



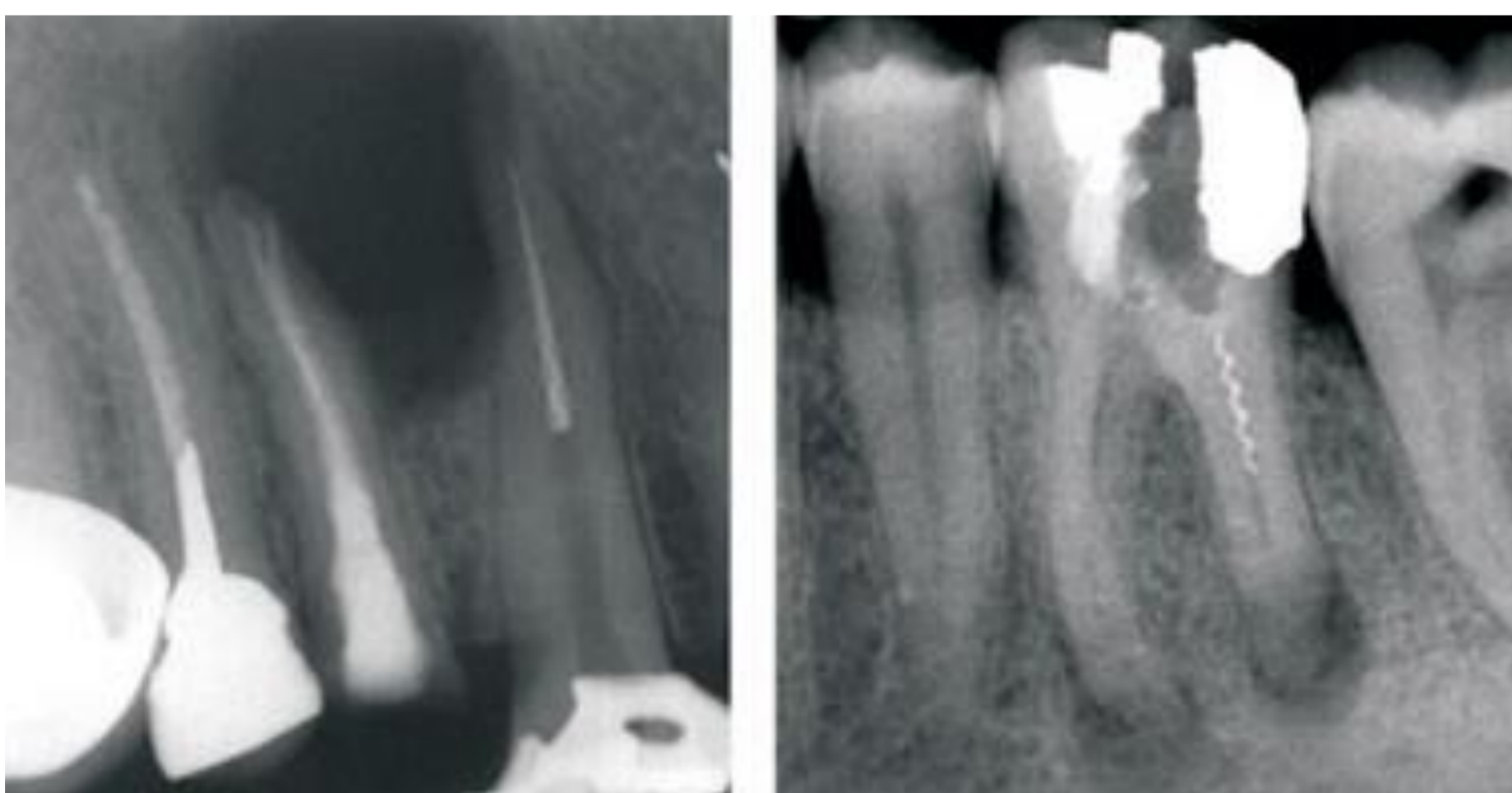
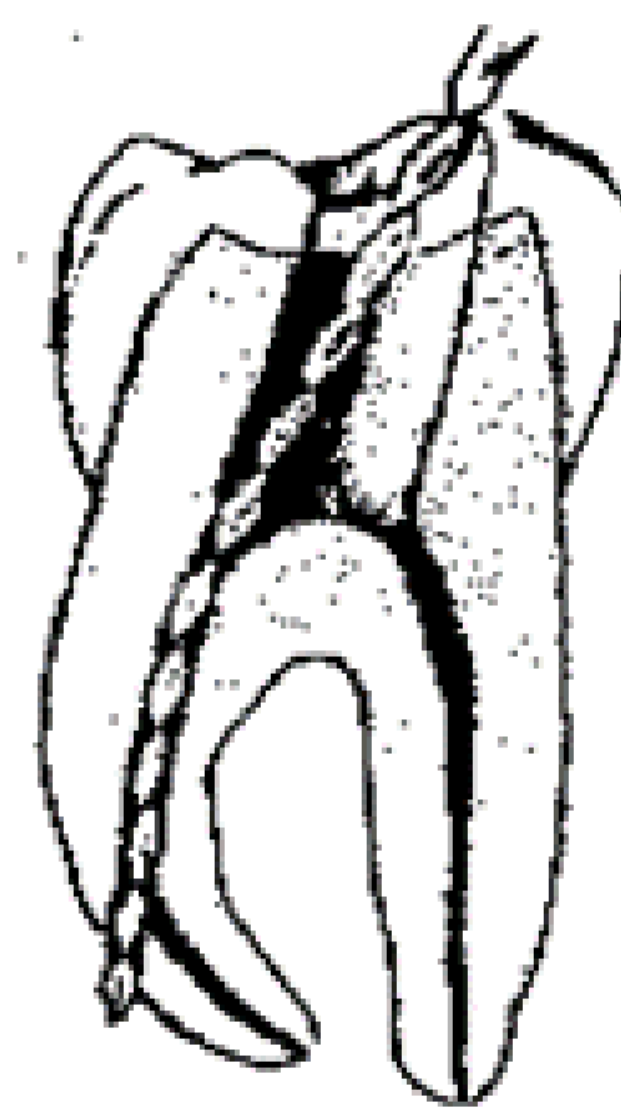
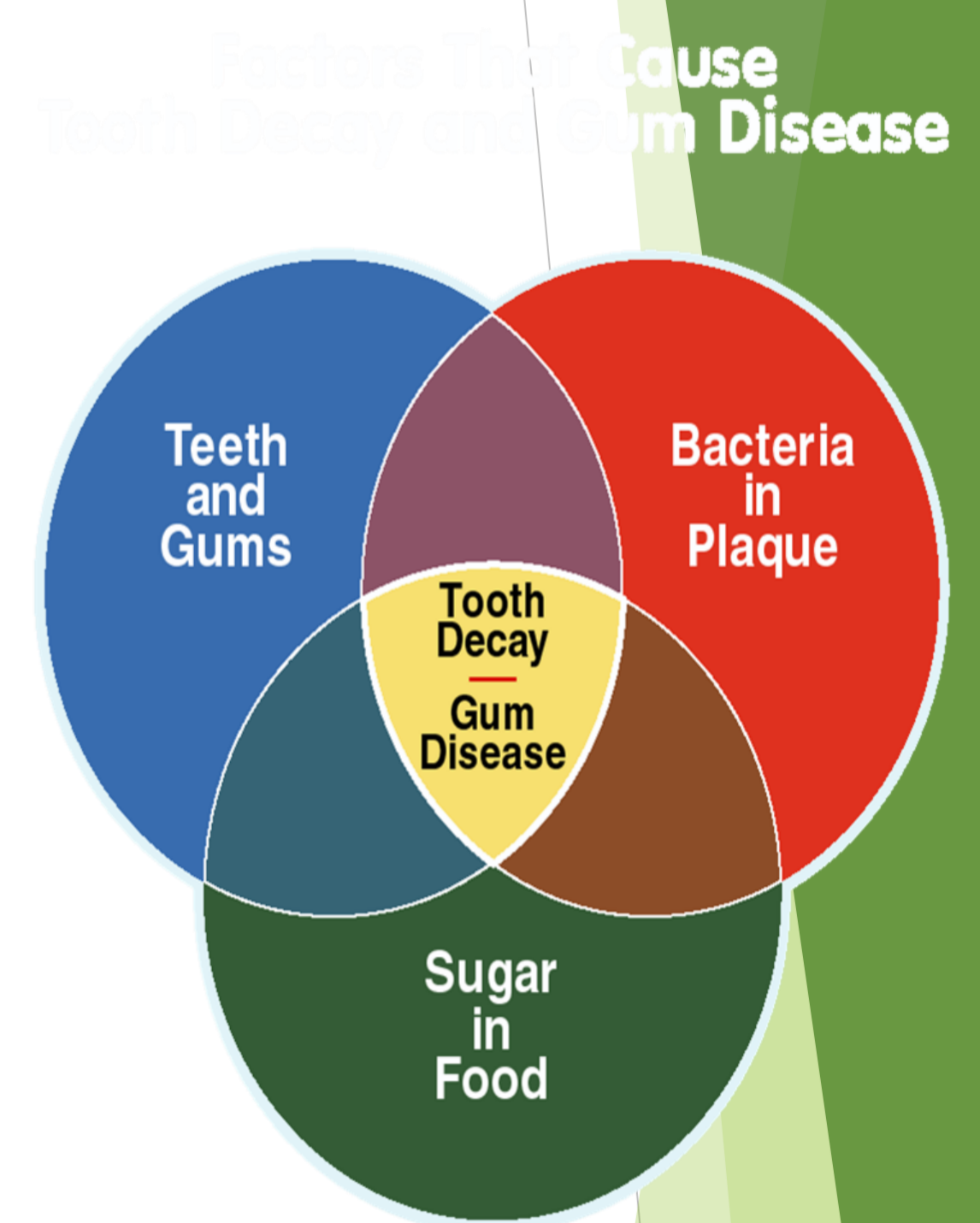
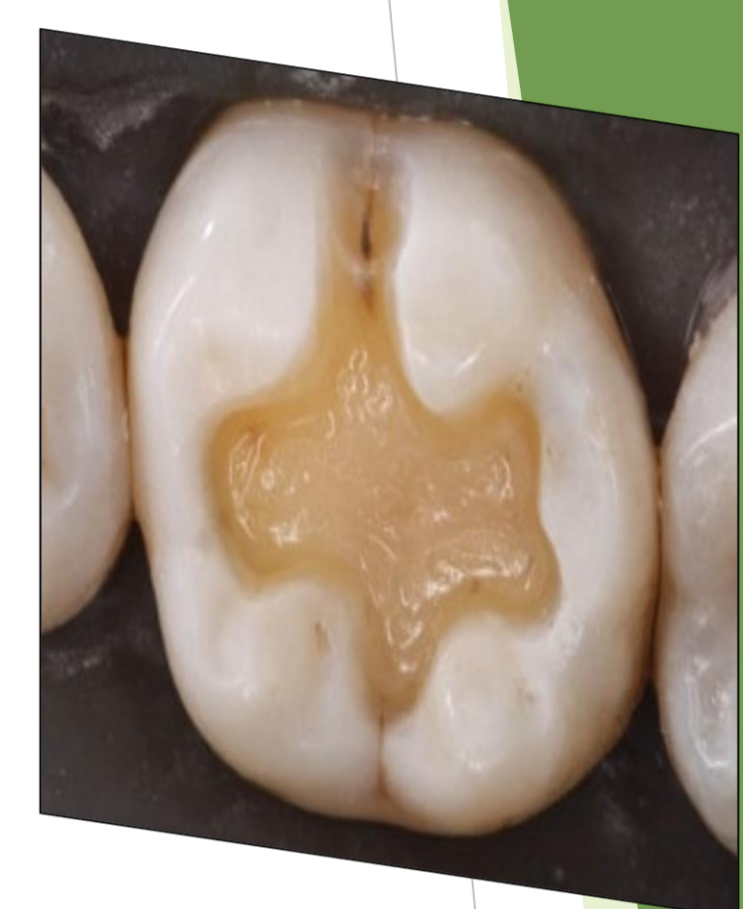
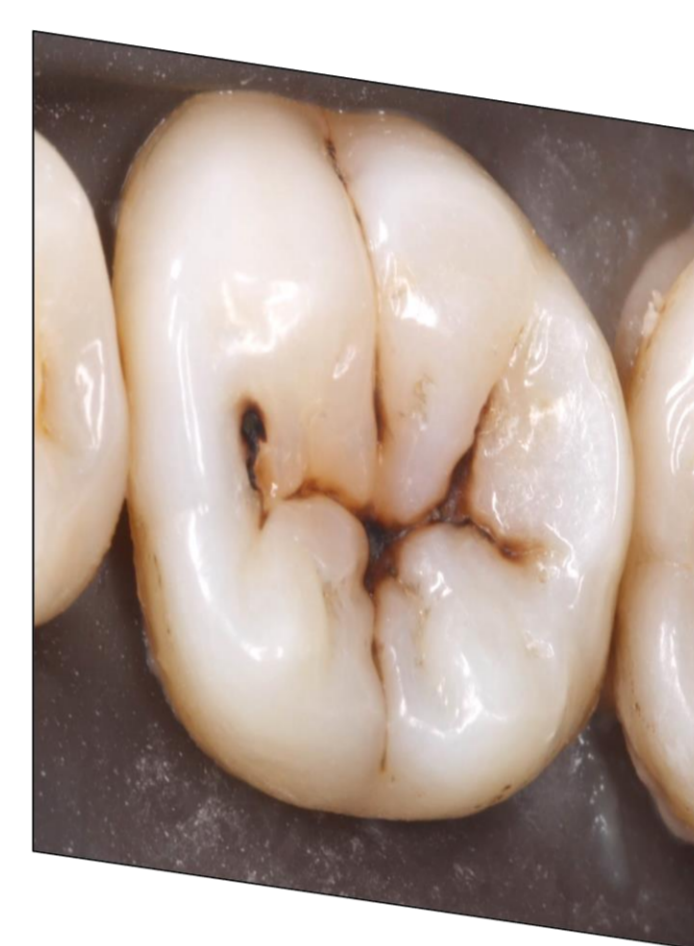
# Influence of saliva in the development of dental erosion

Natasha Longurova, Kovacevska Ivona, Zlatanovska Katerina, Sandra Atanasova, Verica Toneva



Saliva, acquired pellicle, dental structures and their relation to soft tissues in the oral cavity and tongue are in direct contact with the development of dental erosions. During the erosive attack of the saliva, its protective mechanisms such as dilution of erosive agents, neutralization and buffering of acids and slows down the decomposition of the enamel through the common ionic effect of calcium and phosphates.

Saliva offers protective effects that act continuously, and at the same time, and dynamic effects that act during the challenge. Salivary flow and neutralization of acids are important dynamic effects of saliva that prevent demineralization. If these two effects are compared, the acid buffer is the most important because it is associated with improved remineralization. Fluoride in the saliva (from toothpaste and tooth materials and from foods and beverages) can cause remineralization and prevent demineralization.



In a healthy environment, the pH of the inactive saliva is maintained at the limits of 6.7 to 7.4. The bicarbonate system buffer ( $\text{HCO}_3$ ) is the largest buffer present in the saliva. Just like in the peripheral blood, the combination of sodium bicarbonate, carbonic acid and gaseous carbon dioxide is an effective way of releasing the protons (hydrogen ions) from the system. When considering the dynamics of the buffer system. Saliva contains a large number of inorganic ions including calcium, phosphates, fluoride, magnesium, sodium, potassium and chloride.



Key words: demineralization, buffer system, inorganic ions.

