

ABSTRAK

Penurun kekerasan permukaan gigi dapat dipengaruhi oleh aktivitas mikroorganisme yang akhirnya menyebabkan kerusakan jaringan keras gigi. Proses remineralisasi dibutuhkan untuk mengembalikan mineral – mineral yang hilang. Ikan laut mengandung kalsium, fosfor dan fluor dapat membantu proses remineralisasi. Penelitian ini bertujuan untuk mengetahui perbedaan pola konsumsi ikan laut terhadap kekerasan enamel gigi desidui pada Desa Teluk Awur dan Desa Jlegong Kabupaten Jepara.

Metode penelitian ini berjenis *eksperimental laboratoris* dengan rancangan penelitian *post only control group design*, terdiri dari dua kelompok yaitu kelompok wilayah pesisir pantai dan kelompok wilayah non pesisir pantai. Sampel yang digunakan berupa gigi desidui anterior bawah hasil pencabutan yang berjumlah 14 buah. Kekerasan gigi diukur dengan *Mikro Vickers Hardness Tester*, kemudian dilanjutkan analisis data dengan uji *Independent T – test*.

Hasil penelitian menunjukkan bahwa rata – rata kekerasan permukaan gigi desidui Desa Teluk Awur 1009,91 VHN dan Desa Jlegong 691,31 VHN. Uji *Independent T-test* didapatkan hasil signifikansi 0,012 ($P<0,05$) menginterpretasikan bahwa terdapat perbedaan pola konsumsi ikan laut antar kelompok terhadap kekerasan enamel gigi desidui.

Kesimpulan dari hasil penelitian ini adalah terdapat perbedaan kekerasan enamel gigi desidui usia 5 – 7 tahun pada Desa Teluk Awur dan Desa Jlegong yang telah mendapatkan perlakuan mengkonsumsi ikan laut.

Kata Kunci : Kekerasan enamel, gigi desidui, ikan laut, pesisir pantai, *Vickers Hardness Tester*

THE DIFFERENCE OF THE DECIDUOUS TEETH HARDNESS SURFACE TOWARD FISH COMSUMPTION PATTERN

**The study of children 5 – 7 years old in Teluk Awur and Jlegong Village,
Jepara Regency**

ABSTRACT

The decrease of the tooth surface hardness can be affected by the microorganisms activity that ultimately cause the damage of the tooth surface hardness. The process of remineralization is needed to restore the lost minerals. A fish that contain of calcium, phosphorus and fluoride can help the process of remineralization. The purpose of this research is to determine the difference of fish consumption pattern toward the enamel hardness of deciduous teeth at Teluk Awur Village and Jlegong Village of Jepara Regency.

This research methode was experimental type laboratoris with research design of post only control group and consist of two groups that were coastal area and non coastal area group. The sample used was the lower anterior decicuous teeth that revocation of 14 units. The tooth hardness was measured with the Micro Vickers Hardness Tester, followed by data analysis with Independent T-test.

The results showed that the mean of surface hardness of deciduous teeth in Teluk Awur Village was 1009.91 VHN while in Jlegong Village was 691.31 VHN. The Independent T-test showed the significance result was 0.012 ($P < 0.05$) and interpret that there were differentiation in fish consumption patterns between the groups toward the enamel hardness of deciduous teeth.

The conclusion of this research showed that there is differentiation of enamel hardness of deciduous teeth at the age of 5 - 7 years at Teluk Awur Village and Jlegong Village which have got treatment to consume fish.

Keywords : *enamel hardness, deciduous tooth, fish, coastal area, Vickers Hardness Tester*