

## **A study of the influence of mouth-breathing in some parameters of unstimulated and stimulated whole saliva of adolescents.**

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**OBJECTIVE:** The aim of this study was to analyze some standard parameters of the unstimulated and stimulated whole saliva of mouth-breathers and a control group to determine if these variables present any difference in mouth-breathers compared to control group, since these parameters of saliva can influence the oral health. **METHODS:** Saliva samples were collected from 61 adolescents aged 10-19 years; 30 were mouth-breathers and 31 were nose-breathers. The unstimulated salivary specimen was collected, followed by collection of the stimulated saliva. Soon after collecting the salivary sample, the flow rate and buffering capacity were determined. The samples were then stored at -80 degrees C until analysis was performed. The analysis consisted of the determination of protein content and total, free and bound sialic acid levels. **RESULTS:** No statistically significant difference was observed in the flow rate, buffering capacity, protein content, total and bound sialic acid levels of unstimulated and stimulated saliva, nor in the free sialic acid of stimulated saliva. However, the levels of free sialic acid of the unstimulated saliva were significantly higher in the mouth-breather compared to the control group. **CONCLUSIONS:** Since a higher level of free sialic acid is indicative of an increase in the number of bacteria in saliva, our findings suggest that mouth-breathers retain more bacteria in oral tissues.

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