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## **PROSPECTIVE STUDY OF MAXILLA DIMENSIONS IN THE FIRST SIX MONTHS OF LIFE**

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Despite palatal importance for suctioning, swallowing and breathing, and thus on homeostasis of baby's development, there are still gaps in literature regarding maxilla dimensions in newborns, and its relationship with nutritive and non-nutritive sucking habits. Hence, the aim of this study was prospectively evaluate the maxilla dimensions in the first six months of life and to verify if sucking nutritive habits and non-nutritive sucking habits are related or not to growth. It was randomly selected a total of 100 newborns, from 24 to 72 hours of life. Palatine anatomical impressions were taken with silicone impression material and impression trays were made especially for this purpose. Dental models were filled in plaster, and points and anatomical structures were mapped in the models. After six months, 80 infants were remolded and the study models were mapped and measured with a digital caliper. Data were analyzed by Kruskal Wallis test and Hierarchical Regression Model. Anterior portion of maxilla presented a largest relative growth, both in transversal plane ( $\Delta\% = 81.90 [74.40 - 89.70]$ ) and in length ( $\Delta\% = 76.20 [49.10 - 102.70]$ ). No differences were detected in palatine depth (11.00 [10.30 - 11.70] vs. 12.60 [12.0 - 13.90]). Pacifier influenced premaxilla development in pre-dentate phase, considering whether the infants were exclusively breastfed or not at the second evaluation time ( $p < 0.001$ ). Detailed evaluation of maxilla dimensions within the first six months of life can contribute to reference in later studies, as well as to offer subsidies to a better comprehension of pacifier impact on maxillary development.

**Descritores:** Newborn; Birth Term; Maxilla.