

## ABSTRAK

GUSWINDA DIU. The Effect of Tomato Juice on Decreasing Blood Pressure in Hypertension Patients in the Working Area of the Telaga Health Center. Supervised by HAMNA VONNY LASANUDDIN as chairman and FADLI SYAMSUDDIN as member.

Hypertension is a cardiovascular disorder which affects many people in various countries, especially in Indonesia. Treatment of patients with hypertension grade I and grade II is more focused on non-pharmacological treatment, one of which is by increasing a healthy lifestyle that starts with consuming foods that are high in potassium and flavonoids, one of which is tomatoes. The purpose of research was to determine the effect of giving tomato juice to reducing blood pressure in hypertensive patients in the Telaga Health Center Work Area. The research design used the Pre-Experimental Pre-Post Test method with a total sample of 15 people taken used a sampling technique, namely purposive sampling. The results showed the average systolic blood pressure before giving tomato juice was 146.67 mmHg and the average diastolic blood pressure was 91.33 mmHg and the average systolic blood pressure after giving tomato juice was 131 mmHg and diastolic blood pressure was 84.33 mmHg. The results showed the average systolic blood pressure before giving tomato juice was 146.67 mmHg and the average diastolic blood pressure was 91.33 mmHg and the average systolic blood pressure after giving tomato juice was 131 mmHg and diastolic blood pressure was 84.33 mmHg. The results of the Wilcoxon test before and after the intervention of giving tomato juice showed systolic and diastolic blood pressure in the intervention group each got a p value on the systolic variable = 0.003 ( $p \leq \alpha$  0.05), and the p value on the diastolic variable = 0.000 ( $p \leq \alpha$  0.05). Consumption of tomato juice is effective in reducing blood pressure both systolic and diastolic in hypertension sufferers, this is because tomatoes contain several ingredients including lycopene and bioflavonoids which act as antioxidants and potassium lowers blood pressure by reducing peripheral retention and increasing cardiac output. Thus it is expected the use of tomato juice therapy can be applied as an alternative therapy (non-pharmacological) in patients suffering from grade I and II hypertension.

**Keyword : Hypertension, Juice, Blood Pressure, Tomato.**



## ABSTRAK

GUSWINDA DIU. Pengaruh Pemberian Jus Tomat Terhadap Penurunan Tekanan Darah Pada Penderita Hipertensi Di Wilayah Kerja Puskesmas Telaga. Dibimbing oleh HAMNA VONNY LASANUDDIN sebagai ketua dan FADLI SYAMSUDDIN sebagai anggota.

Hipertensi merupakan gangguan kardiovaskular yang dimana banyak diderita oleh masyarakat diberbagai negara khususnya di Indonesia. Penanganan penderita hipertensi grade I dan grade II lebih difokuskan terhadap penanganan nonfarmakologi, salah satunya dengan meningkatkan gaya hidup yang sehat yang dimulai dengan mengonsumsi makanan yang mengandung tinggi kalium dan flavonoid salah satunya adalah tomat. Tujuan penelitian ini untuk mengetahui pengaruh pemberian jus tomat terhadap penurunan tekanan darah pada penderita hipertensi di Wilayah Kerja Puskesmas Telaga. Desain penelitian menggunakan metode penelitian *Pra - Experimental Pre-Post Test* dengan jumlah sampel sebanyak 15 orang diambil dengan menggunakan teknik sampling yaitu *purposive sampling*. Hasil penelitian menunjukkan nilai rata-rata tekanan darah sistolik sebelum pemberian jus tomat adalah 146.67 mmHg serta rata – rata tekanan darah diastolik 91.33 mmHg dan rata-rata tekanan darah sistolik sesudah pemberian jus tomat adalah 131 mmHg dan tekanan darah diastolik 84.33 mmHg. Hasil uji *Wilcoxon* sebelum dan sesudah intervensi pemberian jus tomat menunjukkan tekanan darah sistolik dan diastolik pada kelompok intervensi di dapatkan masing-masing *p value* pada variabel sistolik = 0,003 ( $p \leq \alpha 0,05$ ), dan nilai *p value* pada variabel diastolik = 0,000 ( $p \leq \alpha 0,05$ ). Konsumsi jus tomat efektif dalam menurunkan tekanan darah baik sistolik maupun diastolik pada penderita Hipertensi, hal ini disebabkan karena dalam buah tomat terdapat beberapa kandungan diantaranya likopen dan bioflavonoid yang bertindak sebagai antioksidan dan kalium menurunkan tekanan darah melalui pengurangan retensi perifer dan meningkatkan *cardiac output*. Sehingga diharapkan penggunaan terapi jus tomat dapat diterapkan sebagai terapi alternatif (non-farmakologi ) pada pasien yang menderita hipertensi grade I dan II.

**Kata kunci : Hipertensi, Jus, Tekanan Darah, Tomat,**