

INTISARI

Stunting merupakan kondisi gangguan pertumbuhan kronis pada anak yang dapat menyebabkan defisiensi asam amino esensial sehingga mengganggu sintesis protein saliva, termasuk enzim lisozim yang berperan penting dalam pertahanan antibakteri rongga mulut. Rendahnya produksi lisozim diduga meningkatkan risiko terjadinya karies. Penelitian ini bertujuan untuk mengetahui perbedaan kadar enzim lisozim saliva pada anak *stunting* dengan karies dan anak tidak *stunting* bebas karies di Kapanewon Imogiri, Kabupaten Bantul.

Penelitian ini menggunakan desain *cross-sectional* dengan total sampel berjumlah 6 anak usia 3-5 tahun, yang dibagi menjadi dua kelompok yaitu *stunting* dengan karies dan tidak *stunting* bebas karies. Sampel saliva dikumpulkan dengan *unstimulated* metode *spitting*. Kadar enzim lisozim dianalisis menggunakan metode *Liquid Chromatography–High Resolution Mass Spectrometry* (LC-HRMS). Data diuji menggunakan *Independent T-test* untuk mengetahui perbedaan kadar lisozim antar kelompok.

Hasil uji analisis statistik menunjukkan rata-rata kadar enzim lisozim yang lebih tinggi pada kelompok tidak *stunting* bebas karies. Namun berdasarkan analisis uji menggunakan *Independent T-test* menyatakan bahwa tidak terdapat perbedaan kadar enzim lisozim yang signifikan antara kedua kelompok ($p > 0,05$).

Kata kunci: Saliva, enzim lisozim, *stunting*, karies.

ABSTRACT

Stunting is a chronic growth disorder in children that can lead to essential amino acid deficiencies, potentially impairing the synthesis of salivary proteins, including lysozyme, an important antibacterial enzyme in the oral cavity. Reduced lysozyme production is suspected to increase the risk of dental caries. This study aimed to determine the difference in salivary lysozyme levels between stunted children with caries and non-stunted caries-free children in Kapanewon Imogiri, Bantul Regency.

A cross-sectional design was used with a total of six (6) children aged 3–5 years, divided into two groups: stunted with caries and non-stunted caries-free. Saliva samples were collected using the unstimulated spitting method. Lysozyme levels were analyzed using Liquid Chromatography–High Resolution Mass Spectrometry (LC-HRMS). Data were tested using the Independent T-test to evaluate differences between groups.

The results showed a higher mean lysozyme level in the non-stunted caries-free group. However, statistical analysis using the Independent T-test indicated no significant difference in salivary lysozyme levels between the two groups ($p > 0.05$).

Keywords: Saliva, lysozyme enzyme, stunting, dental caries.