





ثبكة المعلومات الجامعية





جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



نقسم بللله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأفلام قد اعدت دون آية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15-20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of 15-25c and relative humidity 20-40 %



ثبكة المعلومات الجامعية







FACTORS AFFECTING MALNUTRITION AMONG CHILDREN IN THE RURAL AREAS OF AL-MINUFIYA GOVERNORATE

BY

Thanaa Abd El-Rheem Abo El-Enean Ebrahim

B.Sc. Faculty Of Agriculture, Minufiya University, 1988

Debloma Of Nutrition, Faculty Of Home

Economics, Minufiya University, 1993

THESIS

Submitted in Partial Falfilment in the

Requirements for the Degree of

MASTER OF SCIENCE

IN

Nutrition and Food Science

Department of Nutrition and Food Science

Faculty of Home Economics

Minufiya University

9 N

1999

UNDER THE SUPER VISION

Titel of thesis

: Factors Affecting Malnutrition

Among Children In The Rural Areas of

AL- Minufiya Governorate

Degree

: M.Sc Degree of Nutrition and Food Science

Name of Student

: Thanaa Abd El Rheem Abo El Enean Ebrahim

UNDER The SUPER VISION OF:

Prof.. Dr. ATIAT MOHAMED EL-BAHAY

Prof. Of Nutrition Ex. Deanfaculty of Home Economics, Helwan University.

Prof., Dr. LAILA SHEHATA ABD EL-HAMEED

Prof. and Vice Dean for Environ. Affairs

Faculty Of Medicine, Minufiya University

Ass. Prof. LAILA MOHAMED TAWFIK

Ass. Prof. Of Nutrition and Food Science Faculty Of Home, Economics Minufiya University.

APPRVAL SHEET

Title of Thesis

: Factors Affecting Malnutrition

Among Children In The Rural

Areas Of AL- Menoufia Governorate

Degree

: M.Sc. Degree of Nutrition and Food Science.

Name of Student

: Thanaa Abol El Rheem

Abo El Enean Ebrahim.

This Thesis has been approved by

Prof. Dr.

Prof. Dr.

Prof. Dr.

Prof. Dr.

M.M.El-Sayed

Alex M. El Bahen

: Somia S. El Marare

Trian

CONTENTS

- ACKNOWLEDGMEN I	
- INTRODUCTON	(1)
- AIM OF THE WORK	(3)
- REVIEW OF LITERATURE	(4)
* Normal nutrition in early childhood:	(4)
* The problem of malnutrition:	(6)
* Diseases of malnutrition:	(10)
- MATERIAL AND METHODS	(21)
- RESULTS 8 DISCUSSION	(28)
- RECOMME NDATIONS	(158)
- SUMMARY	(160)
- REFERENCES	(165)
- ABBENDEX	···· (174)
- ARABIC SUMMURY	(182)

ACKNOWLEDGMENT

I would like to express my deepest and sincere gratitude to Prof. Dr. | Atiat Mohamed El-Bahay. Prof. of Nutrition and Jood Science, Ex. Dean of Home Economics Jaculty, Hellwan University, for her scientific support and valuable supervision throughout this work.

My special to thanks are due to Prof. Dr. |Laila Shchata ABD. El Hameed. Prof. and Vice Dean for Environ Affairs' Taculty, of medicine, Menoufia University for her interest indispensable advice and valuable comments.

I wish to express my hearty appreciation, deepest thanks and sincere gratitude to. Dr. | Laila Mohamed Jawfik Ass. Professer Nutrition and Iood Science, Home Economics Iaculty, Menoufia University for her supervising this work and for her significant advice and criticism in the preparation of the thesis.

Tinally, deep thanks are paid to my Tamily.

List of tables

Table (1) Distribution of malnourished and control sample according to	P.g
sex	(22)
Table (2) Measurments and specifictest carrid out an the studied group.	(23)
Table (3) Mean and standard deviations of socio economic factors for malnourished and control groups.	(29)
Table (4) Dis tribution of malnourished and control sample according to selected socio economic characteristics.	(41)
Table (5) Inter correlation between social status	(55)
Table (6) Correlation coefficient between social status and home sanitation.	
Table (7) Inter correlation between hom sanitation	(60)
Table (8) Correlation coefficient between social status and mother health	.(63)
Table (9) Inter correlation between mother's health	(65)
Table (10) Correlation coefficient between social status and child health.	(68)
Table (11) Inter correlation between child health	(69)
Table (12) Correlation coefficient between hom sanitation and mother's and child health.	(72)
Table (13) Correlation coefficient belween mother's health and child health.	

Table (14) Mean and standard deviations for several nutrients intake by malnourished sample.	75
Table (15) Analysis of variance for malnourished children with respect to calories.	180
Table (16) analysis of variance for malnourished children with respect to total protein.	807
Table (17) Analys is of variance for malnourished children with respect to total iron.	!81
Table (18) Analysis of variance for malnourished children with respect to calcium.	
Table (19) analysis of variance for malnourished children with respect to vitamin A.	
Table (20) Analysis of variance for malnourished hildren with respect to vitamin B12.	
Table (21) Analysis of variance for malnoursihed children with respect to vitamin C.	.83
Table (22) Analysis of variance for malnourished children with respect to vitamin D.	·
Table (23) Analysis of variance for malnourished children with respect to folat.	184
Table (24) Mean and standard deviation for several nutrients intake	- 0 ,
compared with RDA, 1989. among malnourished and control groups.	87

. fa. .

Table (25) Mean estimates of nutrients intakes of malnourished and	P.g
control groups (90)
Table (26) Inter correlation between nutrients intake (97)
Table (27) Distribution of malnouris hed and control children a ccording to food intake pattern.	
Table (28) Correlation coefficient between social status and nutrents (1	111)
Table (29) Correlation coefficient between social slatus and food consumption pattern (1	16)
Table (30) Correlation coefficient between social statas and food habits. (1	19)
Table (31) Correlation coefficient between nutrients and food consumption pattern (1	22)
Table (32) Mean and stand ard deviation of anthropo metric measur ments for malnourished and control groups (1)	25)
Table (33) Frequency distribution for anthrapo metric measur ments for malnourished and control groups (12)	29)
Table (34) Inter correlation between anthropometric measuuments (13	34)
Table (35) correlation coefficient between social status and anthropo metric measurments (13	38)
Table (36) Correlation coefficient between hom sanitation and anthropometric measures (14	1)
Table (37) Correlation coefficient between mothers health and anlhrop	
metric measures (14	3)

			·				
Table		Correlation					
	ant	hropometric m	leasures				
							(146)
TC 1.1 (20\ 0						•
lable (39) Cor	relation coeffi	cient betweer	anthro po	metric i	neagurec	and
	nuti	rients					(140)
							(143)
Table (40) Correlation coefficient between anthropo metric and food							
	hab	its					44
							(153)
					•		
Table (4	11) Cor	relation coeffic	cient between	anthropo	melric r	neasures	and
•	food	1 consuntion n	attorn				
	1000	d consuption pa	aucii		~		(156)

•

List of figuers

Fig (1) Mean value of father income for malnourished and control group	P.g (30)
Fig (2) Mean value of mother income for malnourished and contro	
Fig (3) Mean value of family income for malnourished and contro groups.	
Fig (4) Mean value of degree of degree of crowdedness for malnourished and control groups.	
Fig (5) Mean value of age of start weaning for malnourished and control groups.	
Fig (6) Distribution of child sequence for malnourished and control groups.	
Fig (7) Distribution of number of children in the family for malnourished and control groups	(49)
Fig (8) Distribution of child receive medicin for malnourished and control groups (50)
Fig (9) Distribution of sufficient normal nursing for malnourished and control groups	50)
Fig (10) Distibution of father's education for malnourished and control groups	51)
Fig (11) Distibution of mather's education for malnourished and control groups (5	51)