



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Module: Introduction to Research (BMHP5005)

Assessment 2: Viva Voce

Student Name: Andreea Florina Bogdan

Student Number: 1907865

Lecturer name :Laila Surani

Introduction

The research study explores the understanding about the Mediterranean diet on the pregnant women in the UK.

The focus also revolves around how the diet of the pregnant women impacts the birth weight of the newborn.



Topic

Nutrition of pregnant women in UK



Aims and objectives

Research Question: How the dietary intake of a pregnant woman can affect the birth weight of a child?

- Aim: *To know dietary intake of pregnant women and impact on the birth weight of a child*

Objectives:

- To explore the diet of pregnant mother age between 20 to 25 and to measure the birth weight of children



Methods

A systemic literature review is performed by focusing on 4 journals about the impact of a pregnant woman's diet on the newborn.

Keywords used: dietary food, Mediterranean diet, birth weight of child, pregnant women, ethical disparity, dietary pattern, pregnancy outcome

Data Sources: EBSCO, Google scholar and Pub Med

Inclusion criteria: Articles after 2017 are used, full text and peer reviewed journal used

Exclusion criteria: Articles that are published before 2017 are excluded, Non-English publication has not been used in this research.

Literature Review

Author(s), title, and year of publication	Aim of study	Methods and Sample size and characteristics	Summary of main findings
Amati, F., Hassounah, S. and Swaka, A., 2019. The impact of mediterranean dietary patterns during pregnancy on maternal and offspring health. <i>Nutrients</i> , 11(5), p.1098	Impact of Mediterranean dietary plan	Systematic analysis , 5 articles were chosen	MD has a positive impact on the pregnant mother and it is beneficial for the child
Caut, C., Leach, M. and Steel, A., 2020. Dietary guideline adherence during preconception and pregnancy: A systematic review. <i>Maternal & child nutrition</i> , 16(2), p.e12916.	Dietary guideline adherence during preconception and pregnancy	Systematic analysis 4 articles	Dietary guideline help to improve mothers health and the Childs health
Paknahad, Z., Fallah, A. and Moravejolahkami, A.R., 2019. Maternal dietary patterns and their association with pregnancy outcomes. <i>Clinical nutrition research</i> , 8(1), pp.64-73.	The influence on the pregnancy outcome due to maternal diet during pregnancy	Systematic analysis 3 articles taken	Dietary impact on the weight of infant
Sigurdson, K., Mitchell, B., Liu, J., Morton, C., Gould, J.B., Lee, H.C., Capdarest-Arest, N. and Profit, J., 2019. Racial/ethnic disparities in neonatal intensive care: a systematic review. <i>Pediatrics</i> , 144(2).	Ethnic disparities in the intensive care of the newborn	Systematic analysis 4 articles	Complex Ethnic disparities impact on the intensive care of neonate
Demilew, Y.M., Alene, G.D. and Belachew, T., 2020. Dietary practices and associated factors among pregnant women in West Gojjam Zone, Northwest Ethiopia. <i>BMC Pregnancy and Childbirth</i> , 20(1), pp.1-11.	Dietary practices in pregnant women	Systematic analysis of 3 articles	Maternal nutrition is important for the birth weight of neonate.

Discussion

Mediterranean diet help to maintain a proper diet including fruits, cereal, nut and vegetables

Social cognitive theory is used to develop a dietary plan during the maternal period

Lack of nutrition leads to reduce the immunity of the child affecting the birth weight

Excess or overeating also has a negative impact on the child which leads to overweight

Ethnic disparity reduces the childbirth weight and women faces morning sickness



Findings

- **Key Findings:**

- 1. Mediterranean diet has a positive impact on the mother and child
- 2. Due to lack of food availability, 2488 children died in the UK in 2018
- 3. Lack of Vitamin B and D reduces the development of the fetus
- 4. The ethnic disparity has a negative impact on the child due to the difference between high class and middle-income people
- 5. It is observed that 98% of the children are defective due to a lack of food

- **Key Themes:**

- 1. Mediterranean diet help to maintain a proper diet including fruits, cereal, nut and vegetables
- 2. Social cognitive theory is used to develop a dietary plan during the maternal period

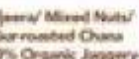
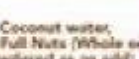
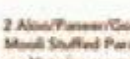
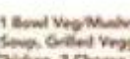
Results

- Lack of nutrition leads to reduce the immunity of the child affecting the birth weight
- Excess or overeating also has a negative impact on the child which leads to overweight
- Ethnic disparity reduces the childbirth weight and women faces morning sickness



Conclusion

- Anemia and rickets are the main challenges faced by children due to improper dietary plan
- Proper guidance under doctors and nutritionists is recommended
- Systematic analysis is done in this research by using qualitative data

Early Morning	Breakfast	Mid-Morning	Lunch	Evening	Dinner
 Banana - 1 Whole	 Overnight Oats Jar with Nuts	 1 Glass Veg/Fruit Juice	 1 Bowl Rajma/ Kadhi, Rice/Roti, Dry Sabzi	 Half Bowl Bhelpuri + Tea (optional)	 1 Bowl Whole Wheat Pasta, Veggies/ Chicken
 Pomegranate- 1 Bowl	 2 Dal (any or gram flour) Chole/ 1 Egg+toast, Milk	 1 Glass Berry Smoothie	 2 Mini Masala Dosa, Sambhar, Chutney	 Hummus and Carrot Sticks (seasonal) or Cucumber	 Palak Paneer/ Paneer Kofta/ Chicken Curry, 2 Roti
 Mango (Seasonal)/ Guava	 1 Cheese potato sandwich, milk	 Jaljeera/ Mixed Nuts/ Garambated Chana (100% Organic Jaggery-Roasted Chick Peas)	 1 Bowl Khichdi, Raita, Salad	 2 pcs Dhokla or Rice Khandvi	 1 Roll Veg/ Chicken Shumama
 Grapes/ Musk Melon (Seasonal)	 1 Bowl Poha, Sweet Lassi/ Chaach (Buttermilk)	 Sweet+ Salty Lemonade	 1 Bowl Dal of choice, Dry Sabzi (pref Green, could be Lauki/Torai/ Karela), Rice, Salad	 Half Bowl Bean Sprouts Chaat	 Veg Korma/ Chicken Curry with Roti
 Banana	 1 Bowl Sweet/ Savory Dahiya	 Coconut water, Fst Full Nuts (Whole or Powdered as an add)	 1 Bowl Black Chana, Rice, Card Rice	 Half Bowl Sweet Corn Chaat	 2 Aloo/Paneer/Gobhi / Moori Stuffed Paratha. Some Veggies are seasonal.
 Watermelon	 1 Bowl Sabudana/ Ragi Dosa	 1 Glass Masala Chaach	 1 Bowl Matar Paneer, 2 mini Parathas, Salad	 Half Bowl Sweet Potato Baked/Chaat	 1 Bowl Veg/Chicken Biryani
 Chikoo/ Orange	 2 Idli, Chutney	 1 Glass Vanilla/ Strawberry Milkshake	 1 Bowl Chole + 2 Bhature (less oil)	 Half Bowl Soji Mithos made with Organic Jaggery	 1 Bowl Veg/Mushroom Soup, Grilled Veggies/ Chicken, 2 Cheese Toast

References

- Amati, F., Hassounah, S. and Swaka, A., 2019. The impact of mediterranean dietary patterns during pregnancy on maternal and offspring health. *Nutrients*, 11(5), p.1098. Available at: <https://www.mdpi.com/2072-6643/11/5/1098/pdf> (Accessed on 29 November 2021)
- Caut, C., Leach, M. and Steel, A., 2020. Dietary guideline adherence during preconception and pregnancy: A systematic review. *Maternal & child nutrition*, 16(2), p.e12916. Available at: <https://onlinelibrary.wiley.com/doi/pdfdirect/10.1111/mcn.12916> (Accessed on 29 November 2021)
 - McNulty, H., Ward, M., Hoey, L., Hughes, C.F. and Pentieva, K., 2019. Addressing optimal folate and related B-vitamin status through the lifecycle: health impacts and challenges. *Proceedings of the Nutrition Society*, 78(3), pp.449-462. Available at: <https://www.cambridge.org/core/journals/proceedings-of-the-nutrition-society/article/addressing-optimal-folate-and-related-bvitamin-status-through-the-lifecycle-health-impacts-and-challenges/45752E6EF3F86CAD3874471734C45DEE> (Accessed on 29 November 2021)
 - Paknahad, Z., Fallah, A. and Moravejolahkami, A.R., 2019. Maternal dietary patterns and their association with pregnancy outcomes. *Clinical nutrition research*, 8(1), pp.64-73. Available at: <https://synapse.koreamed.org/articles/1115523> (Accessed on 29 November 2021)
 - Pigott, T.D. and Polanin, J.R., 2020. Methodological guidance paper: High-quality meta-analysis in a systematic review. *Review of Educational Research*, 90(1), pp.24-46. Available at <https://journals.sagepub.com/doi/pdf/10.3102/0034654319877153> (Accessed on 29 November 2021)
 - Saville, N.M., Shrestha, B.P., Style, S., Harris-Fry, H., Beard, B.J., Sen, A., Jha, S., Rai, A., Paudel, V., Sah, R. and Paudel, P., 2018. Impact on birth weight and child growth of Participatory Learning and Action women's groups with and without transfers of food or cash during pregnancy: Findings of the low birth weight South Asia cluster-randomised controlled trial (LBWSAT) in Nepal. *PloS one*, 13(5), p.e0194064. Available at: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0194064> (Accessed on 29 November 2021)
 - Schmidt, L., Olorisade, B.K., McGuinness, L.A., Thomas, J. and Higgins, J.P., 2020. Data extraction methods for systematic review (semi) automation: A living review protocol. *F1000Research*, 9. Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7338918/> (Accessed on 29 November 2021)
 - Sigurdson, K., Mitchell, B., Liu, J., Morton, C., Gould, J.B., Lee, H.C., Capdarest-Arest, N. and Profit, J., 2019. Racial/ethnic disparities in neonatal intensive care: a systematic review. *Pediatrics*, 144(2). Available at: https://pediatrics.aappublications.org/content/144/2/e20183114?sso=1&sso_redirect_count=1&nfstatus=401&nftoken=00000000-0000-0000-0000-000000000000&nfstatusdescription=ERROR%3A%20No%20local%20token (Accessed on 29 November 2021)

References

- Stephenson, J., Heslehurst, N., Hall, J., Schoenaker, D.A., Hutchinson, J., Cade, J.E., Poston, L., Barrett, G., Crozier, S.R., Barker, M. and Kumaran, K., 2018. Before the beginning: nutrition and lifestyle in the preconception period and its importance for future health. *The Lancet*, 391(10132), pp.1830-1841. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/pmc6075697/> (Accessed on 29 November 2021)
- Torkan, N., Kazemi, A., Paknahad, Z. and Bahadoran, P., 2018. Relationship of social cognitive theory concepts to dietary habits of pregnant women. *Iranian journal of nursing and midwifery research*, 23(2), p.125. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5881229/> (Accessed on 29 November 2021)
- Uday, S. and Högl, W., 2018. Prevention of rickets and osteomalacia in the UK: political action overdue. *Archives of disease in childhood*, 103(9), pp.901-906. Available at: <https://adc.bmj.com/content/103/9/901.abstract> (Accessed on 29 November 2021)
- Usuzaki, T., Shimoyama, M., Chiba, S., Mori, N. and Mugikura, S., 2020. A Method Expanding 2 by 2 Contingency Table by Obtaining Tendencies of Boolean Operators: Boolean Monte Carlo Method. *arXiv preprint arXiv:2002.04721*. Available at: <https://arxiv.org/pdf/2002.04721> (Accessed on 29 November 2021)
- Zelalem, A., Endeshaw, M., Ayenew, M., Shiferaw, S. and Yirgu, R., 2017. Effect of nutrition education on pregnancy specific nutrition knowledge and healthy dietary practice among pregnant women in Addis Ababa. *Clinics in Mother and Child Health*, 14(3), p.265. Available at: https://www.researchgate.net/profile/Mulualem-Endeshaw/publication/319956738_Effect_of_Nutrition_Education_on_Pregnancy_Specific_Nutrition_Knowledge_and_Healthy_Dietary_Practice_among_Pregnant_Women_in_Addis_Ababa/links/59c3ad97458515af3065efdc/Effect-of-Nutrition-Education-on-Pregnancy-Specific-Nutrition-Knowledge-and-Healthy-Dietary-Practice-among-Pregnant-Women-in-Addis-Ababa.pdf (Accessed on 29 November 2021)