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EVALUATION OF BIOCHEMICAL PARAMETERS IN SALIVA OF OBESE AND OVERWEIGHT INDIVIDUALS

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ABSTRACT

Obesity a major risk factor for cardiovascular diseases and diabetes mellitus, is becoming one of the most significant public health problems world wide. Detection of it at an early stage is of utmost importance to decrease the morbidity and mortality in obesity. Saliva based diagnostic offer a promising clinical strategy characterizing the early association between salivary analytes and the disease. The present study was carried out to analyze the physiological variability in salivary parameters among obese, overweight and normal subjects as a function of body mass index. The result presented in the report showed that the saliva of obese and overweight individual significantly differ from that of normal subjects with respect to the content of the total protein, glucose, urea, lactate, lipid components (TG, FFA, PL, cholesterol), antioxidants, inorganic ions and activities of salivary amylase, AP, ALP, LDH and GPx. The electrophoretic profile of salivary protein of test and control groups revealed significantly different salivary protein bands in obese individual in comparison to normal subjects proving the importance of salivary diagnostic in screening of obesity and obesity related diseases.

Keywords: Body Mass Index, Obesity, Saliva, Electrophoretic Profile

INTRODUCTION

Obesity, currently a rapidly growing form of malnutrition, is common in children adolescent and adults and is a challenging contemporary health problem. Its prevalence is rapidly increasing throughout the world. Excess body fat mass arises from energy imbalance caused by taking in too much energy and expending too little **[1]**. The increase in body fat mass is frequently associated with disturbances in