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# RELATIONSHIP OF SALIVARY LEPTIN CONCENTRATIONS AND TOOTH DEVELOPMENT IN OBESE CHILDREN

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**Background:** Obesity is a disorder or disease characterized by accumulation of fatty tissue in the body in excess. The complexity of obesity pathologies has driven an increased demand for quantitative measurement of biomarkers. Leptin (Ob) as one of biomarkers was reported to be higher in obese children. Obese children were also reported had accelerated tooth development.

**Aim:** This study aimed to investigate relationship of salivary Leptin concentrations and tooth development obese children.

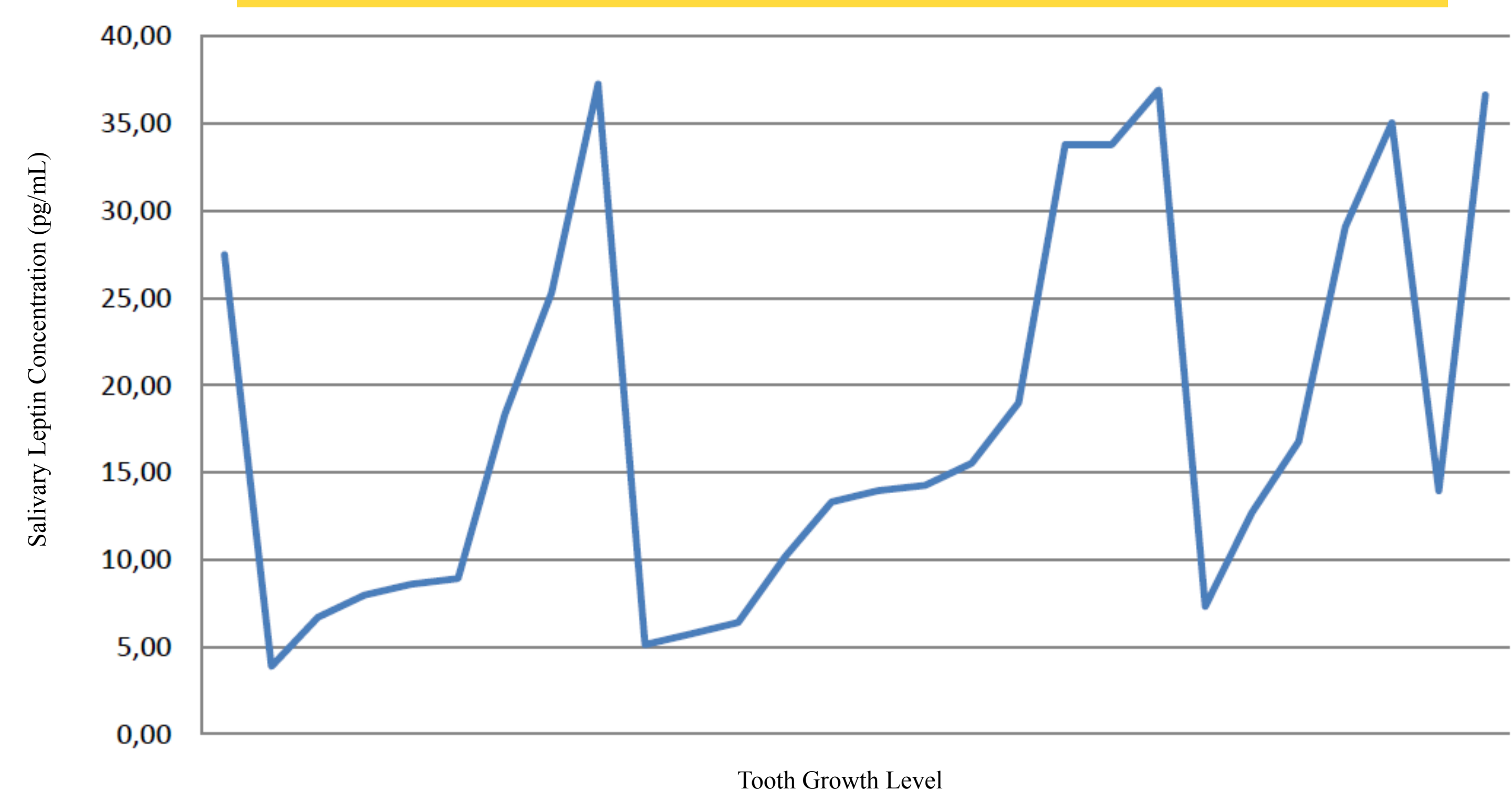
**Design:** All subjects are assessed salivary Leptin concentrations using ELISA and tooth development using panoramic examination.

**Results:** An insignificant very weak positive correlation was found between salivary Leptin concentrations and tooth development ( $r=0.190$ ,  $p=0.334$ ).

**Conclusion:** This study established that salivary Leptin concentrations and tooth development was insignificant correlation.

**Keywords:** obesity, salivary Leptin, tooth development

TOOTH GROWTH DEVELOPMENT AND LEPTIN CONCENTRATION



Correlation between Salivary Leptin Concentration and Tooth Growth and Development

Group of Study	Correlation Coefficient (r)	p
Leptin Concentration		
Tooth Growth Development	0.190	0.334

Difference Significant between Obese and Normal Children Salivary Leptin Concentration

Group of Study	N	Leptin Concentration Mean (pg/mL)	p
Obese Children	14	22.266	
Normal Children	14	11.964	0.009*

\*Sig.  $p<0.05$

Difference Significant between Obese and Normal Children Tooth Growth Development Level

Group of Study	N	Tooth Growth Development Score Mean	p
Obese Children	14	6.36	
Normal Children	14	5.57	0.034*

\*Sig.  $p<0.05$

