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College of Dentistry**



**The Effects of Nonnutritive Sucking Habits on
the Oral Health among 3-5 Years old Children
in Baquba City/Iraq**

A Thesis

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Abstract

Background: Non-nutritive sucking habits (pacifiers sucking and thumb sucking) may have a vital role in the development of dental caries, malocclusions and provides a portal of entry for the microorganisms such as *Candida albicans* into the oral cavity.

Aims of the study: This study was conducted to evaluate the effect of non-nutritive sucking habits (pacifier and thumb sucking) on the oral health of 3-5 years old children in Baquba city/ Iraq. Assess the prevalence of this habit, estimate its effects on the dental caries, malocclusions and the presence of oral *candida albicans*.

Subjects and methods: An observational cross sectional study of non-nutritive sucking habits was conducted by using a multistage cluster random sampling technique. Firstly, a total of 1118 children; 536 boys and 582 girls; aged 3_5 years old belonged to 18 public and private kindergarten in Baquba city/ Iraq had been surveyed for the history of both pacifier sucking and thumb sucking habits. Then, a study group consisted of 50 child with non-nutritive sucking habits (24 boys and 26 girls) whom still practicing non- nutritive sucking habits (25 pacifier sucking and 25 thumb sucking). Other 50 child, who had no history of any non-nutritive sucking habits matching in age and gender to the study group, were chosen for the purposes of comparison incaries experience, malocclusions and in the occurrence of *candida albicans* infection.

Results: The results showed that the prevalence of non- nutritive sucking habits in the total surveyed sample was 8.94% (5.72% for the pacifier sucking and 3.22% for the thumb sucking). Non-nutritive sucking habits were more among the 4 years old age group, pacifier sucking was found to be higher among the boys (64%) , whereas, the thumb sucking habit was found to be higher among the girls (68%).

A highly significant difference was found between the study group and the control group in the caries experience as well as in the occurrence of the following occlusal anomalies (anterior open bite, increased over jet and posterior bilateral cross bite), however, there was none significant difference concerning the occurrence of *candida albicans* between the study group and the control group.

Conclusions: Non-nutritive sucking habits would cause deleterious effects on the oral health of children, so pediatricians and pedodontists should work together in order to get early diagnosis, prevent and treat these habits in cooperation with other specialists such as orthodontists, psychological consultant as well as the child and his parents.