

**Ministry of Higher education
& Scientific Research
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**Oral Health Condition in Relation to Milk and
Dairy Products among Secondary School
Females at Al-Thahab Al-Abyedh Village in
Baghdad/Iraq**

A Thesis

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Abstract

Background: Milk is an opaque white liquid produced by the mammary glands of female mammals; it is an important part of human diets and consideration has been given for the possibility that the intake of dairy food can help to prevent oral health problems.

Aim of the Study: To assess the effect of milk and dairy product on oral health condition and nutritional status among secondary school females in Al-Thahab Al-Abyedh village.

Subjects, materials and methods: the sample consist of 405 adolescent females aged 13-18 years old attending the secondary school in Al-Thahab Al-Abyedh village. Oral examination involved the assessment of dental caries according to the criteria of world health organization, assessment of gingival health condition was recorded according to the criteria of the gingival bleeding index of world health organization, plaque assessment was recorded according to Silness and Loe index while calculus was recorded according to calculus component of periodontal disease index and enamel defect was recorded according to the modified developmental defects of enamel index of the world health organization.

Nutritional status was assessed by anthropometric measurements (body mass index) by center for disease control and prevention.

Results: The total sample was with good oral hygiene regarding the mean of plaque scores. However, the mean calculus index was higher among 16-18 years than 13-15 years. No significant differences were found concerning the gingival bleeding or BMI between the groups. The prevalence of enamel defect among the total sample was 18.77% with no statistical significance between the two age groups. While the mean values of (DS, DMFS and DMFT) were higher among

16-18 years students; statistically these differences were highly significant, significant for MS and non-significant for the FS score.

According to milk and dairy products the current study shows no significant differences among (natural, artificial and mixed) groups regarding the mean of plaque, calculus, gingival bleeding, dental caries and BMI.

The results showed some effects of dairy consumption on oral health: the mean value of plaque index decreased with the high intake of yogurt, while it increased with the high level of cream intake. Other products showed no significant differences among the different levels of intake concerning the mean of plaque index. The mean value of calculus decreased with the high intake of milk while it increased with the high intake of cream other products showed no significant differences among the different levels of intake. The mean of gingival bleeding decreased with the high level of yogurt, cheese and butter. Whereas, it increased with the high intake of cream. Other products showed no significant differences among the different levels of intake regarding the gingival bleeding. However, no significant effect of dairy intake on dental caries nor the BMI were reported.

Conclusion

Findings of this study suggested some health benefits of the dairy products on oral hygiene and gingival health; however, it does not provide support for the effect of dairy intake on dental caries nor the BMI.