Measurement of salivary resistin, visfatin and adiponectin levels.


**Source**

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**Abstract**

Hormonal determination in saliva offers several advantages. Peptides enter the salivary glands either by active transport mechanisms or are expressed and secreted by the salivary glands themselves. The collection of saliva is a noninvasive, easily repeatable and less stressful technique than blood withdrawal. The purpose of the present study was to introduce a method for measuring salivary resistin, visfatin and adiponectin levels and to evaluate their associations with serum levels. Resistin, visfatin and adiponectin levels were measured in serum and saliva of 50 healthy adult volunteers (17 male and 33 female) using commercial enzyme immunoassay kits for serum with minor modifications. The present study documented the determination of resistin and adiponectin levels in saliva and the significant correlation of salivary levels with serum levels (r=0.441, p<0.01 and r=0.347, p<0.05, respectively). Moreover, the identification of visfatin in saliva was achieved, but no significant correlation with serum visfatin levels was observed. To our knowledge, this is the first study to report the determination of resistin and visfatin in saliva and the significant correlation of salivary resistin with serum levels, while it confirmed the significant association between salivary and serum adiponectin. The introduction of salivary determinations of adipokines could contribute to the elucidation of the physiology and the role of the specific adipokines in various clinical conditions (obesity, insulin resistance, inflammation, reproduction, energy imbalance and stress response).

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