

D

Pengutipan hanya

untuk kepentingan

pendidikan,

Dilarang

mengutip

Hak

Repository

VIND

### THE EFFECT OF INFUSED WATER ON WEIGHT LOSS IN OVERWEIGHT PATIENTS AGED ≥18

Alini<sup>1</sup>, Nila Kusumawati<sup>2</sup>, Awalia Ramadhania<sup>3</sup> <sup>1,2,3</sup>School of Nursing, University of Pahlawan Tuanku Tambusai alini\_09@yahoo.com

### Abstract

**Objective:** The purpose of this study was to determine the effect of infused water on weight loss a overweight patients aged  $\geq 18$ . Method: The research design was quasi experimental with one properties posttest design. Pretest was done one day before intervention and posttest after adays of intervention. The study population was overweight sufferers aged  $\geq 18$  at Simpang Pekanbani Public Health Center, totaling 1.357 in population. Purposive sampling technique applied with a sample size of 30 people. Measuring instrument used was the observation sheet of etermine body weight before and after the intervention. The analysis used was univariate and invariate using the T-test. Result: The result showed the effect of infused water on weight loss with a p-value of 0.000 (p <0.05). Conclusion: The average weight loss after seven days of intervention was 0.5 gr. Overweight patients are advised to use infused water as an alternative therapy for weight loss.

Keywords: Body Weight, Infused Water, Overweight

# and roduction

Weight gain is the accumulation of excess fat in the body that occurs in adipose tissue throughout the body. Overweight is divided into two groups. They are overweight and obesity<sup>1.</sup> More than 1.9 billion adults aged  $\geq 18$ years and over are overweight. From this number, there are more than 600 million are overweight or overweight. The highest prevalence of overweight was in Uruguay (18.1%), Western Europe (13.9%), Costa Rica (12.4%), Chile (11.9%), and Mexico (10.5%)<sup>2</sup>. Indonesia is in 10th place with the most overweight population after Pakistan and

Germany. According to the Basic Health research finding in 2013, overweight in andonesia reached 14.8% and in 2018 increased to 21.8%. The highest number of overweight sufferers was in North Sulawesi with 16.3%, in East Kalimantan 15.5% and Riau Province

The prevalence of overweight in Riau Province shows that the highest prevalence is in Siak Regency (20.7%) and Pekanbaru City (12.1%).

Riau

a

Overweight surely has a negative impact on the sufferer. The impacts occur are both physically and psychologically<sup>4</sup>. Several ways to deal with overweight are through regular diet, exercise, and alternative therapy, namely infused water. Infused water is an alternative therapy for those who want an ideal body weight. Infused water is pure water with a mixture of fruits, vegetables or herbs.

Based on a research conducted by Bhatia and Sharaswat<sup>5</sup>, there were 26 samples who were given 500 ml warm water and cinnamon for 12 weeks. It shows that infused water can reduce the weight of research subjects by  $\pm 10$ kilograms. Based on a preliminary survey conducted on 15 people who are overweight in the working area of the Simpang Tiga Public Health Center Pekanbaru, the efforts that they have made to lose weight are consuming dietary drugs, reducing diet and buying products to lose weight. However, these efforts have not been successful. Overweight sufferers do not know yet that infused water can help them to lose weight. Based on the above phenomena, there is limited research on using infused water for weight loss, especially in Riau Province. Thus, the study was conducted





to explore the effect of infused water on weight 0 for overweight patients aged  $\geq 18$  years in Simpang Tiga Public Health Center. Pekanbaru City, Riau Province.

# Method

artis study employed a quantitative research design with a pre-experimental approach with one group pretest-posttest. This research Fondected on June, 2020 in Simpang Tiga Public Health Center, Simpang Tiga sub-district, Bukit Ray district Pekanbaru municipality, Riau was taken from the classification of body weight in the number of overweight patients with a total be 1357 people. The number of samples was 30 beone. The sampling technique used was pupposive sampling. The instrument used in this study was the observation sheet to measure body weight before and after receiving the treatment.

The data collection technique in this study was the fand after giving the treatment (posttest). The test was in form of the measurement of body weight a weight scale that was carried out before consuming infused water and after consuming infused water. The data analysis used was Paired Sample T-test.

## Results

The research was conducted by giving 1.500 ml Infused water to the research subjects every morning at 7 a.m. every day for seven days. The Bresearch findings are presented in the following tables:

# Table 1

No	Category	Total	Percentage
	Age 📮		
	a. 18 – 25	20	66.7%
	years old		
1.	b. 26 – 35	8	26.7%
	years old		
	c. 36 – 45	2	6.6%
	years old		
Tot	al 🖏	30	100%
2.	Gender		
	a. Male	9	30.0%

b. Female	21	70.0%	
Total	30	100%	

Table 1 showed that the majority of the research subjects were between 18-25 years old late adolescents with the total of 20 participants (66.7%). The majority of the participants of this study were female (70%).

### Table 2

#### The Average of Body Weight Pre-Test Variable Mean SD Min-

			Max
Body	65.1	10.0228	53.0 -
weight			87.3
Pre-test			

Table 2 showed that the mean of pretest of body was 65.1 kgs with a standard deviation of 10.0228.

### Table 3

#### The Average of Body Weight Post-Test Variable Mean SD Min-Max Body 64.6 10.1230 51.0 weight 86.1 Post-test

Table 3 showed that that the average body weight after being given infused water therapy is 64.6 Kgs with a standard deviation of 10.1230.

### Table 4

The Comparison of the Body Weight Average Before and After Being Given Infused Water

masca	· · utti					
Variable	Mean	SD	SE	Р	Ν	
				Value		
Body	65.1	10.0228	1.8299			
Weight						
Pre-test				0.000	20	
Body	64.6	10.1230	1.8482	- 0.000	50	
Weight						
Post-test						

Based on table 4, it could be seen that the average body weight before being given infused water was 65.1 with a standard deviation of 10.0228. The mean of body weight after being given infused water was 64.6 with a standard deviation of 10.1230. It also showed the difference of average body weight between before and after being given infused water was 0.5 gr. The results of the T-test statistical test showed that the P value was 0.000



N



(P-<0.05). It could be concluded that there was a significant difference between body weight before and after being given infused water.

Discussion

The average weight loss occurs in the late adolescence period (18 years old - 25 years old). According to Prima and Sari (2013), in the age of 18-25, people still pay attention to their body shape and frequently do not feel confident if they continue to gain weight. At this age, they tend to be easily influenced by impulses in food and drink intake to make changes to weight loss.

Furthermore, weight loss is also affected by gender in which women and men surely have different beeds of calorie. Gender is one of the factors that determines a person's nutritional needs<sup>7</sup> explains that infused water is a new trend and style for healthy living for those who do not like or are not into fruits or having limited time to consume fruit. Besides, it can also encourage someone to consume more water. Fruits that are used for infused water are those that contain vitamin C, which can metabolize the body 30% faster to lose weight. Consuming enough water for 30 minutes before eating can also lose weight<sup>8</sup>

T-test in this study showed a P-Value is 0.000 with an average weight loss of 0.5 gr, whereas in previous studies, the P-value was 0.002 with an average of 0.5 gr of weight loss. This is in line with a theory which explains that to get a large amount of weight loss results, it also takes a long time<sup>6</sup>. To lose weight, at least do it for one week with a total weight loss no more than 1 kg.

# Conclusion

Based on the research findings, it can be concluded that there is an effect of infused water on losing weight with a p-value 0.000 (p 0.05). The study findings showed that that the infused water significantly decreased the body weight. As such, the infused water can be used as one of alternative therapies for those with fundeal body weight.

# Acknowledgement

We would like to thank you all the study participants, the Rector, Vice Rectors and Research and Community Development of Universitas Pahlawan Tuanku Tambusai.

# References

- Batubara, J. R. Juniarti, T. M., Damanik, H. A., & Lubis, S. M. Hubungan Asupan Karbohidrat, Asupan Lemak, Asupan Serat, Aktifitas Fisk Dan Kebugaran Jasmani Remaja Overweight (Studi Siswa/I Smp Negeri 1 Sanggau) (Doctoral Dissertation). 2010.
- 2. World Health Organization.World health statistics 2014 library cataloguing-inpublication Data [accessed 14 March 2020]. Available at http://www.who.int/mediacentre/facts heets/fs311/en/. 2014
- Kementrian Kesehatan. Riset Kesehatan Dasar 2013. [Accessed 14 March 2020]. Available at http://kemenkes.go.id. 2020.
- 4. Prameswari. Hubungan obesitas dengan konsep diri remaja. http://respository.unand.ac.id. [Accessed 14 March 2020)
- 5. Bhatia Shivani, Shubhra Saraswat. Effect of japan water therapy infused with cinnamon on body weight, waist/hip ratio, and body mass index of overweight and obese subjectsshivani. Asian journal of pharmaceutical and clinical research. Vol 12, Issue 9. 2019. [Accessed 14 March 2020]. Available at https://www.researchgate.net.
- Wulandari, R & Rahmanisa, S. Pengaruh ekstrak teh hijau terhadap penurunan berat badan pada remaja. Jurnal Majority, 5(2),106-111. [Accessed 14 March 2020]. Available at http://juke.kedokteran.unila.ac.id. 2016.
- Mulyasari. Pengaruh asupan air putih terhadap berat badan, indeks massa tubuh, dan persen lemak tubuh pada remaja putri yang mengalami gizi lebih. [Accessed 14 March 2020]. Available at Jurnal gizi Indonesia. http://ejournal.undip.ac.id. 2015.
- 8. Indri, Muaris. Infused water: Tren gaya hidup minum air putih. [Accessed 14 March 2020]. Available at https://books.google.co.id/books. 2015.