined as Spontaneous Swallowing is as precious as underestimated, as frequent as it is ignored. This involuntary act is essential to attain and preserve jaw balancing with reference to the head, and head balancing with reference to body posture. I feel it has not been subject to adequate research. Many scientists ad scholars have dealt with the physiological components, frequency and conditions of its occurrence, but nobody has assessed the essential healthy effects of this phenomenon on all the components of the masticatory apparatus.

# **Effect On Teeth And Their Position And Stability**

The contraction of the muscles involved in the swallowing process is started by co-ordinated reflexes and is sensitive to the sense organs which receive stimuli and convey them to nerve centres. The receptors (pressoreceptors and nociceptors) prevent tooth trauma during chewing and swallowing. Every time spontaneous swallowing occurs, teeth are pushed vertically along the major axis, then consolidated and strengthened in the bone. Moreover, teeth are repeatedly stressed to interact correctly with their antagonists in a position of maximal intercuspidation so that they move and adjust until they are in a balanced position with muscles and joints.

### **Eutrophic Effect On Periodontium**

(benefits for the health and condition of gums, dental-alveolar ligament and mandibular bone)

During swallowing teeth have short intermittent contacts which cause the compression and decompression of the periodontium (the tooth-supporting apparatus) and consequently improve the blood pumping action. An increase in blood flow has eutrophic and antibacterial effects on the whole dental-periodontal system which benefits from this process. The consequent improved defence against infection and correct hygienic habits prevent gengivitis, periodontitis and pyorrhoea

### Effect On Condyles And The Whde Mandibular Joint

Condyles are continuously reshaped due to the effect of repeated functional stimuli. Discs and ligaments adjust in order to avoid inconsistency between the structural position and the functional one. Correct condyle movement avoids any damage and strain, which cause pain and reduced mouth opening and closing, crackling, clicking and mandibular deviation. The continuous functional reshaping of these anatomic elements ensure the perfect life-long balance of all system components, if they are not affected by any parafunctional stimuli or external anomalous causes.

# **Self-Balancing Eutrophic Effects On All System Components**

Spontaneous Swallowing continuously and repeatedly represents a regular muscular and vascular exercise which has eutrophic effects on the periodontium (as described above) as well as muscles, jaw bones and joints. Movement and muscular contraction are controlled by the neuromuscular component, which is constantly active and alert. Highly sensitive, it helps perceive minimal shifts and thickness (as thin as hundredths of a millimetre) interposed between the teeth. It is almost impossible to swallow if the jaw is not centred, balanced and locked in the correct occlusion position. Therefore, the innate reflex of Spontaneous Swallowing is a self-balancing physiological biomechanism which is used by the neuromuscular component to check and ascertain whether the jaws are in the correct position and their interaction occurs in perfect balance with all the other elements. This is a sort of gift given by nature, which must not be hindered, because its benefits to the health and well-being are only felt if it is free to operate. The jaw can only be re-centred and re-balanced every time swallowing occurs if the head does not weigh on it due to incorrect sleeping positions (See Bruxism and a complete description).

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