

**A study on the adequacy of dietary intake
of macro nutrients for pregnant mothers
in Kalutara district**

By

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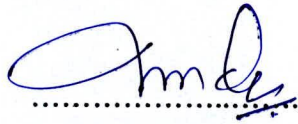
DECLARATION

The work described in this thesis was carried out by me at the University of Sri Jayewardenepura under the supervision of Dr. (Mrs.) Indira Wickramasinghe, Senior Lecturer, Department of Food Science and Technology, Faculty of Applied Sciences, University of Sri Jayewardenepura. Report on this thesis has been not been submitted in whole or in part to any other institution for another degree/diploma.


.....2015/12/08.....

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We certify that the above statement made by the candidate is true and this thesis is suitable for submission.



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TABLE OF CONTENT

Table of content	i
List of figures	vii
List of tables	x
Acknowledgment	xii
Abstract	xiii
CHAPTER 1 – INTRODUCTION	1
1.1 Objectives	2
CHAPTER 2 - LITERATURE REVIEW	4
2.1 Nutrition recommendations for women	4
2.2 Pregnancy and nutrition	5
2.3 Weight gain during pregnancy	7
2.4 Nutritional Recommendations for Women during pregnancy	8
2.4.1 Energy intake	8
2.4.2 Protein intake	10
2.4.3 Lipids and fats intake	11
2.4.4 Essential fatty acids intake	12
2.4.5 Fiber intake	14
2.4.6 Carbohydrate intake	14
2.4.7 Vitamin “A” intake	15

2.4.8 Calcium intake	16
2.4.9 Vitamin "B" intake	16
2.4.10 Vitamin "B ₁₂ " intake	17
2.4.11 Folate intake	17
2.4.12 Iron intake	19
2.5 Critical periods of nutrient intake	21
2.6 Common problems associated with pregnancy	22
2.6.1 Nausea and vomiting of pregnancy and food aversions and cravings	22
2.6.1.1 Nausea and vomiting	23
2.6.1.2 Cravings and aversions	25
2.6.2 Reflux	27
2.6.3 Pica	28
2.6.4 Preeclampsia	28
2.6.5 Gestational diabetes	30
2.7 The interaction of life-style and pregnancy	32
2.7.1 Physical activity	33
2.7.2 Food Safety	34
2.7.2.1 Swordfish, tilefish, king mackerel, and shark.	36
2.7.2.2 Raw sprouts.	36
2.7.2.3 Unpasteurized or untreated juice.	36
2.7.2.4 Alcohol	36
2.7.2.5 Illegal drug use	38
2.7.2.6 Cigarette (Smoking)	38

2.7.2.7 Caffeine	39
CHAPTER 3 – MATERIALS AND METHODS	40
3.1 Sampling	41
3.2 Data collection	41
3.2.1 Personal information	41
3.2.2 Anthropometric information	43
3.2.3 Dietary information	44
3.3 Tabulation of information	44
3.3.1 Tabulation of information gathered	44
3.3.2 Tabulation of information on dietary recommendation	45
3.3.2.1 Weight gain	45
3.3.2.2 Energy intake	46
3.3.2.3 Protein intake	46
3.3.2.4 Carbohydrate intake	47
3.3.2.5 Fat intake	47
3.3.2.6 Mineral and vitamin intake	47
3.4 Data analysis	47
CHAPTER 4 - RESULTS AND DISCUSSIONS	49
4.1 Statistics of general information	49
4.1.1 Statistics of age of the individuals	50
4.1.2 Statistics of number of living children own by the individuals	51

4.1.3	Statistics of the age of youngest child of individuals in the sample	52
4.1.4	Statistics of the race of individuals in the sample	54
4.1.5	Statistics of the religion of individuals in the sample	55
4.1.6	Statistics of the civil status of individuals in the sample	56
4.1.7	Statistics of the education level of individuals in the sample	56
4.1.8	Statistics of the education level of husbands' in the sample	58
4.1.9	Statistics of the profession of individuals in the sample	59
4.1.10	Statistics of the profession of the individuals' husbands in the sample	61
4.1.11	Results on the family income of individuals in the sample	62
4.2	Statistics of the anthropometric information of individuals in the sample	65
4.3	Statistics of the trimester spending by individuals in the sample	68
4.4	Statistics of weight gain percentage of individuals in the sample	69
4.5	Statistics of dietary information of individuals in the sample	71
4.5.1	Statistics of energy intake percentage of individuals in the sample	71
4.5.2	Statistics of protein intake percentage of individuals in the sample	73
4.5.3	Statistics of carbohydrate intake percentage of individuals in the sample	75
4.5.4	Results on fat intake percentage of individuals in the sample	77
4.6	Determination of adequacy of "actual weight gain"	79
4.7	Determination of adequacy of "energy intake"	80
4.8	Determination of adequacy of "macro nutrient intake"	82
4.8.1	Determination of adequacy of "protein intake"	82
4.8.2	Determination of adequacy of "carbohydrate intake"	83
4.8.3	Determination of adequacy of "fat intake"	85

4.9 Determination of correlation between percentages of weight gain and dietary nutrient intake.	87
4.10 Determination of correlation between percentages of dietary energy intake and dietary macro nutrient intake.	89
4.11 Determination of deference between means of percentages of weight gain, energy intake, protein intake, carbohydrate intake and fat intake in three trimesters.	90
4.11.1 Determination of deference between means of percentages of weight gain in three trimesters.	90
4.11.2 Determination of deference between means of percentages of energy intake per day in three trimesters.	93
4.11.3 Determination of deference between means of percentages of protein intake per day in three trimesters.	96
4.11.4 Determination of deference between means of percentages of carbohydrate intake per day in three trimesters.	98
4.11.5 Determination of deference between means of percentages of fat intake per day in three trimesters.	100
 CHAPTER 5 - CONCLUSIONS	 103
 SUGGESTIONS	 105
 REFERENCES	 106

APPENDICES

Appendix I – Table of food composition with unit amounts and food code	I
Appendix II – Questioner	V

LIST OF TABLES

Table 2.1: Analysis of weight gain (g) in pregnancy	7
Table 3.1 Extra energy requirement of the pregnant mother in each trimester	47
Table 4.1 Statistics of age distribution of the sample	50
Table 4.2: Statistics of the distribution of number of living children own by individuals	51
Table 4.3: Statistics of the distribution of age of youngest child of individuals	52
Table 4.4: Statistics of the race distribution of the sample	54
Table 4.5: Statistics of the religion of individuals of the sample	55
Table 4.6: Statistics of the civil status of individuals of the sample	56
Table 4.7: Statistics of the education level of individuals of the sample	56
Table 4.8: Statistics education levels of husbands' of the sample	58
Table 4.9: Statistics of the profession of individuals of the sample	60
Table 4.10: Statistics of the profession of the individuals' husbands	61
Table 4.11: Statistics of the distribution family income level sample	63
Table 4.12: Family income level and their values	64
Table 4.13: Statistics of the distribution of Anthropometric information of individuals	65
Table 4.14: Statistics of the distribution of trimester spending by individuals	68
Table 4.15: Statistics of the distribution of weight gain percentage of individuals	69
Table 4.16: Statistics of the distribution of energy intake percentage of individuals	72
Table 4.17: Statistics of the distribution of protein intake percentage of individuals	74
Table 4.18: Statistics of the distribution of carbohydrate intake percentage	75

Table 4.19: Statistics of the distribution of fat intake percentage of individuals	77
Table 4.20: Paired samples statistics (Required weight gain- Actual weight gain)	79
Table 4.21: Paired samples correlations (Required weight gain- Actual weight gain)	80
Table 4.22: Paired samples test (Required weight gain- Actual weight gain)	80
Table 4.23: Paired samples statistics (Required energy intake- Actual energy intake)	81
Table 4.24: Paired samples correlations (Required energy intake- Actual energy intake)	81
Table 4.25: Paired samples test (Required energy intake- Actual energy intake)	81
Table 4.26: Paired samples statistics (Required protein intake- Actual protein intake)	82
Table 4.27: Paired samples correlations (Required - Actual protein intake)	83
Table 4.28: Paired samples test (Required protein intake- Actual protein intake)	83
Table 4.29: Paired samples statistics (Required - Actual carbohydrate intake)	84
Table 4.30: Paired samples correlations (Required carbohydrate intake- Actual carbohydrate intake)	84
Table 4.31: Paired samples test (Required carbohydrate intake- Actual carbohydrate intake)	85
Table 4.32: Paired samples statistics (Required fat intake- Actual fat intake)	86
Table 4.33: Paired samples correlations (Required fat intake- Actual fat intake)	86
Table 4.34: Paired samples test (Required fat intake- Actual fat intake)	86
Table 4.35: Correlations (Between weight gain and dietary nutrient intakes)	88
Table 4.36: Descriptive (Means of percentages of weight gain)	90
Table 4.37: ANOVA (Means of percentages of weight gain)	91
Table 4.38: Multiple comparisons (Between means of percentages of weight gain)	91
Table 4.39: Descriptive (Means of percentages of energy intake)	93

Table 4.40: ANOVA (Means of percentages of energy intake)	93
Table 4.41: Multiple comparisons (Between means of percentages of weight gain)	94
Table 4.42: Descriptive (Means of percentages of protein intake)	96
Table 4.43: ANOVA (Means of percentages of protein intake)	96
Table 4.44: Descriptive (Means of percentages of carbohydrate intake)	98
Table 4.45: ANOVA (Means of percentages of carbohydrate intake)	98
Table 4.46: Descriptive (Means of percentages of fat intake)	100
Table 4.47: ANOVA (Means of percentages of fat intake)	100
Table 4.48: Multiple comparisons (Between means of percentages of fat intake)	101

LIST OF FIGURES

Figure 4.1 Graphical expression of the age of individuals in the sample	51
Figure 4.2: Graphical expression of age of youngest child of individuals	53
Figure 4.3: Graphical expression of the race of individuals in the sample	54
Figure 4.4: Graphical expression of the religion of individuals in the sample	55
Figure 4.5: Graphical expression of the education level of individuals in the sample	57
Figure 4.6: Graphical expression of the educational level of husbands' in the sample	59
Figure 4.7: Graphical expression of the profession of individuals in the sample	61
Figure 4.8: Graphical expression of the profession of the husbands' in the sample	62
Figure 4.9: Graphical expression of the family income levels in the sample	64
Figure 4.10: Graphical expression of height of individuals in the sample	67
Figure 4.11: Graphical expression of the weight at the first clinic of individuals	67
Figure 4.12: Graphical expression of the BMI at first clinic of individuals	68
Figure 4.13: Graphical expression of trimester spending by individuals	69
Figure 4.14: Graphical expression of weight gain percentage of individuals	71
Figure 4.15: Graphical expression of energy intake percentage of individuals	73
Figure 4.16: Graphical expression of protein intake percentage individuals	75
Figure 4.17: Graphical expression of carbohydrate intake percentage of individuals	77
Figure 4.18: Graphical expression of fat intake percentage of individuals in the sample	79
Figure 4.19: Graphical expression between mean percentages of the weight gain in three trimesters.	92

Figure 4.20: Graphical expression between mean percentages of the energy intake in three trimesters.	95
Figure 4.21: Graphical expression between mean percentages of the protein intake in three trimesters.	97
Figure 4.22: Graphical expression between mean percentages of the carbohydrate intake in three trimesters.	99
Figure 4.23: Graphical expression between mean percentages of the energy intake in three trimesters.	102

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ABSTRACT

The experiment was carried out based on 13 “Medical Officer of Health” (MOH) areas in Kalutara district to find the adequacy of the dietary intake of macro nutrient together with weight gain and energy intake during pregnancy. A questioner was distributed among pregnant mothers to collect data trough clinical sessions conducted by the midwifery officers in the area. Random sampling of questioners was done to tabulate data. One hundred twenty two individuals were taken in to account to analyze the tabulated data. General information and the dietary information were presented separately in tables and graphs. Weight gain, energy intake, protein intake, carbohydrate intake and fat intake were compared with their recommendations to evaluate the adequacy. Paired t test was conduct to evaluate the adequacy of the parameters using the software of “Statistical Program for Social Science” (SPSS). The same parameters were calculated as the percentages to the required values for the purpose of expressing the statistics. The percentages were compared among three trimesters of the pregnancy. One way “Analysis of variance” (ANOVA) test was conducted for the purpose comparison using SPSS software.

As findings, the actual dietary intake of macro nutrients of protein and carbohydrate were found as higher than the required levels. The actual energy intake and fat intake were found as in required level. But the weight gain was found as lower than the recommendations significantly. As an extra finding to the experiment, it was suggested that the evaluation of weight gain cannot be evaluated correlating with the dietary nutrients. There should be further experiment to find the reasons for lower weight gain in pregnant mothers in Kalutara district.