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Hubungan Asupan Natrium, Tekanan Darah, IL-17A Dan TNF Alfa Serum Pada Masyarakat Pejagan, Bangkalan Madura

The Assosiation of Sodium Intake, IL-17A and TNF Alpha Serum Levels in the Community of Pejagan, Bangkalan Madura

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Abstrak

Latar Belakang: Natrium merupakan senyawa kimia yang dibutuhkan tubuh, terkandung dalam zat gizi makanan sehari-hari. Namun, peningkatan kadar natrium dapat meningkatkan tekanan darah (TD), kadar IL-17A dan TNF alfa yang merupakan mediator proinflamasi tubuh yang dapat menyebabkan penurunan kualitas hidup.
Tujuan: Penelitian bertujuan untuk menghubungkan peningkatan asupan natrium dengan TD, IL-17A dan TNF alfa. .
Metode: Penelitian ini merupakan penelitian observasional dengan metode cross sectional. Partisipan adalah masyarakat Bangkalan yang mengisi lembar persetujuan. Data karakteristik yang dikumpulkan adalah usia, jenis kelamin, indeks massa tubuh (IMT) yang diperoleh dengan wawancara langsung di tempat penelitian. Untuk data asupan natrium diukur menggunakan kuesioner SQFFQ (Semi Quantitative Food Frequency) Questionnaire, TD ldiukur dengan digital tensimeter sedangkan IL-17A dan TNF alfa diambil dari darah partisipan dan diukur menggunakan ELISA. Penelitian ini telah memperoleh izin dari Health Ethics Commission No. 424/EC/KEPK/12/2023.
Hasil: Terdapat 62 partisipan dengan jenis kelamin perempuan = 49 orang, laki-laki= 13 orang, rata-rata usia 55,53 + 9,7; rata- rata BMI=26,40 +4,21 kg/L.Terdapat hubungan antara asupan natrium dengan IL-17A (p=0,0001) dan TD (p=0,0001) namun tidak terdapat hubungan dengan TNF alfa (p=0,118)
Kesimpulan: Asupan tinggi natrium berhubungan dengan IL-17A dan TD yang bisa menurunkan kualitas hidup.
Saran: Perlu pemilihan dan batasan asupan natrium per hari.

ABSTRACT

Background: Sodium is a chemical compound needed by the body, contained in daily food nutrients. However, increased sodium levels can increase blood pressure (BP), IL-17A and TNF alpha levels which are pro-inflammatory mediators in the body that can cause decreased quality of life.
Objective: The study aims to link increased sodium intake with BP, IL-17A and TNF alpha. .
Method: This study is an observational study with a cross-sectional method. Participants were Bangkalan people who filled out the consent form. The characteristic data collected were age, gender, body mass index (BMI) obtained by direct interviews at the research site. For sodium intake data, it was measured using the SQFFQ (Semi Quantitative Food Frequency) Questionnaire, BP was measured with

a digital tensiometer while IL-17A and TNF alpha were taken from the participants' blood and measured using ELISA. This study has obtained permission from the Health Ethics Commission No. 424 / EC / KEPK / 12/2023.
Results: There were 62 participants with female gender = 49 people, male = 13 people, average age 55.53 + 9.7; average BMI = 26.40 + 4.21 kg / L. There is a relationship between sodium intake with IL-17A (p = 0.0001) and BP (p = 0.0001) but there is no relationship with TNF alpha (p = 0.118)
Conclusion: High sodium intake is associated with IL-17A and BP which can reduce quality of life.
Suggestions: It is necessary to select and limit sodium intake per day.

IL-17A,, Natrium, Tekanan Darah, TNF alfa
IL-17-A,Sodium,Blood Pressure, TNF alfa