Profil dan total protein dalam saliva subjek dewasa muda pelari dan hubungannya dengan keparahan karies = Profiles and total of salivary protein in young adults and their correlations with caries severity

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Abstrak

ABSTRACT
Latar Belakang: Saliva merupakan hasil sekresi manusia yang mengandung berbagai macam zat seperti protein, hormon dan lain-lain. Aktivitas fisik dapat memengaruhi kandungan saliva seperti profil dan total protein di dalamnya. Protein dalam saliva dapat memengaruhi aktivitas progres karies. Perlu diketahui apakah aktivitas fisik memengaruhi aktivitas karies. Tujuan: Menganalisis perbedaan profil dan total protein dalam saliva subjek pelari dan hubungannya dengan skor indeks DMFT. Metode: Profil protein diekspresikan menggunakan metode SDS-PAGE lalu dianalisis secara manual sedangkan total protein dihitung menggunakan prosedur Bradford. Hasil: Dalam saliva subjek pelari ditemukan protein dominan yaitu dengan berat molekul 60 kDa, 30 kDa dan 10 kDa sedangkan pada subjek non-pelari yaitu 60 kDa, 30 kDa dan 25 kDa. Protein yang hanya ditemukan dalam saliva subjek pelari yaitu 45 kDa dan 10 kDa sedangkan yang hanya ditemukan dalam saliva subjek non-pelari yaitu 15 kDa. Total protein saliva pada subjek non-pelari lebih tinggi yaitu 774,46 µg/mL sedangkan pada subjek pelari sebesar 547,89 µg/mL. Kesimpulan: Terdapat perbedaan profil dan total protein saliva antara subjek pelari dan non-pelari serta terdapat hubungan antara profil dan total protein saliva dan skor indeks DMFT.
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ABSTRACT
Background: Saliva is a secretion of the human body that contains various substances such as proteins, hormones and etc. Physycial activity could influence the contents of saliva such as the profiles and total of the proteins. Salivary proteins take role in caries progression activity. It is needed to be known whether physical activity affects caries progression. Objective: To analyze the difference of profiles and total of salivary proteins in runners and their correlations with DMFT index scroes. Methods: Protein profiles are expressed with SDS-PAGE procedure and then are analyzed manually, meanwhile the protein total is calculated using Bradford procedure. Results: The dominant proteins found in runners saliva are 60 kDa, 30 kDa and 10 kDa proteins and those found in non-runners saliva are 60 kDa, 30 kDa and 25 kDa. Proteins only found in runners saliva are 45 kDa and 10 kDa proteins and the ones only found in non-runners saliva is 15 kDa protein. Total of salivary proteins in non-runners is higher than the runners, which is 774,46 µg/mL compared to 547,89 µg/mL. Conclusion: There are differences found in the salivary proteins profiles and total in the runners and non-runners and there are correlations established between the salivary proteins profiles and total and the obtained scores of DMFT index.