

## ABSTRAK

### **EFEK JUS KOMBINASI WORTEL (*Daucus carota* L.) DAN TOMAT (*Lycopersicum esculentum* Mill.) TERHADAP TEKANAN DARAH NORMAL LAKI-LAKI DEWASA**

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Hipertensi merupakan penyakit kronis sering terjadi di negara berkembang. Pengendalian hipertensi menggunakan obat anti hipertensi menjadi kendala karena efek samping dan biaya mahal. Cara penanggulangan hipertensi melalui perubahan gaya hidup sehat dengan menerapkan pola makan *Dietary Approaches to Stop Hypertension (DASH)* yaitu dengan banyak mengonsumsi buah dan sayur seperti wortel-tomat.

Tujuan penelitian untuk menilai efek jus kombinasi wortel-tomat (JKWT) terhadap tekanan darah sistol (TDS) dan diastol (TDD) dan untuk menilai potensi penurunannya dibandingkan jus wortel dan jus tomat tunggal.

Desain penelitian eksperimental laboratorik sungguhan, dengan desain pre-test dan post-test. Data yang diukur adalah TDS dan TDD (mmHg) pada 30 orang laki-laki dewasa sebelum dan sesudah minum jus, menggunakan metode gabungan palpasi-auskultasi. Analisis data menggunakan uji “*t*” berpasangan dan ANAVA dilanjutkan dengan uji Tukey dengan  $\alpha = 0,05$ .

Hasil penelitian rerata tekanan darah sesudah minum JKWT (99,10/65,30 mmHg) lebih rendah dibandingkan sebelum minum JKWT (115/72,10 mmHg) ( $p < 0,01$ ). Penurunan TDS JKWT 13,83% berbeda signifikan dengan jus wortel 11,01% ( $p < 0,05$ ) tetapi setara dengan TDS tomat 11,54% ( $p > 0,05$ ). Sedangkan penurunan TDD JKWT 9,23%, jus wortel 6,88%, dan jus tomat 7,04% berpotensi sama ( $p > 0,05$ ).

Simpulan JKWT berefek menurunkan tekanan darah dan potensinya lebih kuat dibandingkan jus wortel dan berpotensi sama dibandingkan jus tomat.

Kata kunci : jus kombinasi wortel-tomat, tekanan darah, laki-laki dewasa

## **ABSTRACT**

### **THE EFFECT OF COMBINED CARROT (*Daucus carota* L.) JUICE AND TOMATO (*Lycopersicum esculentum* Mill.) JUICE ON THE NORMAL BLOOD PRESSURE IN ADULT MALE**

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*Hypertension is the common chronic disease in developing countries. Control of hypertension with antihypertensive drugs is often an obstacle because of the risk of side effects and cost. One of the ways to overcome hypertension is by practicing healthy lifestyle by applying the Dietary Approaches to Stop Hypertension (DASH) diet by consuming lots of fruit and vegetable such as carrot and tomato.*

*The purpose of this research was to assess the effect of combined carrot and tomato juice (CCTJ) on systolic (SBP) and diastolic blood pressure (DBP) and to assess the potential in decreasing blood pressure compared with carrot juice and tomato juice only.*

*The design of this study was real experimental laboratoric, with pre-test and post-test design. The data measured were systolic and diastolic blood pressure (mmHg) in 30 adult men before and after taking the juice with palpation and auscultation method. Data analysis using the paired "t" test and ANOVA continued with Tukey test with  $\alpha = 0,05$ .*

*The average blood pressure after drinking CCTJ (99,10/65,30 mmHg) was lower than before drinking combined juice (115/72,10 mmHg) ( $p < 0,01$ ). The amount of decreasing SBP was 13,83% significantly different with carrot juice 11,01% ( $p < 0,05$ ) but have same effect with tomato juice (11,54%) ( $p > 0,05$ ). Whereas the amount of decreasing DBP with CCTJ was 9,23%, carrot juice 6,88%, and tomato juice 7,04% have the same potential ( $p > 0,05$ ).*

*It could be concluded that CCTJ decrease blood pressure and its potential is stronger than carrot juice and have same potential compared with tomato juice.*

**Keywords :** *combined carrot and tomato juice, blood pressure, adult men*

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