## Effect of Masticatory Efficiency on General Health

**ADOPTED** by the FDI General Assembly **September**, **2003** in **Sydney**, **Australia** REVISED **September**, **2009** in **Singapore** 

## Introduction

Masticatory efficiency in adults may be compromised if there are less than 20 functional teeth.

Masticatory efficiency has essential benefits, not only for the digestion of food, but also for its contribution to physical and mental well-being. Dentists and patients have a shared responsibility to contribute to overall health by maintaining an appropriate and acceptable level of masticatory efficiency to meet patients' needs. However, further research on the relationship between masticatory efficiency, general health and quality of life is necessary.

There is evidence to support that:

- mastication stimulates the flow of saliva, which helps to maintain the health of hard and soft oral tissues and protect the body against pathogens
- loss of masticatory efficiency may be associated with emotional health problems
- deranged occlusions with reduced masticatory efficiency may lead to the risk of alimentary problems, stress and temporomandibular joint disorders
- patients with morbid obesity require educating to chew food for longer, as a requirement of a weight loss programme
- restoration of masticatory efficiency following dental treatment may lead to an improvement in Quality of Life
- mastication increases blood flow within the brain and stimulates central neural activity; however, the implications of these findings are unclear
- nutritional guidance should be provided to patients, specific to their level of masticatory efficiency
- there may be an association between a healthy Body Mass Index and masticatory efficiency

## References

- Armellini D, von Fraunhofer AJ. The shortened dental arch: a review of the literature. *J Pros Dent* 2004;92:531-5
- Nakata M. Masticatory function and its effects on general health. Int Dent J 1998;48:540-8
- Veyrune JL, Miller CC, Czernichow S, Ciangura CA, Nicolas E, Hennequin M. Impact of morbid obesity on chewing ability. *Obes Surg* 2008;18:1467-72