



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1254421>Available online at: <http://www.iajps.com>

Research Article

**A HOSPITAL BASED STUDY ON KNOWLEDGE IN WOMEN
REGARDING FOOD AND NUTRIENTS INTAKE DURING
PREGNANCY**¹Hafiza Nimra Shabbir, ²Aqsa Javed, ³Sidra Shabbir¹Punjab Medical College²Sarghoda Medical College³University of Medical and Dental College FSD**Abstract:**

Objectives: To know the knowledge of the diet plan in pregnant women according to food and nutrient levels and to know the level of education, the economy, and popular women's choice of food.

Place and Duration: The study was performed in the Obstetrics and gynecology department of Services Hospital, Lahore for the period of one year from January 2015 to December 2015.

Study Design: An Observational Study

Results: 380 pregnant women were interviewed 3 times using a 24-hour diet reminder with recipes. Negotiations were made on health, nutrition and socioeconomic status and on women's weight and height measurements. The result shows nutritional status should be monitored in pregnant women and should be acknowledged to the pregnant women.

Conclusions: According to the Pakistan diet, women's (unreinforced) diets were not sufficient for all nutrients except energy and fat. A low level of micronutrient intake of food outside the rice was detected. Food habits and the economy have shown that women have a negative impact on food choice, family type, education level, number of pregnancies and popular dietetics. negative. Recommended foods in proper amount, green vegetables especially, should be given to women. Nutritional recommendations provided by healthcare providers at all levels should be the same and should be local cheap foods that are widely consumed.

Keywords: Pregnancy, diet intake, nutritional status.

Corresponding author:

Hafiza Nimra Shabbir,
Punjab Medical College

QR code



Please cite this article in press Hafiza Nimra Shabbir et al., *A Hospital Based Study on Knowledge in Women Regarding Food and Nutrients Intake during Pregnancy*, Indo Am. J. P. Sci, 2018; 05(05).

INTRODUCTION:

During pregnancy, the fetus is completely dependent on mother for nutrients and energy and woman not lose weight only, but will also ensure that the necessary nutrients are taken in an optimal manner. Women average 10-12 kilograms' weight increases in western countries during pregnancy while low-income countries gain 2-7 kilograms during pregnancy. During pregnancy, maternal malnutrition may result in growth retardation of fetus and have been shown to be a decisive factor in reducing birth weight. In the 3rd pregnancy trimester especially low calorie diet in mother affects the fetus's weight [1]. A baby with a low birth weight less than 2.5kg more prone to suffer from disease and therefore less likely to survive a baby normal weight (birth weight, 0.25 g). If infants with weight low after birth survive, development will not occur properly and under nutrition more likely. In Pakistan, the mean birth weight ranges from 2.7 to 2.8kg g and in the world is the lowest. In addition, the children proportion with low weight after birth is one of the highest problem up to 30%. Some studies in Pakistan only provide data on nutrient uptake, others include some socioeconomic measures such as education and economy [2]. Other studies have only given knowledge on the reasons that determine the choice of food for women, as well as information on some foods that play an important role, such as food (warming effect), which increases the body temperature of women. Hutter has presented qualitative data on the outcome of food intake and food beliefs in women in the rural areas of South Pakistan. However, there is no study in Pakistan of pregnant women reporting consumption of food and nutrients according to their recommendations and incorporating qualitative data on health, nutrition and birth [3]. The purpose of this research was to know whether the diet of the pregnant woman's nutrient levels and food intake conformed to Pakistan's recommendations; The educational level explains factors such as the social status and famous dietetics affect the choice of women's food and improve anti

natal care, taking into account practical and cultural opportunities.

MATERIALS AND METHODS:

It is an Observational study carried out in Obstetrics and gynecology department of Services Hospital, Lahore for the period of one year from January 2015 to December 2015. It took 24 hours for each woman to take 3 consecutive meals that were not consecutive. Visits were not disclosed. When special foods were defeated, food intake at the resort was not measured. On Saturday, Saturday was considered the normal day of the week, along with normal diets.

Sunday was specially agreed, probably with more animal-derived food consumption. Thus, on Sundays (Monday interviews), they are welcomed with 1 / 7th of the total number of interviews. The average purchase amount of the group is calculated according to the average purchase amount of each woman. Cooked rice and heart rate for every interview to estimate the size of the portions. She showed the portions she eats in her kitchen and used water to estimate the amount of fluids and thin sauces. If there was extra food, it was heavy. All the recipes of the nuts are calculated the same way [4]. Soehnl's home and family balance is used between 2000 and 5000 g between 0 and 2000 g with a precision of 2 g and 5 g. A table of standard weights of ordinary foods was formed. Small, normal and large standard sizes were estimated on average from three samples purchased at local markets. Recipes for purchased sweets, snacks and cakes were obtained locally. If the woman did not know the consumed recipe, a standard recipe was used according to the average recipe taken from the other participating women. At the macrobesin level, the intake values were also calculated by laddu nutrient supplementation (cereal, pulses, sugar and ground noodles supplemented with micronutrients).

RESULTS:

Three eighty women were selected for the study between the ages of 17-30 and in the 3rd trimester of pregnancy (Table 1).

Table 1 Characteristics of women* in the study

	Mean (median)	SD	Range
Woman's age (years)	22.9 (22)	3.5	17–30
Gestational age (months)	7.9 (8)	0.8	7–9
Height (cm)	152 (153)	5.0	139–161
Weight (kg)	51 (50)	6.5	42–74
Years of marriage	4.7 (4)	3.4	1–13
Number of pregnancy	2.3 (2)	1.2	1–6
Parity	1.2 (1)	1.4	0–5
Number of living children	1.0 (1)	1.1	0–4
Number of visits to healthcare facility†	4.4 (4)	1.9	2–9

SD, standard deviation.

* $n = 30$.

† Visits in present pregnancy; healthcare facility covers village health nurse, doctor and hospital.

Three hundred eighty women were completed interviews and one woman taken only two people. The education level of the majority of pregnant women and their husbands varies between 6 and 11 years, but 20% of women and 25% of their husbands are illiterate. Dietary supplements consume an additional 80 percent of the women. Sixty (53%) women were consuming ladies and 30 (37%) people reported receiving two recommended daily amounts. Two hundred ninety (63%) women received potent

tablets containing folic acid and iron and possibly calcium.

The actual women food intake, except for their regular diet, is shown in Table 2. The diet was predominantly rice, mainly vegetables, cereals and mostly green leafy vegetables. Green leafy vegetables (GLV) average intake was minimum, 0.9k g in female in 21 days. Fruit consumption is 3 times more than the recommended amount.

Table 2 Actual food intake* and recommended daily intake of foods for a balanced pakistani diet

Raw food item	Actual intake (g day ²¹), mean (SD)	Recommended intake (g day ²¹)	
		Adult pregnant woman†, vegetarian, moderate work	Adult pregnant woman†, non-vegetarian, moderate work
Cereals	360(90)	385	385
Vegetables, total‡	228(188)	360	345
Pulses	26(16)	85	70
GLV	9(13)	125	125
Other vegetables	–	75	75
Roots and tubers	–	75	75
Fruits§	130(86)	30	30
Milk	129(113)	300	200
Oil and fat	17(8)	35	40
Sugar	19(16)	40	40
Meat and fish	24(–)	–	30
Meat	17(31)	–	–
Fish	4(14)	–	–
Poultry	3(9)	–	–
Eggs	2(6)	–	30

SD, standard deviation; GLV, green leafy vegetables; –, no value. * Supplements are not included.

† The recommendations for a balanced diet are for a reference woman weighing 45 kg²¹.

‡ Total vegetables include pulses, GLV, other vegetables and roots and tubers. § Fruits include sugar cane, groundnut and coconut.

Energy intake and selected foods are shown in Table 3. Calculations were made with or without laddu. The average nutrient and energy intake from females did not meet Pakistan's recommendations, except lipid diet.

Table 3 Pakistan recommendations for pregnant women and the average daily intake of energy and selected nutrients with and without laddu supplement

Energy and nutrient intakes	Indian* recommendation	Group mean without laddu (with laddu)	SD	Range	95% CI
Energy (kJ)	10 555	8645 (9463)	2211	4763– 13 130	7854–9436
Fat (g)	30	41 (44)	19.1	14– 90	33.9–47.6
Protein (g)	65	50 (56)	16.8	28– 89	44.3–56.3
Carbohydrate (g)	490†	369 (405)	91.3	201– 611	336.9–402.2
Vitamin A (RE)‡	600	156	103.0	46– 432	119.0–192.7
Vitamin C (mg)	40	30	19.6	5– 99	22.9–36.9
Riboflavin (mg)	1.5	0.6	0.26	0– 1	0.51–0.69
Calcium (mg)	1000	523	168.5	246– 910	462.9–583.6
Iron (mg)	38	10	3.5	5– 20	8.6–11.1

SD, standard deviation; CI, confidence interval.

* Recommended dietary allowances for Indians: reference woman – pregnant with a pre-pregnancy weight of 50 kg, moderate work²¹.

† Calculated from given values.

‡ 6 mg carotene = 1 RE (retinol equivalent).

Statistical analysis included the following socioeconomic parameters: number of pregnancies, education level of women, family type family income, consumption of laddus and health facility center visits. In addition, a negative correlation was found between fruit intake and the number of pregnancies. The intake of fruit is reduced by 1.4 g women days²¹ after each pregnancy. Most women changed their eating habits during pregnancy. The following vegetables were reported to eat more often and / or in large quantities: GLV, fruit, meat, milks, eggs, curds and whey and fish. Bread, Dhal, millet, wheat flour (wheat flour and dough made from water), snack, boost (powdered fortified drinks) and foods in general have been spoken by more than one woman. Several women stated that they had encountered some issues during the past week with dizziness, dizziness and stomach aches that eat less. All but one woman received a pregnancy nutrition recommendation. family, Local health providers and friends have found advice. In general, the recommendation is to eat more GLV and vegetables, such as beets, carrots, lady fingers and bottle capers. In addition, it is already mentioned by more women fruit, eggs, milk, lor, meat, fish and laddu. Most women changed their eating habits during pregnancy. The following vegetables were reported to eat more often and / or in large quantities: vegetables, GLV, meat, fruit, eggs, milks, curds and whey and fish. Bread, snack, millet, boost (powdered fortified drinks) and wheat flour foods in general have been spoken by more than one woman.

DISCUSSION:

The current dietary survey was applied to 380 pregnant women in the last trimester admitted in services Hospital, Lahore Pakistan, at the end of the rainy season and at the beginning of winter 1998. All but one woman weighed 42 kg and the Pakistan Government's limit values of 145 cm as a risk during pregnancy 5. However, 19% (63%) of the women had a heavy weight when Mavalankar et al. used the cut-off value of 51 kg, which had the risk of having a small baby for gestational age. When considered as a group, the foods they receive are lower than almost all Pakistan food recommendations for almost all foods. Both without reinforcement and energy consumption were less than Pakistan's recommendation 6. Based on the basal metabolism rate and moderate physical activity for Pakistan women, it was estimated that women's energy needs were lower than Pakistan recommendations. However, it is of utmost importance that enough energy is consumed to gain fat during the breastfeeding period, especially when the woman needs enough energy for her and her fetus during pregnancy. In this study, average energy intake (average) of 8.6MJ female, 21 days 21 was significantly higher than other studies where average energy intake varied from 4.9 to 7.6MJ to 21 days²¹ [6]. However, the 50 g female 21 day 21 (without laddu) protein intake was similar. It is also fast and does not interfere in the woman's daily life. By combining the weighing and recipe of food and combining the recipe (three times), a greater accuracy and correctness of the data were obtained [8]. A flat-sloped syndrome appears to have appeared in 24-hour food recalls; this is overestimated by the fact that the higher amounts of food are more likely than the basic

foods, whereas the lower consumption of other foods is overestimated 9. Given that pregnant women in rural areas spend a lot of time in the last quarter, the sample size was limited to 30 women [10]. Most of the energy and nutrient intake amounts are calculated on the basis of a non-reinforced diet, but most women have consumed some kind of supplement. This was done for a few reasons. It has not been known since the contents of women's durable tablets were given to unknown small bags [11]. Hutter16 confirms this by asking women whether they have tablets and concentration tonics. However, in-depth interviews have made it clear that most women have not received any reinforcements. In this study, half of the women reported that they consumed two-thirds of their strength with tablets and other laddu reinforcements [12]. If these women had actually consumed the reinforcements, it could lead to an improvement in their energy consumption and micro-nutrients. However, the fifth section reported that it did not receive any attachments.

CONCLUSION:

Health care providers must ensure that women understand the importance of using diet supplements. In addition, nutritional recommendations provided by all healthcare providers, especially doctors, are based on cheap, local and widely consumed food items rich in nutrients, thus the best scarce economic resources of women. Resources to improve your diet.

REFERENCES:

- Hjertholm, K.G., Iversen, P.O., Holmboe-Ottesen, G., Mdala, I., Munthali, A., Maleta, K., Shi, Z., Ferguson, E. and Kamudoni, P., 2018. Maternal dietary intake during pregnancy and its association to birth size in rural Malawi: A cross-sectional study. *Maternal & child nutrition*, 14(1).
- Peacock, A., Hutchinson, D., Wilson, J., McCormack, C., Bruno, R., Olsson, C.A., Allsop, S., Elliott, E., Burns, L. and Mattick, R.P., 2018. Adherence to the Caffeine Intake Guideline during Pregnancy and Birth Outcomes: A Prospective Cohort Study. *Nutrients*, 10(3), p.319.
- de Boer, A., Bast, A. and Godschalk, R., 2018. Dietary supplement intake during pregnancy; better safe than sorry?. *Regulatory Toxicology and Pharmacology*.
- Bartáková, V., Kuricová, K., Zlámál, F., Bělobrádková, J. and Kaňková, K., 2018. Differences in food intake and genetic variability in taste receptors between Czech pregnant women with and without gestational diabetes mellitus. *European journal of nutrition*, 57(2), pp.513-521.
- Lima, M.S., Perez, G.S., Morais, G.L., Santos, L.S., Cordeiro, G.S., Couto, R.D., Deiró, T.C.B.J., Leandro, C.G. and Barreto-Medeiros, J.M., 2018. Effects of maternal high fat intake during pregnancy and lactation on total cholesterol and adipose tissue in neonatal rats. *Brazilian Journal of Biology*, (AHEAD), pp.0-0.
- Vähämäki, S., Laiho, A., Lund, R., Isolauri, E., Salminen, S. and Laitinen, K., 2018. The impact of probiotic supplementation during pregnancy on DNA methylation of obesity-related genes in mothers and their children. *European journal of nutrition*, pp.1-11.
- Lemes, S.F., de Souza, A.C.P., Payolla, T.B., Versutti, M.D., da Silva Ramalho, A.D.F., Mendes-da-Silva, C., Souza, C.M., Milanski, M., Torsoni, A.S. and Torsoni, M.A., 2018. Maternal Consumption of High-fat Diet in Mice Alters Hypothalamic Notch Pathway, NPY Cell Population and Food Intake in Offspring. *Neuroscience*, 371, pp.1-15.
- Geraghty A, O'Brien EC, Alberdi G, Horan MK, Donnelly J, Larkin E, Segurado R, Mehegan J, Molloy EJ, McAuliffe FM. 756: Maternal protein intake during pregnancy impacts child growth up to five years of age: Findings from the ROLO study. *American Journal of Obstetrics & Gynecology*. 2018 Jan 1;218(1):S453.
- Lopez-Minguez J, Dashti HS, Madrid-Valero JJ, Madrid JA, Saxena R, Scheer FA, Ordoñana JR, Garaulet M. Heritability of the timing of food intake. *Clinical Nutrition*. 2018 Mar 12.
- Jiang P, Turek FW. The endogenous circadian clock programs animals to eat at certain times of the 24-hour day: What if we ignore the clock?. *Physiology & behavior*. 2018 Apr 16.
- Most, Jasper, Porsha M. Vallo, Abby D. Altazan, Linda Anne Gilmore, Elizabeth F. Sutton, Loren E. Cain, Jeffrey H. Burton, Corby K. Martin, and Leanne M. Redman. "Food Photography Is Not an Accurate Measure of Energy Intake in Obese, Pregnant Women." *The Journal of nutrition* 148, no. 4 (2018): 658-663.
- Asiabar, A.K., Shokravi, F.A., Hajifaraji, M. and Zayeri, F., 2018. The Effect of an Educational Intervention with Spouse's Participation on Food Intake of Pregnant Females: A Randomized Controlled Trial. *Iranian Red Crescent Medical Journal*, (In Press).