

# The Effectiveness Of Kepok Banana ( Musa Paradisiaca. L) Consumption On Reducing First Trimester Igravidarum Emesis

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## ABSTRACT

Emesis gravidarum is a complaint that often occurs in pregnant women, especially in the first trimester. In addition to pharmacological drugs, emesis gravidarum can also be treated non-pharmacologically. This study aims to determine the effectiveness of the consumption of kepok bananas (*Musa Paradisiaca Formatypica*) on the reduction of first trimester emesis gravidarum in the Independent Midwife Practice (PMB) Susanti Pekanbaru City. The study was conducted from June to August 2021. The type of research used was pre-experimental with a one-group pre-post-test design which did not use a control group, but previously the group had pretest observations so that researchers could compare changes. The population of this study was 15 respondents. The sampling technique in this study was total sampling. The research instrument is a questionnaire sheet and bivariate data analysis. From the results of the study, it is known that the average emesis gravidarum before consuming banana kepok is 9.27 and the average emesis gravidarum after consuming banana kepok is 7.00. The results of the paired T-test showed the effectiveness of kepok banana consumption on decreasing first trimester emesis gravidarum with p value  $0.000 < 0.05$ . From the results of this study, it is expected that pregnant women who experience emesis gravidarum can consume kepok bananas boiled for 40 minutes 3 times a day. Researchers suggest to health workers to be able to provide education about the benefits of kepok bananas to pregnant women in the first time who experience emesis gravidarum.

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## INTRODUCTION

Pregnancy is a natural and physiological process. Every woman who has healthy reproductive organs, if she has experienced menstruation and has sexual intercourse, it is likely that pregnancy will occur. If the pregnancy is planned, it will bring happiness, but on the other hand the ability for women is needed to adapt to the changes that occur during pregnancy, both physiological and

psychological changes (Mandriwati et al, 2016). In the first trimester of pregnancy, you are most likely to experience nausea with or without vomiting. These symptoms begin around the sixth week of pregnancy and usually improve at the end of the first trimester of pregnancy around week 13. (Ira, 2015)

Emesis gravidarum is a common complaint in pregnant women, especially in the first trimester. Nausea and vomiting in pregnancy is known as morning sickness. Morning sickness can occur at any time of the day (though not at night while sleeping) and is not a disease. Nausea and vomiting are normal characteristics of early pregnancy. (Lilana, 2015).

Emesis gravidarum can turn into hyperemesis gravidarum if you don't get treatment right away, while hyperemesis gravidarum in pregnant women can cause impaired function of vital organs, anemia, malnutrition, impact on fetal development, and even lead to death. There are many factors that cause hyperemesis gravidarum, such as internal factors such as the mother's physical and psychological conditions, besides that it is supported by hormonal factors, maternal age, maternal parity, previous pregnancy history. While external factors are family support, information and the role of health workers. (Rinata & Ardillah, 2017).

Emesis gravidarum in pregnancy is generally called morning sickness, experienced by about 70-80% of pregnant women and is a phenomenon that often occurs at 5-12 weeks of gestation. Nausea and vomiting in pregnancy are usually mild and can be controlled according to individual conditions. (Rinata & Ardillah, 2017).

There are several ways that can be used to overcome nausea during pregnancy, namely when you wake up, the mother should not immediately stand up but sit down for a while to neutralize dizziness, after waking up try to drink a glass of warm water, consume dry and light food or crackers in the morning, eat little but often, increase the consumption of fruits and vegetables (Rofi'ah et al., 2019).

According to the World Health Organization (WHO) in 2016, the number of cases of nausea and vomiting (hyperemesis gravidarum) reached 12.5% of the total number of pregnancies in the world. Nausea and vomiting can interfere with and make fluid imbalances in the kidney and liver tissue necrotic. (World Health Organization (WHO), 2016).

Based on data from the Ministry of Health of the Republic of Indonesia in 2016, in Indonesia, data on pregnant women and vomiting reached 14.8% of all pregnancies. Complaints of nausea and vomiting occur in 60-80% primigravida and 40-60% multigravida. One in a thousand pregnancies these symptoms become more severe. Feelings of nausea and vomiting are caused by increased levels of the hormone estrogen and chorionic gonadotropin hormone (HCG) in the serum. The physiological changes of this hormone increase are not yet clear, due to the central nervous system and reduced gastric emptying (Baiq Eka Putri Saudia, 2017).

According to the Indonesian Health Demography Survey (IDHS) in 2016, it was recorded that 45% of pregnant women in Indonesia experienced emesis gravidarum, while in 2017 the number increased to 58% of pregnant women experiencing emesis gravidarum. (RI, 2016). According to the 2015 Riau Province Health Profile, the number of pregnant women who experience emesis gravidarum is estimated at 58% and occurs in remote villages where 38% of pregnant women experience hyperemesis gravidarum so that many pregnant women suffer from anemia and even malnutrition.

According to (Maharani, 2010) quoted by (Aryani, 2015) in Indonesia there are 50-90% cases of Emesis Gravidarum experienced by pregnant women. However, in cases like this it does not cause death in pregnant women because Emesis Gravidarum only lacks nutrients and fluids. However, ongoing Emesis Gravidarum can be bad for the health of the mother and her baby.

Banana is an important commodity in Indonesia and the world. In almost all regions in Indonesia, bananas are grown and produced, both in the yard and in the garden. During the last 10 years, Indonesia is the 6th banana producing country in the world with a production of 6,189,052 tons in 2012 (Oktaviana et al., 2017).

Bananas for pregnant women are very good for pregnant women because the folic acid content in bananas can maximize fetal growth and development so that bananas are very good for pregnant women to consume, bananas contain many active compounds and their nutritional content is beneficial for health, one of which is B6 content to prevent nausea. vomiting in pregnant women (Ratih & Qomariah, 2018).

According to Qomariah's research (Ratih & Qomariah, 2018), regarding the effectiveness of banana consumption against first trimester emesis gravidarum in Kampar Regency in 2017, it is known that the Wilcoxon Signed Rank test results produce a significance value ( $p$ ) = 0.04. A significance value ( $p$ ) that is smaller than 0.05 indicates a significant effect before and after the intervention.

Based on Rini and Siti's research (Ratih & Qomariah, 2018), entitled Vitamin B6 Content in Kepok Bananas: Alternatives to Overcoming Nausea and Vomiting in Pregnant Women. Reported that the results of the examination were carried out at the Riau University laboratory with preparations using kepok bananas which consisted of several forms of consumption of kepok bananas, namely ripe kepok bananas containing 0.2530 mg/ml B6, kepok bananas containing 0.2022 mg/ml B6 content. , raw kepok bananas contained 0.1418 mg/ml of B6, boiled kepok bananas for 40 minutes contained 0.3646 mg/ml of B6, 0.3060 for 30 minutes and 0.2860 mg/ml for 20 minutes. The highest content results in kepok bananas boiled for 40 minutes, so it is recommended to help reduce emesis gravidarum in first trimester pregnant women.

Based on data obtained from the Independent Practice of Midwife Susanti from December - February 2021, the first visit (K1) of pregnant women in the first trimester was 41 people. From interviews with 5 pregnant women who checked themselves, it was found that mothers did not know about other alternatives besides pharmacological drugs, consuming banana kepok can be used as an alternative to reduce emesis naturally.

Based on the description above, the researcher is interested in conducting research on "Effectiveness of consumption of bananas (*Musa paradisiaca formatypica*) on reducing emesis gravidarum in first trimester pregnant women at the Independent Practice of Midwife Susanti Pekanbaru in 2021".

## RESEARCH METHOD

The type of research used is pre-experimental with a one-group pre-post-test design which does not use a control group, but previously the group had pretest observations so that researchers could compare changes. The population of this study was 15 respondents. The sampling technique in this study was total sampling. The research instrument is a questionnaire sheet and bivariate data analysis.

## RESULTS AND DISCUSSIONS

### Results

**Table 1.** Distribution of the average frequency of emesis gravidarum in first trimester pregnant women before consuming kepok bananas at the Susanti Midwife Independent Practice, Penbaru City.

Category	Emesis Gravidarum Before and After Consumption of Banana Kepok			
	N	Mean	Min-Max	Sd. Deviation
Before Intervention	15	9.27	5-12	2.187
After Intervention	15	7.00	4-9	1.46

Based on table 4.1, it shows that from 15 respondents, the average emesis gravidarum in pregnant women in the first trimester before consuming banana kepok was 9.27 with the lowest emesis gravidarum 5 and the highest 12 with a standard deviation of 2.187. Of 15 respondents, the average emesis gravidarum after consumption of banana kepok was 7.00 with the lowest emesis gravidarum 4 and the highest emesis gravidarum 9 with a standard deviation of 1.464.

**Table 2.** The results of the normality test of the effectiveness of the consumption of banana kepok on the reduction of emesis gravidarum in first trimester pregnant women in the independent practice of Susanti Midwife, Pekanbaru City

	Saphiro-Wilk		
	P Value	Df	Sig.
Pretest	0.892	15	0.072
Posttest	0.923	15	0.216

Based on table 4.2, the p value is more than 0.05, so it can be concluded that the data is normally distributed. Thus, the conditions for the paired T-test are met.

**Table 3.** The Effectiveness of Consumption of Kepok Bananas on Reducing Emesis Gravidarum in First Trimester Pregnant Women in Independent Practice of Midwife Susanti Pekanbaru City

Variabel	Mean	SD	SE	P Value	N
Pre Test - Post Test	2.267	1.534	0.396	0.000	15

Based on Table 4.4, the results obtained from 15 respondents with the Mean Pretest and Posttest values being 2.267 and P Value 0.000 so that  $H_0$  was rejected and  $H_a$  was accepted, meaning that there was an effectiveness of Kepok banana consumption on decreasing emesis gravidarum in first trimester pregnant women at the Independent Practice of Midwife Susanti, Pekanbaru City.

### Discussions

Analysis Before and after consuming kepok banana, Based on the paired sample t test, it was found that the p value was  $0.000 < 0.05$  so it can be concluded that there is an effect of Kepok Banana Consumption on the Decrease in Emesis Gravidarum in First Trimester Pregnant Women. Bananas for pregnant women are very good for pregnant women because of the folic acid content in bananas. can maximize fetal growth and development so that bananas are very good for pregnant women, bananas contain many active compounds and their nutritional content is beneficial for health, one of which is B6 content to prevent nausea and vomiting in pregnant women (Yulianti, 2010). This study is in line with Qomariah's 2017 research on the effectiveness of banana consumption on first trimester emesis gravidarum in Kampar Regency. In 2017, it was found that the Wilcoxon Signed Rank test results yielded a significance value ( $p$ ) = 0.04. A significance value ( $p$ ) that is smaller than 0.05 indicates a significant effect before and after the intervention.

## CONCLUSION

Based on the paired sample t test, it was found that the p value was  $0.000 < 0.05$  so it can be concluded that there is an effect of Kepok Banana Consumption on the Decrease in Emesis Gravidarum in First Trimester Pregnant Women

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