Analisis Hubungan Antara Kadar Leptin pada Saliva Anak Usia 6-8 Tahun Dengan Status Stunting di NTT = Analysis of the Relationship Between Leptin Levels in the Saliva of 6-8 Year-Old Children and Stunting in NTT

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Abstrak

Latar Belakang: Stunting merupakan salah satu bentuk dari malnutrisi dengan prevalensi paling tinggi. Kondisi ini terjadi di berbagai negara salah satunya di Indonesia dengan prevalensi terbesar berada di NTT. Dampak dari stunting bermacam-macam seperti meningkatkan resiko penyakit non-communicable pada saat dewasa, serta meningkatkan resiko obesitas pada saat dewasa. Pertumbuhan dipengaruhi oleh berbagai hormon, salah satunya adalah leptin. Leptin dapat diproduksi dalam jumlah sedikit pada kelenjar saliva mayor. Namun, penelitian yang menunjukan hubungan stunting dengan kadar leptin masih terbatas khususnya dalam penelitian yang menggunakan saliva sebagai sampel. Tujuan: Menganalisis perbedaan kadar leptin pada saliva anak usia 6-8 tahun pada anak-anak berkategori stunting dan non-stunting serta menganalisis korelasinya. Metode: Penelitian ini menggunakan 84 sampel saliva anak usia 6-8 tahun di NTT yang dikategorikan menjadi stunting dan non-stunting. Saliva diteliti menggunakan BioEnzy© ELISA kit untuk melihat kadar leptin lalu dilakukan kuantifikasi menggunakan ELISA reader dengan panjang gelombang 450 nm. Dari pembacaan tersebut didapatkan nilai absorbance dan konsenterasi sampel saliva. Selanjutnya konsenterasi leptin sampel saliva dianalisis secara statistik menggunakan SPSS untuk mengetahui nilai komparasi dan korelasi dengan status stunting dan non-stunting. Hasil: Rata-rata kadar leptin saliva anak-anak 6-8 tahun stunting ditemukan lebih tinggi daripada anak-anak non-stunting. Terdapat hubungan linear negatif sedang yang bermakna antara kadar leptin saliva anak 6-8 tahun dengan status stunting ($r = -0,287$, $p < 0,05$). Kesimpulan: Terdapat perbedaan dan hubungan antara kadar leptin pada saliva anak usia 6-8 tahun dengan status stunting dan non-stunting. Hal ini dapat terlihat dari rata-rata kadar leptin pada saliva yang lebih tinggi pada anak-anak berstatus stunting daripada non-stunting.
.....Background: Stunting is a form of malnutrition with the highest prevalence. This condition occurs in various countries, one of which is Indonesia, with the greatest prevalence in NTT. The impact of stunting varies, such as increasing the risk of non-communicable diseases as adults and increasing the risk of obesity as adults. Growth is influenced by various hormones, one of which is leptin. Leptin can be produced in small amounts in the major salivary glands. However, research showing the relationship between stunting and leptin levels is still limited, especially in studies using saliva as a sample. Objectives: Analyzing the differences between salivary leptin levels in children aged 6-8 years in the stunting and non-stunting groups and analyzing the correlation between salivary leptin levels in children aged 6-8 years with stunting. Method: This study used 84 saliva samples of children aged 6-8 years in NTT who were categorized as stunting and non-stunting. Saliva was examined using the BioEnzy© ELISA kit to see leptin levels and then quantified using an ELISA reader with a wavelength of 450 nm. From the readings, the absorbance and concentration values of the saliva samples were obtained. Furthermore, the leptin concentration of saliva samples was analyzed statistically using SPSS. Results: The average salivary leptin level of stunted children aged 6-8 years was found to be higher than the non-stunted children. There was a significant negative linear

correlation between salivary leptin levels in children aged 6-8 years and stunting status ($r = -0.287$, $p < 0.05$). Conclusion: There is a significant difference between leptin levels in the saliva of children aged 6-8 years with stunting and non-stunting status. There is also a significant correlation between leptin levels in the saliva of children aged 6-8 years with stunting and non-stunting status. This can be seen from the average leptin level in saliva which is higher in stunted children than non-stunted children.