

INTISARI

Karies gigi merupakan penyakit rongga mulut yang bersifat multifaktorial. Salah satu penyebabnya adalah status gizi. *Stunting* merupakan kondisi kekurangan gizi kronis yang menyebabkan terganggunya komponen saliva termasuk kadar urea yang berperan dalam mekanisme *buffer* dengan meningkatkan pH saliva. Penelitian ini bertujuan mengetahui perbedaan kadar urea saliva pada anak *stunting* dengan karies dan anak tidak *stunting* bebas karies di Kapanewon Imogiri, Kabupaten Bantul.

Desain penelitian yang digunakan adalah *cross-sectional* yang melibatkan enam sampel anak usia 3-5 tahun yang terdiri dari tiga anak *stunting* dengan karies dan tiga anak tidak *stunting* bebas karies. Pengukuran kadar urea dilakukan menggunakan metode *Liquid Chromatography–High Resolution Mass Spectrometry* (LC-HRMS). Analisis statistika yang dilakukan meliputi uji normalitas, uji homogenitas, dan *Independent T-test*.

Hasil penelitian menunjukkan rerata luas area urea pada kelompok anak *stunting* dengan karies sebesar $1461,67 \pm 331,90$, sedangkan pada kelompok anak tidak *stunting* bebas karies $1820,33 \pm 750,82$. Uji *Independent T-test* menunjukkan tidak terdapat perbedaan yang signifikan antara kedua kelompok ($p = 0,491$). Meskipun demikian, kelompok anak tidak *stunting* bebas karies memiliki kecenderungan nilai urea yang lebih tinggi. Temuan ini menunjukkan bahwa kadar urea saliva tidak berbeda secara signifikan antara kedua kelompok, namun pola peningkatan kadar pada anak tidak *stunting* bebas karies dapat menggambarkan potensi kontribusi urea dalam mekanisme proteksi terhadap karies.

Kata kunci: Urea, *Stunting*, Karies

ABSTRACT

Dental caries is a multifactorial oral disease. One of its causes is nutritional status. Stunting is a condition of chronic malnutrition that causes disruption of saliva components, including urea levels, which play a role in the buffer mechanism by increasing saliva pH. This study aims to determine the difference in saliva urea levels in stunted children with caries and non-stunted children free of caries in Kapanewon Imogiri, Bantul Regency.

The study design used was cross-sectional, involving six samples of children aged 3-5 years, consisting of three stunted children with caries and three non-stunted children free of caries. Urea levels were measured using the Liquid Chromatography–High Resolution Mass Spectrometry (LC-HRMS) method. Statistical analyses included normality tests, homogeneity tests, and Independent T-test.

The results showed that the mean urea area in the group of stunted children with caries was 1461.67 ± 331.90 , while in the group of non-stunted children free of caries it was 1820.33 ± 750.82 . The Independent T-test showed no significant difference between the two groups ($p = 0.491$). However, the group of non-stunted children free of caries tended to have higher urea values. These findings indicate that the salivary urea levels did not differ significantly between the two groups, but the pattern of increase in levels in non-stunted children free of caries may illustrate the potential contribution of urea in the protective mechanism against caries.

Keywords: Urea, Stunting, Caries