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CORRELATON BETWEEN CONSUMPTION OF FRUIT DRINKS AND THE CONCENTRATION OF CA AND PHOSPHATES IN THE SALIVA

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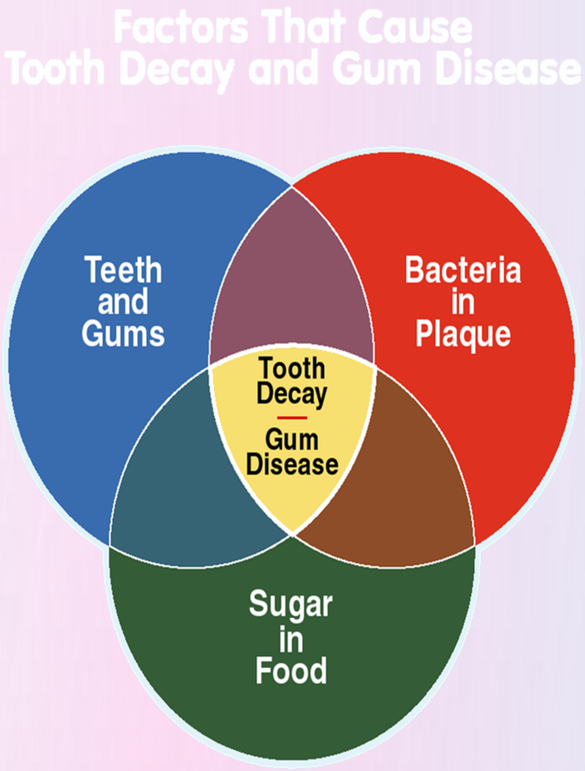
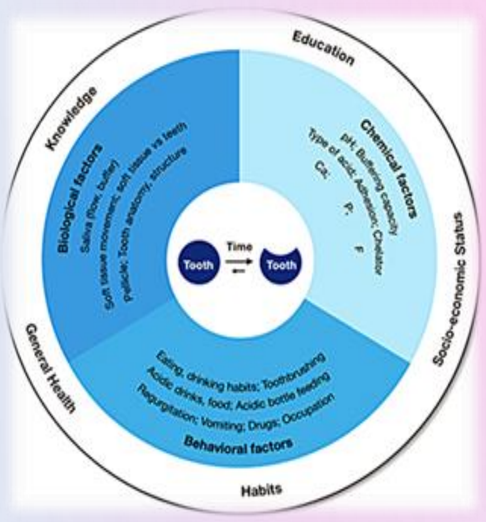
Aim:

The purpose of our study is to determinate the concentration of Ca and phosphates in saliva in the dependence of consumption of fruit drinks.



Material and method

The principle of the method for determining calcium and phosphates in saliva will be determined by ready-made semi-automatic analyzers (Chem-5 Plus v2, Erba Diagnostics Manheim Gmbh, Germany), that functions on the base of atomic absorption spectrometry.The principle is based on Ca ions and phosphates from the saliva sample, in an alkaline environment. Further, they react with the O-cresolphthalein complex, forming a complex with various colors that maximally absorb light at 530 nm. The color intensity is proportional to the concentration of the ions, that are in the sample.



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Results

Among the consumption of fruit drinks and the value of calcium and phosphates in saliva of patients for Spearman R = 0.012 and p> 0.05, a markedly weak positive non-significant correlation was noted, where the increased usage of fruit drinks follow the increase of calcium in saliva. Among the consumption of fruit drinks and the value of calcium and phosphates in saliva of patients for Spearman R = 0.012 and p> 0.05, a markedly weak negative non-significant correlation was noted, where the increased usage of fruit drinks follow the decline of phosphates in saliva.

Conclusion

Although it is too difficult to determine the exact erosive risk potential for various beverages and other dietary substances, however, they with the type, method and frequency generally have an impact on the damage to hard tooth substances and should not be neglected and many other external and internal factors.