Indonesian Journal of Global Health Research
Volume 7 Number 2, April 2025
e-ISSN 2715-1972; p-ISSN 2714-9749
http://jurnal.globalhealthsciencegroup.com/index.php/IJGHR

EFFECTIVENESS OF CONSUMING THALASSA EGGPLANT AND DATE EXTRACT IN INCREASING HEMOGLOBIN LEVELS IN PREGNANT WOMEN: SYSTEMATIC LITERATURE REVIEW

Ulfia Fitrianingsih[1]*, Runjati[1], Betty Yosephin Simanjuntak[1]
[1]Poltekkes Kemenkes Semarang Jl. Tirto Agung, Pedalangan, Banyumanik, Semarang, Jawa Tengah 50268, Indonesia
Poltekkes Kemenkes Bengkulu, Jl. Indragiri Pd. Harapan No.3, Padang Harapan, Gading Cempaka, Bengkulu 38225, Indonesia
*ulfiafitrianingsih93@gmail.com

ABSTRACT

Anemia in pregnant women is a significant public health problem, especially in developing countries. Iron deficiency in pregnant women can interfere with fetal growth and maternal health. One alternative to increase hemoglobin levels is to consume local foods such as tamarillo and date palm juice, which are rich in iron and vitamin C.Objective: The aim of this study was to identify the effectiveness of consuming tamarillo and date palm juice in increasing hemoglobin levels in pregnant women with anemia based on a systematic literature review.Method: The research design is a Systematic Literature Review of articles or journals published in 2020-2024, accessed on Google Scholar, PubMed and Scopus with the Prisma Flow technique. Relevant articles were selected using the PRISMA flow technique, with the inclusion criteria being in Indonesian or English that can be accessed in full.Results: The results of the analysis of 10 articles showed that consumption of tamarillo and date palm juice significantly increased hemoglobin levels in pregnant women with anemia. The increase in hemoglobin levels ranged from 1.0-2.0 g/dL in the intervention group. Tamarillo is effective due to its vitamin C content which increases the absorption of non-heme iron, while date palm juice provides additional iron and energy to support hemoglobin formation.Conclusions: tamarillo and date palm extract have been proven effective as non-pharmacological interventions in treating anemia in pregnant women. The combination of these two ingredients can be a safe natural alternative and has the potential to increase the success of managing pregnancy anemia.

Keywords: anemia; date palm juice; hemoglobin; pregnant women; tamarillo

How to cite (in APA style)
Fitrianingsih, U., Runjati, R., & Yosephin, B. (2025). Effectiveness of Consuming Thalassa Eggplant and Date Extract in Increasing Hemoglobin Levels in Pregnant Women: Systematic Literature Review. Indonesian Journal of Global Health Research, 7(2), 351-360. https://doi.org/10.37287/ijghr.v7i2.5527.

INTRODUCTION

Pregnancy is a continuous process that begins with the process of ovulation, migration of spermatozoa to the ovum, conception and growth of the zygote, nidation (implantation) in the uterus and formation of the placenta until the growth and development of the conception until it is time to be born. Pregnancy is divided into three trimesters, namely the first trimester, namely the age of 0 to 12 weeks, the second trimester 13 weeks to 28 weeks, and the third trimester 29 weeks to 42 weeks. (Hidayanti and Rahfiludin 2020)Pregnancy is accompanied by changes in the body, both anatomically, physiologically, and biochemically. Pregnant women experience an increased need for iron so that they need a lot of iron intake during pregnancy. This increased need for iron is to meet the needs of the fetus for fetal growth, placental growth and increased maternal blood volume. (Sihombing et al. 2023)The need for iron during the first trimester or in the first 3 months of pregnancy is relatively small, namely 0.8 mg / day, then increases in the second and third trimesters, namely 6.3 mg / day. During pregnancy, pregnant women experience an increase in blood plasma of up to 30%, blood cells

18%, but hemoglobin levels only increase by 19%, this is what causes the frequency of anemia in pregnancy to be quite high. (Sihombing et al. 2023)

Pregnancy anemia with indications of hemoglobin levels below 11g/dL or hematocrit levels dropping below 37% in the first trimester, hemoglobin levels less than 10.5g/dL or hematocrit levels of 35% in the second trimester and in the third trimester hemoglobin levels less than 10g/dL or hematocrit levels less than 33%. The function of hemoglobin in the body of pregnant women is for the needs of daily body activities, the stability of hemoglobin levels in the blood is useful so that oxygen flow to the fetus is optimal, avoiding fatigue during childbirth so that excessive bleeding does not occur, maximizing maternal health during pregnancy, and improving fetal growth and development. (Hidayanti and Rahfiludin 2020 World Health Organization (WHO) the prevalence of anemia in the world reaches 41% and most of 75% occurs in developing countries. India is one of the developing countries that experiences anemia with a prevalence rate of 50-90% and the problem of maternal mortality in India is caused by anemia by 19%. (Ghiffari et al. 2021The prevalence of anemia in pregnant women in Indonesia reached 48.9% with anemia occurring in urban areas of 48.3% and in rural areas of 49.5%. The incidence of anemia in pregnant women aged less than 25 years was 84.6% and the incidence of anemia in pregnant women aged more than or equal to 35 years was 57.6%. This illustrates that the incidence of anemia in Indonesia is quite high and has become a serious public health problem (server public health problem) with a prevalence limit of anemia of more than 40%. (Sibuea, Hardhana, and Widiantini)

Based on the results of research conducted by Sri Yunida, et al., The results of the study showed that most respondents (55%) were at risk and almost all (75%) had anemia and as many as 51 respondents had iron deficiency. (Yunida et al. 2022)One of the obstacles in providing iron supplements is the low compliance of pregnant women in consuming iron supplements of at least 90 tablets during pregnancy. The Basic Health Research Report (2018) reported that pregnant women in Indonesia who consumed iron supplements (TTD) ≥90 tablets were only 38.1%. Meanwhile, the 2017 Indonesian Health Demographic Survey Report (SDKI) showed that 13% of pregnant women did not consume iron supplements during pregnancy, 29.4% of pregnant women consumed iron tablets <60 tablets, 8.9% of pregnant women consumed 60-89 iron supplements, 5.1% of pregnant women did not know about consuming iron supplements and only 44% of mothers consumed iron supplements according to the recommendation of at least 90 tablets, but this percentage has not changed in the last 10 years. The achievement of iron tablet consumption by pregnant women has decreased from 2018 from 81.2% to 64% in 2019, and this figure is still far from the national target of 98%. (Larasati, Mahmudiono, and Atmaka 2021)

There are several efforts to overcome anemia in pregnant women, including pharmacological and non-pharmacological. Consuming iron supplements (TTD) at least 90 tablets during pregnancy with a dose of 60 mg is a pharmacological method. Meanwhile, consuming local foods such as nuts, beets, red spinach, dates and tamarillos are non-pharmacological efforts. (Gelar, Kebidanan, and Oleh 2021)One example of food that contains iron is tamarillo and date palm juice. The content of tamarillo in every 100g contains 48 calories, 1.4-4.7mg protein, 0.3-0.9mg iron, 5600SI vitamin A, 15-42mg vitamin C, 2mg vitamin E, and 6-18mg calcium. In addition to being rich in iron, tamarillo also contains vitamin C which can help the absorption of iron. In addition, vitamin C is one of the external antioxidants needed by the body. (Utami, Fauziyah, and Puspareni 2021)

Dutch eggplant is a source of vitamin C which functions to increase iron absorption and as an antioxidant because it maintains cell health, and improves the immune system, in addition to being an antioxidant, vitamin C functions to maintain and preserve the health of capillaries, teeth and gums. Dutch eggplant also contains compounds such as β-carotene, anthocyanins and fiber. The antioxidant compound contained in β-Carotene has a very important role because it is the most resistant to free radical attacks. This compound is often referred to as provitamin A in the body so it is often referred to as vitamin A. (Parameter et al. 2021)Iron is a precursor that is essential for the formation of hemoglobin, erythrocytes and hematocrit. Iron in food can be in the form of heme which is bound to protein and is found in food derived from animals. More than 35% of this heme can be absorbed directly. Another form is in the form of non-heme, namely a complex inorganic iron compound found in food derived from plants, which can only be absorbed by 5%. Absorption of non-heme iron can be increased if there is sufficient vitamin C. Vitamin C can increase the absorption of non-heme iron up to four times. (Hari and Internasional 2020)

Efficient and effective absorption of iron is in the form of ferrous because it is easily soluble, therefore, an acidic environment is needed in the stomach and a compound that can convert ferric to ferrous in the intestine. The compound in question is ascorbic acid (vitamin C). The rate of iron absorption is also influenced by plasma iron levels. The human body does not have the ability to synthesize vitamin C, so it must be obtained from outside the body in the form of food or medication. (Hari and Internasional 2020)Meanwhile, the content of 100 grams of dates consists of 282kcal of energy, 39mg of calcium, 10mcg of vitamin A, 75.03g of carbohydrates, 1.05mg of iron, 2.45g of protein, and 0.40mg of vitamin C. (Kurma 2023)All of these vitamins have different functions that can help the body become healthy through carbohydrate metabolism, maintaining blood glucose levels, fatty acids for energy, and helping in the formation of hemoglobin, leukocytes, erythrocytes and hematocrit. Several studies have shown that consuming dates can increase hemoglobin levels. (Anemia and Nanda 2020)

Hemoglobin is a complex protein consisting of protein, globin and hem pigment containing iron. Hemoglobin functions as an oxygen carrier rich in iron in red blood cells (erythrocytes) and carries oxygen from the lungs to the body's tissues. Hemoglobin is a part of the blood and has an important role in the formation of red blood cells (erythrocytes). (Sianturi and Tanjung 2007)Hematocrit serves to indicate the volume of red blood cells or full erythrocytes in 100 mm^3blood and is expressed as a percentage. Another function of hematocrit is to measure the proportion of red blood cells (erythrocytes). The hematocrit value is used to determine the average erythrocyte value and to determine whether or not anemia is present. The purpose of this study was to evaluate the effectiveness of consuming tamarillo and date palm juice in increasing hemoglobin levels in pregnant women with anemia through a systematic review of various relevant literature

METHOD

The research method used is Systematic Literature Review, with data sources in the form of journals, articles or research results in electronic databases published on the Google Scholar portal and Open Access Journal (PubMed). The inclusion criteria for the study include journal articles that are in accordance with the research topic, using Indonesian or English, published in the last 5 years (2019-2024), and can be accessed in full text. While articles or journals that cannot be accessed in full text will be executed from the study. Sampling was carried out by the first author, then reviewed by the two authors using the PRISMA diagram to select articles or journals that meet the research inclusion criteria. In addition, the selection process also considers the research questions set. If it does not answer one of the research questions, then the two authors agree to exclude the article. The purpose of this study was to evaluate the effectiveness of consuming tamarillo and date palm juice in increasing hemoglobin levels in pregnant women with anemia through a systematic review of various relevant literature.Relevant studies were selected based on criteria including relevance to eggplant and dates, availability in full text, and language (Indonesian or English). Data from selected articles were then extracted and synthesized to identify key trends, effective practices, and implementation barriers

RESULT

The results of a review of 10 studies showed that consuming tamarillo and date juice can significantly increase hemoglobin levels in anemic pregnant women. Research by Larra Fredrika and Lussy Efrida Yanti (2021) found that tamarillo juice can increase hemoglobin levels with a significant difference between before and after intervention (p-value <0.05). A similar study by Endang Citia Mitas (2021) showed an increase in hemoglobin levels of 2 g/dL in pregnant women in the third trimester after consuming tamarillo juice. This effect is due to the vitamin C content in tamarillo which helps the absorption of non-heme iron, which is important for the formation of hemoglobin.

Table 1.
Characteristics of literature findings articles (n= 10)

Title and Researcher	Research Design	Sample	Results
The Effect of Dutch Eggplant Juice *(Solanum Betaceum Cav)* on Hemoglobin Levels in Nursing Students of Muhammadiyah University of Bengkulu Larra Fredrika, Lucy Efrida Yanti (2021)	Experimental method, using a pre-*experimental design* with a *pretest-posttest design* .	sample of 15 people with the sampling technique using "Purposive Sampling"	The results of the study showed that there was a difference in hemoglobin (Hb) levels before and after being given tamarillo juice with a p value = 0.000 (<0.05). It can be concluded that there is an effect of tamarillo juice on hemoglobin (Hb) levels in nursing students at the Faculty of Health Sciences, Muhammadiyah University of Bengkulu.
The Effect of Giving Turquoise Eggplant Juice (*Solanum Betaceum*) on Hb (Hemoglobin) Levels in Pregnant Women in the Third Trimester in the Siulak Mukai Health Center Work Area, Kerinci Regency in 2021 Endang City Mitas (2021)	*Quasi Experiment* Design with one group *pre test - post test* design research design	15 pregnant women with anemia	The results of the study showed that the average *pre-test Hb level* in pregnant women in the third trimester was 9.873 g%. The average *post-test Hb level* in pregnant women in the third trimester was 11.873 g%. The difference in the average HB (Hemoglobin) levels *pre-test* and *post-test* of turquoise eggplant juice (Solanum Betaceum) in pregnant women in the third trimester was 2 g%. Based on the results of the study, it can be concluded that there is an effect of giving turquoise eggplant juice *(Solanum Betaceum)* on hemoglobin levels in pregnant

Title and Researcher	Research Design	Sample	Results
			women in the third trimester in the Siulak Mukai Health Center Work Area, Kerinci Regency in 2021.
The Effect of Adding Date Palm Juice on Hemoglobin Levels of Anemic Pregnant Women at the Fistha Nanda Clinic in 2020 The story of the 2020 film "The Story of the 2020 Film" by Natasya Fardillah M.	*Quasi Experiment* Design with non-randomized control group *pre-test research design post test* design	20 pregnant women with anemia	The results of the study were an increase in hemoglobin levels in pregnant women after consuming date palm juice and Fe tablets with an average of 2.0 g/dl and an increase in hemoglobin levels in pregnant women after consuming Fe tablets with an average of 0.8 g/dl. Consumption of date palm juice and Fe tablets can provide a greater increase than consuming Fe tablets alone .
Effectiveness of Giving Date Palm Juice on Increasing Hb Levels in Pregnant Women in BPM Work Area of Bengkulu City Rismayan, Nurul Maulani (2023)	The research used an intervention study with *the one group pretest – posttest method.*	30 pregnant women with anemia	The p-value obtained was 0.000 or p-value <α (0.005), this shows that there is an effect before and after giving date palm juice on increasing hemoglobin levels in pregnant women at the BPM of Bengkulu City.
The Effect of Giving Date Palm Juice on Increasing Hemoglobin Levels in Pregnant Women (Widowati, Kundaryanti, and Lestari 2019)	The quasi-experimental research design with the one group pre-test and post-test method, using one group as the group before and after being given an intervention to determine the effect of date palm juice on increasing hemoglobin levels.	13 pregnant women in the second trimester with anemia.	The results of the study showed that the lowest hemoglobin levels of respondents before consuming date palm juice were 8.1 gr/dL and the highest were 10.4 gr/dL, with an average of 9.6 gr/dL. Respondents who experienced anemia mostly occurred at the non-risk maternal age, namely 20-35 years old, as many as 10 respondents. In this study, the number of respondents was more than 90% of mothers aged 20-35 years. The results of this study indicate that non-risk pregnancy ages still have the opportunity to experience anemia
The Effect of Giving Dates on Increasing Hemoglobin in Anemic Pregnant Women. Lindia, Winda Maolinda, Frani Mariana, Susanti Suhartati (2024)	Experiment (Pre-Experiment, research design using pretest-posttest research design without control group design using one type of treatment	The sample used was 20 people and met the inclusion criteria, consisting of 10 control samples and 10 intervention samples.	there is an effect of giving dates on increasing hemoglobin levels in pregnant women with anemia. As for the control group that did not receive intervention, the average group level in the initial measurement (before) was 10.21 gr/dl and in the second measurement (after) was 10.43 gr/dl.
The Effect of Giving Date Palm Juice on Increasing Hb Levels in Pregnant Women. (Irmawati and Rosdiana	pre-experimental with a one group pretest post test design	15 pregnant women who are willing to be respondents,	15 samples were obtained where before the administration of date juice obtained a mean value of 10.18 and after the

Title and Researcher	Research Design	Sample	Results
2020)		Pregnant women who are willing to sign informed consent, Pregnant women who are willing to consume date palm juice, Pregnant women in the first or second trimester, Pregnant women who are anemic and Primigravida women.	administration of date juice obtained a mean value of 11.31. The results of the T-Test showed that the p value was 0.000 <0.05, so Ho was rejected and H1 was accepted, so this shows that there is an influence between the administration of date juice and hemoglobin levels.
The Effect of Giving Dutch Eggplant Juice on Hemoglobin Levels in Pregnant Women with Anemia at the Taman Sari Pratama Clinic, Pekanbaru City in 2022 (Riset Dan Inovasi Al-Matani, Sari Kota Pekanbaru Tahun, and Tiansa Barus 2023)	This research design uses one group before and after intervention design or pre and post test design.	15 respondents, pregnant women who consume iron tablets and are willing to drink eggplant juice.	The average level of pregnant women before being given eggplant juice at the Pratama Taman Sari Clinic in Pekanbaru City in 2022 was an average Hb level at the measurement before 10.367 gr/dl. The average level of pregnant women after being given eggplant juice at the Pratama Taman Sari Clinic in Pekanbaru City in 2022 was an average Hb level at the measurement after 11.693 gr/dl.
The Effect of Date Palm Juice on Increasing Hemoglobin Levels in Pregnant Women with Anemia at the Aur Duri Health Center, Jambi City in 2024. (Junita 2024)	pre-experimental research with a One Group Pretest Posttest design.	The number of samples in this study was 30 pregnant women with anemia.	The results obtained before being given date palm juice, the average hemoglobin level in pregnant women was 9.23 (mild anemia) and after being given date palm juice, the average hemoglobin level in pregnant women was 12.35 (not anemic), meaning that there was an effect of date palm juice on increasing hemoglobin levels in pregnant women with anemia.
Effect of Date Palm Juice on Hemoglobin Levels in Pregnant Women. (Yunitasari et al. 2021)	Type of quantitative research with Quasi Experimental research design (quasi experiment)	22 pregnant women	The average hemoglobin level before being given date juice in the intervention group was 10,000 gr% and in the control group was 10.127 gr%. The average hemoglobin level after being given date juice in the intervention group was 11.564 gr% and in the control group was 10.864 gr%. There was an effect of giving date juice in increasing hemoglobin levels in pregnant women with mild anemia which was shown after conducting an independent sample ahasant-test, the results of the Sig. (2-tailed) value were 0.000 <0.05, so it was proven

Title and Researcher	Research Design	Sample	Results
			that there was an effect.

DISCUSSION

Research shows that consuming tamarillo and date juice can significantly increase hemoglobin levels in pregnant women with anemia. Tamarillo has been proven effective thanks to its high vitamin C content, which functions to increase the absorption of non-heme iron. Research by Larra Fredrika and Lussy Efrida Yanti (2021) shows that tamarillo juice can significantly increase hemoglobin levels with a p-value <0.05. In addition to vitamin C, tamarillo also contains β-carotene and anthocyanins which act as antioxidants, improve blood cell health, and support the immune system. This effectiveness makes tamarillo a potential local food source in helping to overcome anemia.Date palm juice, on the other hand, also showed similar effectiveness in increasing hemoglobin levels. Research by Rismayan and Nurul Maulani (2023) noted a significant increase in hemoglobin levels in pregnant women with anemia after consuming date palm juice with a p-value <0.05. The iron, vitamin A, and energy content in dates supports the formation of erythrocytes and hemoglobin. Similar results were reported by Natasya Fardillah M. et al. (2020), who found that the combination of date palm juice and Fe tablets provided a greater increase in hemoglobin than consuming Fe tablets alone. In addition, a recent study by Junita (2024) showed that consuming date palm juice was able to increase hemoglobin levels in pregnant women from an average of 9.23 g/dL (mild anemia) to 12.35 g/dL (not anemia).

This is in line with the results of Nhovita Divera's research (2019) which found an increase in hemoglobin (Hb) levels in midwifery students at Padang Polytechnic of Health with an average of 11.4g/dL to 11.7g/dL. After conducting a dependent t-test, a p-value of 0.01 (<0.05) was obtained, meaning that there was an effect of hemoglobin levels before and after consuming tamarillo juice with a dose of 200g tamarillo blended with 250cc of water given once a day for 6 days. (Divera 2019).Although research on the combination of tamarillo and date juice consumption is still limited, each ingredient shows significant effectiveness. Vitamin C in tamarillo increases the absorption of non-heme iron from plant foods, while date juice provides additional iron and energy to support the hematopoiesis process. The combination of these two ingredients can provide a stronger synergistic effect in increasing hemoglobin levels in pregnant women with anemia.

Another study compared the effectiveness of tamarillo juice and tomato juice in increasing hemoglobin levels in pregnant women in the third trimester. The results showed that consuming tamarillo juice contributed to increasing hemoglobin levels, although it was not more effective than tomato juice. (Rohmah, Winarsih, and Saputra 2024). In line with research conducted by (Junita 2024) This study examined the effect of date palm juice on increasing hemoglobin levels in pregnant women with anemia. The results showed that consuming date palm juice significantly increased hemoglobin levels in pregnant women with anemia.Descriptive research was also conducted by Tono (2022) observing hemoglobin levels before and after regular administration of tamarillo juice and Fe tablets. The results showed an increase in hemoglobin levels from mild anemia to normal, indicating a positive effect of the intervention.In line with the research with Literature review conducted by (Pringsewu 2024) reviewing several articles that examine the effects of giving date palm juice on increasing hemoglobin levels in pregnant women. In conclusion, date palm juice is effective in increasing hemoglobin levels and can be used as a non-pharmacological intervention to overcome anemia in pregnant women.

Another study examined the effects of a combination of iron tablets and dates on increasing hemoglobin levels in pregnant women with anemia. The results showed that the combination was more effective than giving iron tablets alone.(Rahayu et al. 2024)However, one of the main challenges in managing anemia in pregnant women is the low level of compliance in consuming iron supplements (TTD). According to Larasati et al. (2021), only 38.1% of pregnant women in Indonesia consume TTD as recommended, far below the national target of 98%. Therefore, tamarillo and date palm juice can be a more acceptable non-pharmacological alternative, especially among pregnant women who have difficulty or are reluctant to consume TTD.Most of the reviewed studies used quasi-experimental designs with relatively small sample sizes. Further studies with more rigorous designs, larger populations, and longer intervention periods are needed to strengthen the scientific evidence and explore the molecular mechanisms behind the effects of both substances.Clinically, these results indicate that tamarillo and date palm extract can be used as a safe and effective additional intervention in the management of anemia in pregnant women. In addition to providing nutritional benefits, this intervention also has the potential to increase the success of anemia management programs with a local food-based approach. With further development, the combination of tamarillo and date palm extract can be an innovative solution to overcome pregnancy anemia in a more holistic and sustainable manner.

CONCLUSION

Based on the results of the literature review, it can be concluded that consumption of tamarillo and date palm juice is significantly effective in increasing hemoglobin levels in pregnant women with anemia. Tamarillo, with its vitamin C and antioxidant content, helps increase the absorption of non-heme iron, while date palm juice provides additional iron, energy, and other essential nutrients that support hemoglobin formation. The combination of these two ingredients can be a natural, safe, and easily accepted solution as an alternative for managing anemia in pregnant women.However, to strengthen scientific evidence, further research is needed with a more rigorous design, larger sample size, and longer intervention duration. Thus, the potential of tamarillo and date palm juice in managing pregnancy anemia can be more integrated into a broader public health program.

REFERENCES

Anemia, Hamil, and Fistha Nanda. 2020. “Pengaruh Penambahan Sari Kurma Terhadap Kadar Hemoglobin Ibu Hamil Anemia Di Klinik Fistha Nanda Tahun 2020.” 4(2): 201–15.

Divera, Nhovitta. 2019. “Pengaruh Jus Terong Belanda Terhadap Kadar Hemoglobin Mahasiswa Tingkat I Prodi DIII Kebidanan Poltekkes Kemenkes Padang.” : 1–10.

Gelar, Memperoleh, Sarjana Kebidanan, and Disusun Oleh. 2021. “Efektifitas Pemberian Jus Buah Bit Dan Kurma Pada Ibu Hamil Dengan Anemia Terhadap Peningkatan Kadar Hemoglobin Di Puskesmas 01 Kecamatan Kedung Kabupaten Jepara.”

Ghiffari, Eugidia Mayang et al. 2021. “Kecukupan Gizi, Pengetahuan, Dan Anemia Ibu Hamil.” Ghidza: Jurnal Gizi dan Kesehatan 5(1): 10–23.

Hari, Peringatan, and Bidan Internasional. 2020. "DOI: Http://Dx.Doi.Org/10.33846/Sf11nk319 Pengaruh Variasi Dosis Ekstrak Terong Belanda Terhadap Konsentrasi Spermatozoa Pada." 11(2): 100–104.

Hidayanti, Lilik, and M.Zen Rahfiludin. 2020. "Dampak Anemi Defisiensi Besi Pada Kehamilan : A Literature Review." Gaster 18(1): 50.

Ibu, Hemoglobin, and Hamil Anemia. 2024. "Al-Tamimi Kesmas." 13: 139–44.

Irmawati, S, and Rosdiana Rosdiana. 2020. "Effect of Dates Extract on Increasing Hb Levels in Pregnant Women." Jurnal Ilmiah Kesehatan Sandi Husada 9(2): 1051–56. https://akper-sandikarsa.e-journal.id/JIKSH.

Junita, Dewi. 2024. "FPengaruh Sari Kurma Terhadap Kenaikan Kadar Hemoglobin Ibu Hamil Dengan Anemia Di Puskesmas Aur Duri Kota Jambi Tahun 2024." (2).

Kurma, Sari. 2023. "No Title." 11(1): 97–102.

Larasati, Destania Kinthan, Trias Mahmudiono, and Dominikus Raditya Atmaka. 2021. "Hubungan Pengetahuan Dan Kepatuhan Mengkonsumsi Tablet Tambah Darah Dengan Kejadian Anemia Defisiensi Besi: Literature Review." Media Gizi Kesmas.

Parameter, Profil et al. 2021. "DOI: Http://Dx.Doi.Org/10.33846/Sf12nk321 Profil Parameter Spesifik Dan Non Spesifik Ekstrak Etanol Kulit Dan Biji Terong Belanda (." 12(November): 98–102.

Pringsewu, Universitas Muhammadiyah. 2024. "Volume 2 No 2 Oktober 2024 LITERATURE REVIEW : PENGARUH PEMBERIAN SARI KURMA TERHADAP PENINGKATAN KADAR HEMOGLOBIN PADA IBU HAMIL LITERATURE REVIEW : THE EFFECT OF GIVING DATE PALM JUICE ON INCREASING HEMOGLOBIN LEVELS IN PREGNANT WOMAN Universitas Muhammadiyah Pringsewu Email Correspondence : Liarohmayati@student.Umpri.Ac.Id Bawah 11 Gr % Pada Trimester Satu Dan Tiga , Atau Kadar Hemoglobin Kurang Dari 10 Gr % Volume 2 No 2 Oktober 2024 Dengan Bertambahnya Plasma Sehingga Terjadi Pengenceran Darah . Perbandingan Tersebut Yang Di Butuhkan Untuk Metabolism Besi Yang Normal . Kekurangan Zat Besi Dapat Pemberian Sari Kurma Terhadap Peningkatan Kadar Hemoglobin Pada Ibu Hamil . Populasi Dan Sampel Terhadap Peningkatan Kadar Hemoglobin Pada Ibu Hamil Dengan Pencarian Dilakukan Di Google Scholar , Schoolar Kriteria Pemberian Sari Kurma Untuk Meningkatkan Kadar Hemoglobin Pada Ibu." 2(2).

Rahayu, Puji et al. 2024. "Pengaruh Pemberian Tablet Tambah Darah Dan Buah Kurma Sukari (Phoenix Dactylifera) Terhadap Kadar Hemoglobin Ibu Hamil Anemiadi Puskesmas Karang Rejo." Jurnal Penelitian Inovatif 4(3): 1323–30.

Riset Dan Inovasi Al-Matani, Lembaga, Taman Sari Kota Pekanbaru Tahun, and Dewi Tiansa Barus. 2023. "Pengaruh Pemberian Jus Terong Belanda Terhadap Kadar Hemoglobin Ibu Hamil Penderita Anemia Di Klinik Pratama." Journal of Hospital Management and Health Sciences 4(2): 27–31.

Rohmah, Sinta Nur, Sri Winarsih, and Wahyu Joko Saputra. 2024. "Efektivitas Jus Terong Belanda Dan Jus Tomat Terhadap Kadar Hemoglobin Ibu Hamil Trimester III." 0231: 185–92.

Sianturi, Sister, and Masitta Tanjung. 2007. “Terhadap Jumlah Eritrosit Dan Kadar Hemoglobin Mencit Jantan (Mus Musculus L .) ANEMIA STRAIN DDW MELALUI INDUKSI.” 3: 49–54.

Sibuea, Farida, Boga Hardhana, and Winne Widiantini, eds. Profil Kesehatan Indonesia 2021. Jakarta: Kementerian Kesehatan Republik Indonesia.

Sihombing, Sarmauli Franshisca, Program Studi, Pendidikan Profesi, and Universitas Batam. 2023. “ZONA KEBIDANAN – Vol. 14 No. 1 Desember 2023.” 14(1): 81–92.

Simarmata, Risma Romaulina, and Nugrahaningsih Wh. 2017. “Aktivitas Jus Buah Terong Belanda Terhadap Kadar Hemoglobin Dan Jumlah.” 6(2): 69–74.

Tono, Sendy Firza Novilia. 2022. “Pengaruh Yoga Terhadap Nyeri Punggung Pada Ibu Hamil Tm Iii.” Jurnal Kebidanan 11(1): 27–32.

Utami, Mudiati Nisa, A Fauziyah, and Luh Desi Puspareni. 2021. “Pengaruh Minuman Popping Boba Terong Belanda Tes Toleransi Glukosa Oral The Effect Of Tamarillo Popping Boba Drink With Green Tea Extract On Oral Glucose Tolerance Test Pendahuluan International Diabetes Federation Tahun 2019 Menjelaskan Bahwa Jumlah Pend.” 6(2): 83–94.

Widowati, Retno, Rini Kundaryanti, and Puput Puji Lestari. 2019. “Pengaruh Pemberian Sari Kurma Terhadap Peningkatan Kadar Hemoglobin Ibu Hamil.” 5(2): 60–65.

Yunida, Sri et al. 2022. “Usia Dengan Kejadian Anemia Dan Defisiensi Zat Besi Pada Ibu Hamil.” Journal of Telenursing (JOTING) 4(1): 20–27.

Yunitasari, Anggi et al. 2021. “Pemberian Sari Kurma Terhadap Kadar Hemoglobin Pada Ibu Hamil.” MJ (Midwifery Journal) 1(4): 261–68.