OBJECTIVE: This cross-sectional study sought to conduct a spatially analysis of the distribution of dental caries and the nutritional status (NS) of 5-year-old preschool children of public schools in the city of Araraquara, São Paulo, Brazil. METHODS: The sample was selected in a stratified probabilistic manner. A dental examination was conducted to investigate the dmft index. The anthropometric indicators of the weight/height (W/H), height/age (H/A), weight/age (W/A) and body mass index (BMI) were calculated to estimate the NS. A descriptive statistical analysis was conducted and a thematic map was created. At the end of the study 491 children had full address codification. A GPS device was used to ascertain the geographic reference points. A pluri-directional semi-variogram was elaborated. RESULTS: It was revealed that both variables presented a pure nugget effect showing the absence of a spatial correlation, in other words the dmft and nutritional status are not regionalized variables, and their values do not reveal direct spatial dependence. CONCLUSIONS: Dental caries and nutritional status are health conditions that do not reveal spatial dependence. Ultimately, the combination of these indicators with others can produce spatial dependence effects.

Keywords
Anthropometrics, Dental caries, Geostatistics, Nutritional Status, Spatial Analysis.