

THE EFFECT OF TOMATO JUICE (SOLANIUM LYCOPERSICUM) ON BLOOD PRESSURE STABILIZATION IN HYPERTENSION PATIENTS IN YANTI CLINIC PERCUT SEI TUAN DISTRICT DELI SERDANG IN 2021

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ABSTRACT

Hypertension is a global health problem resulting in an increase in morbidity and mortality as well as the burden of health costs, including in Indonesia. Based on data from the Yanti Clinic for 5 months from October 2020 - February 2021, there were 57 hypertensive patients, of which 23 were male and 34 were female, aged over 25 years. The purpose of this study was to determine the effect of giving tomato juice (solanium lycopersicum) on blood pressure stabilization in patients with hypertension at the Yanti Clinic in 2021. The type of research is Quasi Experiment (Quasi Experiment) with one group pre and posttest design, the population of all patients with hypertension is 20 people. The sampling technique was purposive sampling with the inclusion criteria not taking hypertension drugs with a sample of 20 people, the instrument of this study used an observation sheet. Data analysis was carried out by using paired t-test. The results of the study before giving Tomato Juice (Solanium Lycopersicum) in patients with hypertension The majority of systolic was 160 mmHg, diastolic was 100 mmHg. After being given tomato juice, the majority of systolic was 130 mmHg, diastolic was 90 mmHg. The results of the paired t-test with a p value of 0.000 (< 0.005). showed the effect of Tomato Juice (Solanium Lycopersicum) on Blood Pressure Stabilization in Hypertensive Patients at Yanti Clinic. Based on the results of this study, it can be concluded that there is an effect of tomato juice (Solanium lycopersicum) on blood pressure stabilization in patients with hypertension at the Yanti Clinic in 2021. It is hoped that health workers will recommend using non-pharmacological methods (tomato juice) to lower blood pressure in hypertensive patients.

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1. Introduction

Hypertension is known to the public as high blood disease which includes degenerative problems, hypertension problems are suffered by many people in the world, including in Indonesia, hypertension problems include Non-Communicable Diseases (PTM). Many people with hypertension easily underestimate the symptoms of this hypertension. Hypertension can cause the death of sufferers, therefore many think that the problem of hypertension is called the silent killer, because the disease can come suddenly without showing symptoms (Nurul Hidayah, Utomo, & Denys, 2018).

According to Lukito in 2019, hypertension is a global health problem resulting in an increase in morbidity and mortality as well as the burden of health costs, including in Indonesia. Hypertension is a risk factor for damage to important organs such as the brain, heart, kidneys, retina, large blood vessels (aorta) and blood vessels peripheral. (Lukito, 2019)

WHO data in 2015, the problem of hypertension puts the first number as a disease that can cause death problems in the world, there are approximately 1.13 billion people in the world who have been attacked by hypertension, meaning that there are one in three people in the world suffer from hypertension problems. In 2020 there are approximately 1.56 billion people in the world suffer from hypertension, hypertension can cause the death of eight billion people every year in the world. In Indonesia, hypertension is ranked 5th as the cause of death in the Survey Sample Registration data (WHO, 2015).

Data from the Health Office of North Sumatra Province, recorded 50,162 people suffering from hypertension. From these data, it was recorded that the most suffering from hypertension were women with a total of 27,021. The age group that suffered the most were those aged over 55 years with a total of 22,618 years, then ages 18 to 44 years with a total of 14,984 and ages 45 to 55 years with a total of 12,560. In 2015, there were recorded hypertension sufferers in North Sumatra in January-October 2015, reaching 15,1939. The most sufferers are women with a total of 87774. The age of most patients seen in the data is also over 55 years old with a total of 85254, followed by ages 45 to 55 years 11 with a total of 44909 and ages 18 to 44 years with a total of 21776 (Sumut Pos, 2016)

According to the Basic Health Research (Riskesmas) in 2018, the increase in the prevalence of hypertension in Indonesia with a population of around 260 million is 34.1%. In an effort to reduce the prevalence and incidence of cardiovascular disease due to hypertension, it takes strong determination and continuous joint commitment from all related parties such as health workers, policy makers and also community participation (Riskesmas, 2018). Based on data obtained from the Yanti clinic, which was conducted at the time of the study, there were 57 hypertensive patients for 5 months from October 2020 to February 2021. Of the 57 people there were 23 men, and 34 women, all aged above 25 years.

One way that can be used to deal with this hypertension problem is by pharmacological and non-pharmacological, pharmacology is by taking antihypertensive drugs such as: diuretics, vasodilators, adrenergic inhibitors and others, and non-pharmacological such as eating more vegetables and fruits, fruits that are rich in fruit and vegetables. that can lower blood pressure are dragon fruit, watermelon, melon, star fruit and examples of vegetables that can lower blood pressure are tomatoes (*solanum lycopersicum*) (Lubis et al, 2019).

Tomato juice (*Solanum lycopersicum*) is a drink made from tomatoes. Tomato juice is considered to have a content that is quite effective in lowering blood pressure so that tomatoes can prevent increased blood pressure, both systolic and diastolic. Potassium content in 100 grams of tomatoes contains 235 mg of potassium. Potassium is also useful as limiting the release of renin, so that it can improve the activity of renin-angiotensin. And tomatoes contain lycopene which is considered effective as lowering blood pressure, tomatoes have little sodium and fat (Nurul Hidayah et al, 2018).

Based on research conducted by Suwanti, DKK in 2018 concerning the Effect of Giving Tomato Juice on Blood Pressure of Elderly Patients with Hypertension in Lemahireng Village, Bawen District, said that Based on table 4 it can be seen that the tomato juice group, after being given tomato juice, had an average systolic BP of $150,53 \pm 11.79$, and the mean diastolic BP was 85.5 ± 6.62 mmHg. The decrease in blood pressure after administration of tomato juice was due to the intake of potassium from fruits and vegetables given to the subject as the main variable whose effect was seen in reducing blood pressure. . In this study, the administration of tomato juice was 363 mg/day obtained from 150 grams of tomatoes.

Subsequent research conducted by Rahayu in 2017 The Effect of Giving Tomato Juice on Blood Pressure in Menopausal Women with Hypertension at Posyandu Kantil said that based on the results of research on the effectiveness of drinking tomato juice on blood pressure in postmenopausal women with hypertension at Posyandu Kantil, Pojok Village, Kediri City in 2017, after drinking tomato juice from 11 respondents experienced changes in blood pressure. The mean systole value is 133.181 mmHg. Meanwhile, the mean diastolic value was 87.27 mmHg. Wilcoxon test results obtained P value = 0.072 systole and 0.334 for diastole, then the P value $>$, this means that H_0 is accepted and H_1 is rejected. So the conclusion is there is no difference in blood pressure before and after giving tomato juice to hypertension patients at the Kantil Posyandu, Pojok Village, Kediri City in 2017.

Based on the results of a preliminary survey conducted in February, data obtained from the

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Yanti Clinic showed that 10 people had hypertension. Researchers took blood pressure measurements of 10 people, it turned out that 7 out of 10 people had high blood pressure. ah systolic 140 mmHg and diastolic 90 mmHg and 3 out of 10 people have systolic blood pressure 160 mmHg and diastolic 100 mmHg. Researchers also asked if they used alternative therapies from herbal ingredients, 3 out of 10 people answered that they already knew I found cucumber as a blood pressure lowering agent and used herbal medicines such as cinnamon and ginger and 5 people said that they did not use herbal medicines only to take medical medicines such as amlodifin, nifedifin and captopril while 2 out of 10 people said that so far their efforts to overcome hypertension by reducing salty foods, satay, and offal, and when the researchers mentioned that tomatoes can lower blood pressure they all answered that they did not know that tomatoes could also be used as herbal therapy for lowering blood pressure in people with hypertension, they only knew that tomatoes as a cooking ingredient. They ask a lot of questions about the use of tomatoes,

Based on the description above, the researchers are interested in conducting research on the effectiveness of tomato juice on the stability of changes in blood pressure in patients with hypertension. (1) General Objectives, to determine the Effect of Giving Tomato Juice (*Solanium lycopersicum*) on Blood Pressure Stabilization in Hypertension Patients at Yanti Clinic in 2021. (2) Specific Objectives (1) To determine the blood pressure of hypertensive patients before being given tomato juice (*Solanium lycopersicum*). (2) To determine the blood pressure of hypertensive patients after being given tomato juice (*solanium lycopersicum*). (3) To determine the effect of giving tomato juice (*Solanium lycopersicum*) to stabilization of systolic and diastolic blood pressure in patients with hypertension.

The benefits of this research are: (1) Researcher's place. As input for people with hypertension and their families that giving Tomato Juice can be beneficial for lowering blood pressure and improving their quality of life. (2) Educational Institutions. Can be used as input in making educational programs for leaders for students and as a source of reading in the library. (3) Further Research. As a source of additional information and data in carrying out further research related to hypertension and the administration of tomato juice.

2. Research Methods

2.1 Research Types and Design

2.1.1 Types of research

This study uses a Quasi-Experimental research method, is a study by conducting experimental activities (Experiment), where this design does not have strict limits on randomization and at the same time the data controls validity threats. It is called a quasi-experiment because this experiment does not have the characteristics of the variables that should be controlled without data or are difficult to do. Therefore, the validity of the research is insufficient to be called a real experiment (Notoadmodjo, 2017). This study aims to determine the effect of giving tomato juice (*solanium lycopersicum*) to blood pressure stabilization in patients with hypertension at Yanti Clinic in 2021.

2.1.2 Research design

The research design is one group pre and posttest which is a type of design that only uses one group of subjects, before the trial is carried out in a group without a control group, an assessment or measurement is carried out in that group. Next, a group trial was reassessed (Sujarweni, W, 2014).

Research design



Note:

O1 : Pretest

X : Giving Tomato Juice

O2 : Posttest

2.2 Data Processing and Data Analysis Techniques

2.2.1 Data processing

The collected data is then processed with the following steps: (1) Editing, correcting errors in filling out or in the data. At this stage, the data obtained is checked by checking the respondent's number and checking the contents of the data collection instrument. (2) Coding, coding is the stage of providing codes or signs for each data that has been collected to obtain data and enter it into a table. (3) Tabulating. tabulate all data in the form of distribution to facilitate data analysis, data processing and drawing conclusions. (4) Entering Data (Data Entry) or Processing. Data Entry, namely the answers from each respondent in the form of "codes" (numbers or letters) entered into a computer program or "software". (5) Data Cleaning (Cleaning).

2.2.2 Data analysis

After the research data is collected, the data is analyzed using Paired Samples T-test, then the results of data processing will be presented in the form of graphs and tables by testing the Effect of Tomato Juice on Lowering Blood Pressure in Hypertensive Patients using the Paired Samples T-test (Paired Samples) statistic method. T-test) (Arikunto, 2016).

This data is tested with the normality test. The data uses the Kolmogrov-Smirnov test with the results of P-Value > 0.05, which is 0.078, so the data is normally distributed

3. Result And Discussion

3.1 Research result

3.1.1 Overview of Research Site

This research was carried out at the Yanti Bandar Setia Clinic, Percut Sei Tuan District, Deli Serdang Regency, is one of the clinics that has been established since 1990, as a pomegranate midwife clinic where the services provided are in accordance with service standards, many people from all over seek treatment, check health, give birth to immunizations and participate in family planning. The boundaries of the Knik Yanti Tembung area are as follows:

1. West Side: bordering Sampali village and Dendang sea
2. East side: bordered by Pematang Lalang Village and Bandar Khalifah
3. North: Bordering the Villages of Lalang and Saentis
4. South side: Bordered by Bandar Khalifah Village and Percut

3.1.2 Demographic Data

Demographic data in this study are as follows:

TABLE 1
DISTRIBUSI DATA DEMOGRAFI PENDERITA HIPERTENSI DI KLINIK YANTI TAHUN 2021

NO	Demographic Data	Frequency	Percentage %
1	Age		
	25-30	7	35%
	31-35	6	30%
	36-40	7	35%
	Total	20	100
2	gender		
	Man	5	25%
	Woman	15	75%
	Total	20	100
3	Education		
	SENIOR HIGH SCHOOL	12	60%
	JUNIOR HIGH SCHOOL	5	25%
	SD	2	10%
	No school	1	5%
	Total	20	100
4	work		

Table of contents available at iocscience.com

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		Self-employed	6	30%
		Employee	7	35%
		IRT	7	35%
		Total	20	100%
5	Weight			
		50-65	7	35%
		66-75	7	35%
		76-85	6	30%
		Total	20	100
6	Long Suffering			
		< 6 Months	14	70%
		7 Months-2 Years	3	15%
		>2 Years	3	15%
		Total	20	100

Based on table 1, it can be seen that the majority of respondents are 25 -30 years old and 36-40 years old respectively 7 people (70%), gender of female respondents are 15 people (75%), education of high school respondents is 12 people (60%), Employment of Employees and IRT respectively 7 people (70%) and body weight 50-65 and 66-75 as many as 7 people (70%), duration of suffering 6 months less than 14 people (70%).

3.1.3 Distribution of Blood Pressure Before Giving Tomato Juice To Patients With Hypertension At Yanti Clinic, Kec. Percut Sei Tuan, Kab. Deli Serdang Year 2021

TABLE 2
DISTRIBUTION OF BLOOD PRESSURE BEFORE GIVING TOMATO JUICE IN HYPERTENSION PATIENTS

No	Blood pressure	Systolic Frequency	Percentage (%)	Diastolic Frequency	Percentage (%)
1	Normal	0	0%	0	0%
2	Prehypertension	0	0%	0	0%
3	Stage I hypertension	10	50%	11	55%
4	Stage II hypertension	10	50%	9	45%
	Total	20	100%	20	100

Based on Table 4.2, it is known that from the results before being given tomato juice to hypertension respondents at the Yanti clinic in 2021, the majority of respondents experienced systolic blood pressure stage I and stage II hypertension as many as 10 people (100%) and diastolic systolic hypertension stage I as many as 11 people (55%)

3.1.4 Distribution of Blood Pressure After Tomato Juice Was Given To Hypertension Patients At Yanti Clinic, Kec. Percut Sei Tuan, Kab. Deli Serdang Year 2021

TABLE 3
DISTRIBUTION OF BLOOD PRESSURE AFTER TOMATO JUICE IS GIVEN TO HYPERTENSION PATIENTS

No	Blood pressure	Systolic Frequency	Percentage (%)	Diastolic Frequency	Percentage (%)
1	Normal	11	55%	6	30%
2	Prehypertension	3	15%	8	40%
3	Stage I hypertension	5	25%	4	20%
4	Stage II hypertension	1	5%	2	10%
	Total	20	100%	20	100%

Based on table 4.3, it is known that from the results after being given tomato juice to hypertension respondents at the Yanti clinic, the majority of respondents experienced normal systolic blood pressure as many as 11 (55%) respondents, diastolic blood pressure data, the majority of 6 people (30%)

3.1.5 Effect of Tomato Juice on Blood Pressure Reduction in Hypertension Patients

TABLE 4
THE EFFECT OF TOMATO JUICE ON BLOOD PRESSURE REDUCTION IN HYPERTENSION PATIENTS

No	Variable	mean	Std.deviation	T	P value
1	Systolic blood pressure before and after systolic blood pressure	157.60-124.75	18,320	8019	0.000
2	Diastolic blood pressure before-diastolic blood pressure after	98.60-83.90	10,969	5,993	0.000

Based on the Independent t-Statistic Test in table 4.4, it can be seen that the comparison of the mean blood pressure before administration of Tomato Juice with systolic and diastole is 157.60/98.60 mmHg and Post-test systolic and diastole is 124.75/83.90 mmHg with P value 0,000 (0.05) it can be concluded that H0 is rejected and Ha is accepted, it can be concluded that the administration of Tomato Juice (*Solanium Lycopersicum*) has an effect on Blood Pressure Stabilization in Hypertension Patients at Yanti Clinic, Kab. Deli Serdang Year 2021.

1.2 Discussion

1.2.1 Blood Pressure in Patients with Hypertension Before Giving Tomato Juice (*Solanium Lycopersicum*) To Stabilize Blood Pressure In Patients With Hypertension At Yanti Clinic, Kab. Deli Serdang Year 2021

Based on research that has been carried out at the Yanti Clinic, the effect of Tomato Juice (*Solanium Lycopersicum*) on Blood Pressure Stabilization in Hypertensive Patients At Yanti Clinic, Kab. Deli Serdang In 2021, the majority of respondents' blood pressure was obtained before giving Stage I and Stage II hypertension tomato juice, this is from the results of interviews that the majority of patients are more dominant in eating foods such as: coconut milk, excess salt, offal and coffee drinking habits, which can potentially increase blood pressure above normal limits. Endang Triyanto (2020), stated that abnormally high pressure in the arteries causes an increased risk of stroke, aneurysm, heart failure, heart attack and kidney damage. The exact cause of hypertension is still unknown.

From the Sugiri report in Central Java, it was found that the prevalence rate was 6% for men and 11% for women. Reports from West Sumatra showed 18.6% in men and 17.4% in women. In the urban area of Semarang found 7.5% in men and 10.9% in women. While in urban areas of Jakarta, it was found 14.6 in men and 13.7% in women. Endang Triyanto (2020).

Research conducted by Siti Kemala Sari, et al in (2017) entitled the effect of giving tomato juice (*lycopersicum esculentam* mill) on blood pressure in hypertensive patients in Torgamba sub-district, Labuhan Batu Selatan district 2017, systole before drinking costat juice was 145.63 mmHg and systolic blood pressure after drinking tomato juice was 128.13 mmHg with a P value = 0.007, which means that there was a difference between 1811 mean systolic blood before drinking tomato juice and after drinking tomato juice. The results obtained that the average systolic blood pressure before drinking tomato juice was 145.63 mmHg and the systolic blood pressure after drinking tomato juice was 128.13 mmHg with a P value = 0.007 which means that there is a difference between the average systolic blood pressure before drinking tomato juice. and after drinking tomato juice.

According to the researchers, the majority had stage I and II hypertension because the respondents continued to check and take medication, but from the interview results, they did not know what to eat and what food to eat, such as eating onions, white in addition to being overweight.

1.2.2 Blood Pressure in Hypertensive Patients After Giving Tomato Juice At Yanti Clinic, Kec. Percut Sei Tuan Kab. Deli Serdang in 2021

Based on research that has been done at the Yanti Clinic, Kec. Percut sir Kab. Deli Serdang in 2021. Get the majority of Normal blood pressure after giving tomato juice. The lycopene content in tomatoes also has a protective effect on the inner lining of blood vessels, thereby potentially

reducing the risk of blood clots.

Potassium content in tomatoes is very important for heart function. This mineral is healthy and prevents the possibility of heart attacks, strokes, and hypertension. Hamidah Jauhary (2017).

This is in line with the research by Siti Kemala Sari, et al (2017) with the title of the effect of giving tomato juice (*lycopersicum esculentum* mill) on blood pressure in hypertensive patients in Torgamba sub-district, Labuhanbatu Selatan district 2017. The results obtained were the average diastolic blood pressure before drinking tomato juice is 86.88 mmHg and diastolic blood pressure after drinking tomato juice is 83.13 mmHg with a P value = 0.034 which means there is a difference between diastolic blood pressure before drinking tomato juice and after drinking the latest juice. The results of this study found a decrease in blood pressure before drinking tomato juice and after drinking tomato juice at systolic blood pressure of 17.5 mmHg and diastolic blood pressure of 3.75 mmHg.

According to Aryati Puji Lestari (2012) the method used in making tomato juice is to blend 150 grams of tomatoes, 50 ml of water, then put into a glass. This is done once a day ie in the morning. From the results of the study, it was found that after giving tomato juice, almost all respondents experienced a decrease in blood pressure. However, the success of giving tomato juice to the respondents cannot be separated from the fact that respondents believe that this action can help lower their blood pressure.

According to researchers, blood pressure is caused by giving tomato juice consisting of water, the rest consists of carbohydrates, fiber, vitamins, and minerals, has low calories, soluble fiber that can be useful for maintaining digestive health, is rich in vitamin C, which is a powerful antioxidant. which is useful for scavenging free radicals. Free radicals are known to damage cells and body tissues and cause various diseases. They also play a role in the formation of collagen. The body needs collagen to support healthy skin and joints, increase immunity, besides that it contains the mineral potassium which is important for maintaining electrolyte balance in the body, helps muscle contraction and nerve transmission, and reduces the risk of high blood pressure or hypertension and heart disease.

1.2.3 Effect of Tomato Juice on Blood Pressure Reduction in Hypertension Patients

Based on research that has been carried out at the Yanti Clinic, the effect of Tomato Juice (*Solanum Lycopersicum*) on Blood Pressure Stabilization in Hypertensive Patients At Yanti Clinic, Kab. Deli Serdang in 2021. It was found that there was an effect of Tomato Juice (*Solanum Lycopersicum*) on Blood Pressure Stabilization in Patients with Hypertension.

Tomato (*Solanum lycopersicum* L.) contains vitamins A and C, as well as anti-disease compounds that are good for health, especially lycopene. Lycopene is the most abundant red dye found in tomatoes (Winarti, 2010). In 100 g of tomatoes contained as much as 94.1% water; energy 19 cal; 1.0 g protein; fat 0.2 g; carbohydrates 4.1 g; fiber 0.8 g; 0.6 g ash; Ca 18.0 mg; P 18.0 mg; Fe 0.8 mg; Na 4.0 mg; K 266.0 mg; vitamin A 735 IU; thiamine 0.06 mg; riboflavin 0.04 mg; niacin 0.60 mg; and ascorbic acid 29.0 mg (Asharii, 1995). According to research by Maulida and Naufal (2010), 100 g of tomato juice contains 5.14 mg of lycopene.

According to the results of Suwanti's research (2018) on the effect of giving tomato juice on blood pressure in the elderly with hypertension in Lemahireng Village, Bawen District, Semarang Regency, the research type is Quasy Experiment using one - Group Pre Post Test, data analysis using the t-test dependent test (α). = 0.05). The results showed that the average systolic blood pressure of the elderly was 164.47 mmHg, after being given tomato juice it decreased to 150.53 mmHg. Meanwhile, his diastolic blood pressure also decreased from 93.00 mmHg before being given tomato juice to 85.53 after being given tomato juice and there was a significant effect of giving tomato juice on blood pressure in the elderly with hypertension, this is in accordance with research conducted with this type of research, same data analysis,

The mean diastolic value before being given tomato juice was 98.60 and the mean value after being given tomato juice was 83.90, the std. deviation was 10,969, and the t value was -8.019, the p value was .000, this is in accordance with Linga's Research Kurniasari (2012) about the effect of giving tomato juice on blood pressure in the elderly with hypertension at PSTW Unit Abiyoso Yogyakarta. With Quasi Experiment with Non-Equivalent Control Group design. The sample in this

study were 30 people with blood pressure who were taken by means of a Non-Randomized Control Group Pretest Posttest Design. With the results of the Independent t Test to compare the experimental group and the control group systolic BP, it was found that the t value: 12,339 and p: 0.000 ($P < 0.05$). Diastolic BP obtained t value: 9.801 and p: 0.000 ($P < 0.05$),

According to researchers, giving tomato juice is very good because it can lower blood pressure, it is easy to get, cheap prices and has no serious side effects, besides that, it is still necessary to check health, especially blood pressure control.

1.3 Research Limitations

In this study, researchers have made every effort to obtain actual data and optimally control conditions related to the research process and results, but various obstacles often arise so that various weaknesses and limitations in the implementation of this research are carried out. that is, the respondent's house is far apart, the time is too short. So the researcher uses TIM so that the research data collection runs smoothly.

The results of the research conducted at the Yanti Clinic, Kec. Percut Sei Tuan Kab. Deli Serdang on the Effect of Tomato Juice (Solanum Lycopersicum) on Blood Pressure Stabilization in Hypertensive Patients that: (1) Blood pressure before being given tomato juice on hypertension respondents at the clinic, the majority had stage I hypertension and stage II hypertension. (2) Blood pressure after given tomato juice to hypertension respondents at the clinic, the majority of whom had normal blood pressure. (3) There is an Effect of Tomato Juice (Solanum Lycopersicum) on Blood Pressure Stabilization in Patients with Hypertension. Statistical analysis using the t test at $n=20$ 0.05 obtained a significance value of $p = 0.000$, so it can be concluded that the research hypothesis is accepted because the value of t count $>$ from t table (0, 005) so that it can be stated that the administration of tomato juice (Solanum lycopersicum) is effective in stabilizing blood pressure in patients with hypertension at the Yanti Clinic, Kab. Deli Serdang.

4. Conclusion

The results of the research conducted at the Yanti Clinic, Kec. Percut Sei Tuan Kab. Deli Serdang on the Effect of Tomato Juice (Solanum Lycopersicum) on Blood Pressure Stabilization in Hypertensive Patients that: (1) Blood pressure before being given tomato juice to hypertensive respondents at the clinic, the majority had stage I hypertension and stage II hypertension. (2) Blood pressure after being given tomato juice on hypertension respondents at the Yanti clinic, the majority had normal blood pressure. (3) There is an Effect of Tomato Juice (Solanum Lycopersicum) on Blood Pressure Stabilization in Patients with Hypertension. Statistical analysis using the t test at $n=20$ 0.05 obtained a significance value of $p=0.000$, it can be concluded that the research hypothesis is accepted because the value of t count $>$ from t table (0, 005) so that it can be stated that the administration of tomato juice (Solanum lycopersicum) is effective in stabilizing blood pressure in patients with hypertension at the Yanti Clinic, Kab. Deli Serdang

Suggestions for: (1) Research sites, it is hoped that for research sites so that people can use non-pharmacological methods (tomato juice) to lower blood pressure in patients with hypertension and can implement research results, namely by giving tomato juice to respondents who have blood pressure above normal limits. (2) Educational institutions For educational institutions, especially nursing, the results of this study can be a source of information in the development of knowledge, especially about the benefits of tomato juice in the health sector. (3) Further researchers, future researchers are expected to continue this research with the title Effect of Tomato Juice (Solanum Lycopersicum) on Blood Pressure Stabilization in Hypertensive Patients with a larger number of samples.

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Table of contents available at [IOCScience](https://www.iocscience.com)

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