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Título	Firmicutes Levels in the Mouth Reflect the Gut Condition With Respect to Obesity and Early Childhood Caries
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Resumo	<p>The present cross-sectional study investigated whether Firmicutes (F) and Bacteroidetes (B) levels in the mouth reflected the gut condition in obesity and early childhood caries (ECC). Eighty preschoolers (3-5 years) were equally assigned into four groups: 1. obese + ECC, 2. obese + caries-free (CF), 3. eutrophic + ECC, and 4. eutrophic + CF. Nutritional status and ECC were assessed based on the WHO criteria. Dental biofilm and fecal samples were collected for F and B quantification using RT-PCR analysis. Data were evaluated using three-way-ANOVA and Pearson's correlation ($\alpha = 0.05$). Regardless of the anatomical location effect ($p = 0.22$), there were higher values for F in the obese children + ECC compared with those in obese + caries-free (CF) in both mouth and gut ($p < 0.05$). The correlation for F at these sites was negative in obese children + ECC ($r = -0.48$; $p = 0.03$) and positive in obese children + CF ($r = 0.50$; $p = 0.03$). Bacteroidetes were influenced by ECC ($p = 0.03$) and the anatomical location ($p = 0.00$), and the levels tended to be higher in the mouth of the obese children + ECC ($p = 0.04$). The F/B ratio was higher in the gut and was affected by the anatomical location ($p = 0.00$). This preliminary study suggested that modulated by ECC, counts of oral Firmicutes reflected corresponding condition in the gut of obese preschoolers. In addition, we first evidenced that the Firmicutes phylum behave differently according to the nutritional status and caries experience and that supragingival biofilm and gut could share levels of similarity.</p>
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