

The Food Consumption Type and Nutritional Status of Pregnant Women in Baqui Community Health Centre, Pante Makasar Sub-Region, RAE OA, 2024

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Article Information

Submitted: 14 October 2025

Accepted: 20 October 2025

Publish: 30 October 2025

Keyword: Food Consumption Type; Nutritional Status; Pregnant Women;

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Year: 2025

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Abstract

Introduction: Pregnant women are in a period that determines the quality of human beings in the future because it develops the child's body through the condition of the fetus, in the mother's womb. **Objective:** The purpose of the research was to find out the Relationship of Food Consumption Type to the Nutritional Status of Pregnant Women. **Method:** The method used in this research is a quantitative study approach (Cross-Sectional), with a population of 130 mothers who brought their children to treatment at Baqui Health Centre. The data analysis technique used is Chi-square, and the analysis was conducted using SPSS version 22.0. **Result and Discussion:** Based on the results and discussion on the Relationship of Food Consumption Type (X1) Nutrition Status (Y) in Baqui Community Health Centre, 2024 finally showed that of the 32 respondents who gave answers on the Food Consumption Type Relationship with the category of Good Normal (15.6%), 31%, Less (31%) and less category Naton Normal (46.9%), Less (6.3%). It means that the type of food consumption is good, but it is applied to the intervention. Then the chi-square test at alpha (α) 0.05 showed that the p-value = 0.01. **Conclusion:** To conclude that there is a significant relationship between the type of food consumption and the nutritional status of pregnant women with a p-value of 0.01 ($p < \alpha$ 0.005). It is recommended to the Ministry of Health and the Baqui Health Centre, especially the communities, to draw up and plan the program and continue to improve health education for mothers about nutritious food consumption

How to Cite

Aniceto da Conceição Pacheco, Levi Anatolia S.M. Exposto, Adelaide Viegas do Rosario, Marília Juvi Gonçalves, Honória de F. P. Carvalho, Marcos Carvalho/The Food Consumption Type and Nutritional Status of Pregnant Women in Baqui Community Health Centre, Pante Makasar Sub-Region, RAE OA, 2024, 2025, Vol. 5, No. 1, 2025

<https://doi.org/10.54543/kesans.v5i1.465>

DOI

e-ISSN/p-ISSN

2808-7178 / 2808-7380

Published by

CV Rifainstitut/KESANS: International Journal of Health and Science

Introduction

Adequate nutrition throughout pregnancy is critical for a positive and healthy pregnancy result. Inadequate food consumption during pregnancy can result in malnutrition for both mother and baby, raising the risk of miscarriage, birth abnormalities, low birth weight, and stunted growth. (Riazi et al., 2024). Pregnant women are in a period that determines human quality in the future because of the development of the child's body through the condition of the fetus. The nutritional status of pregnant women is an indicator of the type of food consumption in the community. The nutrition of pregnant women is not balanced, nutrient deficiency and low level of health of pregnant women will be more vulnerable, which indicates high maternal mortality due to bleeding, anaemia, and cedar wood during pregnancy. (Mayesti Akhriani, 2015).

Pregnant women should have a good nutritional status that can be obtained from consuming a variety of foods. The proportion and quantity of food that mothers should consume is a lot of food because it responds to their nutritional needs for pregnant women's growth and development, good nutrition for pregnant women, hopefully, babies born healthy as well. Nutritious food from the first trimester is an important part of efforts to optimize babies' intelligence to ensure pregnant women, must consume nutritious food to benefit the baby in the womb as a source of protein, vitamin vitamins for pregnant women during pregnancy because in production organs such as menstruation, nutritional needs are not seen from the portion only but must be determined by the measurement of nutrient substances that are contaminated in the food we consume. (Belay et al., 2024).

According to a 2022 United Nations (UN) report, more than 828 million people worldwide are undernourished, with 349 million affected by food insecurity as a result of the combined impacts of conflict, COVID-19, the climate crisis, and rising costs, which are increasing the prevalence of acute malnutrition among pregnant and lactating women in low- and middle-income countries. (Belew et al., 2024). That's why the World Health Organization (WHO) recommends that pregnant women increase their intake of energy, vitamins, and minerals through increased macronutrient and micronutrient consumption during pregnancy (Maykondo et al., 2022). Therefore, pregnant women should give priority to the first information on how to treat pregnancy. In the first trimester, there are physical changes in the body, responses to pregnancy symptoms, antenatal control behaviours, and complications that may occur in the first trimester of pregnancy (Agric, 2023).

Timor-Leste Food Nutrition Survey (TLFNS) chose pregnant and breastfeeding mothers because they will make a greater impact by focusing on consistent and regular daily dietary diversity, rather than focusing solely on pregnant and breastfeeding mothers and their specific needs. (TLFNS, 2020). Nutritional status is a measure of human condition seen from the food we consume and use nutrients in our bodies throughout our human life, food consumption, as well as other factors that can affect our nutritional status. If we consume good food, it will provide good benefits to our nutritional status. (Shenka et al., 2018). Type of Food Consumption is a nutritious and very important food; the food we eat can affect the body's ability to prevent and fight infections in our body. A healthy diet will help the body maintain its immune system. Pregnancy is the result of a sperm and an egg, and we count the beginning of fertilization until the baby is born. A normal pregnancy will continue from 40 hours to 9 weeks or 9 months according to the international calendar. (Shemsu et al., 2020).

Previous studies have found low acceptable food consumption scores among pregnant women in this predominantly rural area. Nutritional counselling during pregnancy should address the importance of dietary diversity, and consumption of animal-based foods has been shown to improve nutrition during pregnancy. (Fite et al., 2022). The purpose of the research was to find out the type of food consumption and the nutritional status of pregnant women.

Methods

This research design uses a quantitative method with a cross-sectional approach, which is a method used by researchers to understand the symptoms or phenomena and problems that arise before conducting research, related to the data processed by the research object, as well as to improve and obtain knowledge about the validity of the data needed for the proper implementation of the research, so that it can be accounted for in each proposal. The target population of this study was 32 pregnant women who could visit the Baqui Community Health Center. This study was conducted through direct interviews with pregnant women and the measurement of the nutritional status of pregnant women through LILA. Data analysis used frequency distribution on respondent characteristics and chi-square for correlation with the help of SPSS Version 22.0.

Result and Discussion

1. Results

Table 1			
Respondent description based on age in Baqui Health Centre			
No	Aged	Frequency	(%)
1	10-19	1	3.1
2	20-29	23	71.9
3	30-39	8	25.0
Education Level			
1	Analphabet	4	12.5
2	Primary	6	18.8
3	Pre-Secondary	7	21.9
4	Secondary	9	28.1
5	Bachelor's Degree	6	18.8
Total		32	100%

Sources: Primary data SSK Baqui, Year 2024

The results show that the age group 10-19 is the smallest among all ages (3.1%), and the age group 20-29 is the largest (71.9%). This research shows that the majority of respondents in this survey are aged 20-29. The results show that from the totality of respondents, the group of education level Analphabet (12,5%), Primary school (18,8%), Junior high school (7%), Senior high school (28.1%), Bachelor's degree (18%). In this research, the respondents with a Senior high school education level have the highest percentage, 28.1%, and the lowest is those with no formal education, with a 12.5%.

Table 2

Distribution of the Type of Food Consumption and Nutritional Status

Type of Food Consumption	Frequency	Percentage (%)
Good	15	46.9
Enough	17	53.1
Nutritional Status		
Normal	20	62.5
Severe	12	37.5
Total	32	100%

Primary data sources SSK Baqui, Year 2024

The results show that the distribution of respondents based on the Type of Food Consumption category Good is 46.9%, and the Type of Food Consumption Category Enough is 53.1%. The results show that the distribution of respondents based on the status of pregnant women's nutrition is normal category is 62.5%, the less category is 37.5%. This result shows that most of the nutritional status in the normal category is more than the others.

Table 3

Bivariate Analysis of the type of food consumption and the nutritional status of pregnant women

No	Types of Food Consumption	Nutritional Status		Total	P=Value
		Good	Severe		
1	Good	5 (15.6%)	10 (31.3%)	15 (46.9%)	0.01
2	Enough	15 (46.9%)	2 (6.3%)	17 (53.1%)	
	Total	20 (62.5%)	12 (37.5%)	32 (100%)	

Primary data sources SSK Baqui, Year 2024

The researcher showed that the total number of respondents amounted to 32. From the total number of this, the researcher concluded that the type of food consumption category good with normal nutritional status amounted to 15.6%, and the other category amounted to 31.3%. Type of Food Consumption Nutritional status category low and normal amounted to 46.9% and amounted to 6.3% respectively. Based on the results of the chi-square test, $p = 0.01 < \alpha 0.05$ means that there is a significant relationship between the type of food consumption and nutritional status in Baqui Health Centre.

2. Discussion

The food consumption types and the nutritional status of pregnant women in the Baqui Community Health Center in Pante Makassar revealed significant findings for the year 2024. The hypothesis testing yielded a significance level (α) of 0.05, with p-values indicating a stronger result of $0.05 < 0.01$. This suggests that the alternative hypothesis (H_a) is accepted, which implies a significant relationship between food consumption type and nutritional status, while the null hypothesis (H_0) is rejected at the 0.01 significance level. Further examination of eating habits related to the nutritional status of pregnant women in their third trimester indicated that none exhibited adequate eating habits. Specifically, 16.6% displayed moderately adequate habits, while a considerable 83.4% fell into the inadequate category. As a result, a significant majority of 76.7% of the participants were classified as having inadequate nutritional status, while only 23.3% achieved adequate nutritional status. Notably, the findings demonstrated no significant

relationship between the evaluated eating habits and nutritional status, evidenced by a p-value of 0.035, thus refuting the originally proposed hypothesis related to eating habits. (Paredes-Díaz et al., 2023).

Research results indicate that 46.9% of participants consumed nutritious food, while 53.1% consumed food categorized as poor. Statistical analysis reveals a significant relationship between food consumption type and nutritional status at Baqui Health Centre, with a p-value smaller than 0.05. Proper food consumption is crucial for pregnant women, as inadequate essential nutrients can negatively impact both maternal health and fetal development. (Fite et al., 2022).

The study conducted by Agric and Belay found that of the 949 pregnant women studied, 51.20% had acceptable food consumption scores, 42.60% had poor scores, and 6.2% had borderline scores. Factors such as missed meals (AOR = 1.37), literacy (AOR = 3.99), poorest wealth status (AOR = 0.52), and a positive attitude toward diverse food consumption (AOR = 1.52) were found to be associated with a higher risk of food insecurity. Additionally, the independent predictor for acceptable food consumption scores was identified as CI: 1.17–1.98. (Agric, 2023; Belay et al., 2024)

Maternal and early childhood nutrition is foundational in setting the course for lifetime metabolic and disease outcomes. Food security influences the achievement of optimal diets; however, little is known about how traditional food intake may influence this dynamic for Aboriginal and Torres Strait Islander people living in remote communities. (Tonkin et al., 2025). The study indicated that 54.8% of pregnant women exhibited poor dietary practices, with 19.5% classified as undernourished. This figure is lower compared to 66.2% in Oromia and 59.9% in Amhara, as well as 60.7% in Bahir Dar. Contributing factors to dietary variations include geographical differences, agroeconomic practices, cultural influences, individual preferences, and seasonal food production. Agricultural outputs differ regionally, with southern Ethiopia prioritizing root crops, fruits, and vegetables, while the north mainly cultivates cereals, highlighting the influence of religious and environmental factors on dietary habits. (Diddana, 2019). Some study shows that takeout consumption is common in pregnant women in the first trimester. Education level, depressive symptoms, and online time are potential risk factors influencing takeout consumption during early pregnancy. (Teng et al., 2025).

Conclusion

The study findings from the Baqui Community Health Center reveal a notable link between food consumption types and the nutritional status of pregnant women. Key factors influencing dietary practices include geographical and agroeconomic considerations, cultural influences, education level, and depressive symptoms during early pregnancy. Proper food consumption is essential for the health of pregnant women and fetal development. It is recommended to the Ministry of Health and the Baqui Health Centre, especially the communities, to draw up and plan the program and continue to improve health education for mothers about nutritious food consumption.

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Aniceto da Conceição Pacheco, Levi Anatolia S.M. Exposto, Adelaide Viegas do Rosario, Marília Juvi Gonçalves, Honória de F. P. Carvalho, Marcos Carvalho/KESANS
The Food Consumption Type and Nutritional Status of Pregnant Women in Baqui Community Health Centre, Pante Makasar Sub-Region, RAEOA, 2024

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