ASSESSMENT OF TALL STATURE AMONG EGYPTIAN CHILDREN

THESIS
Submitted for Partial Fulfillment of Master Degree in
Pediatrics

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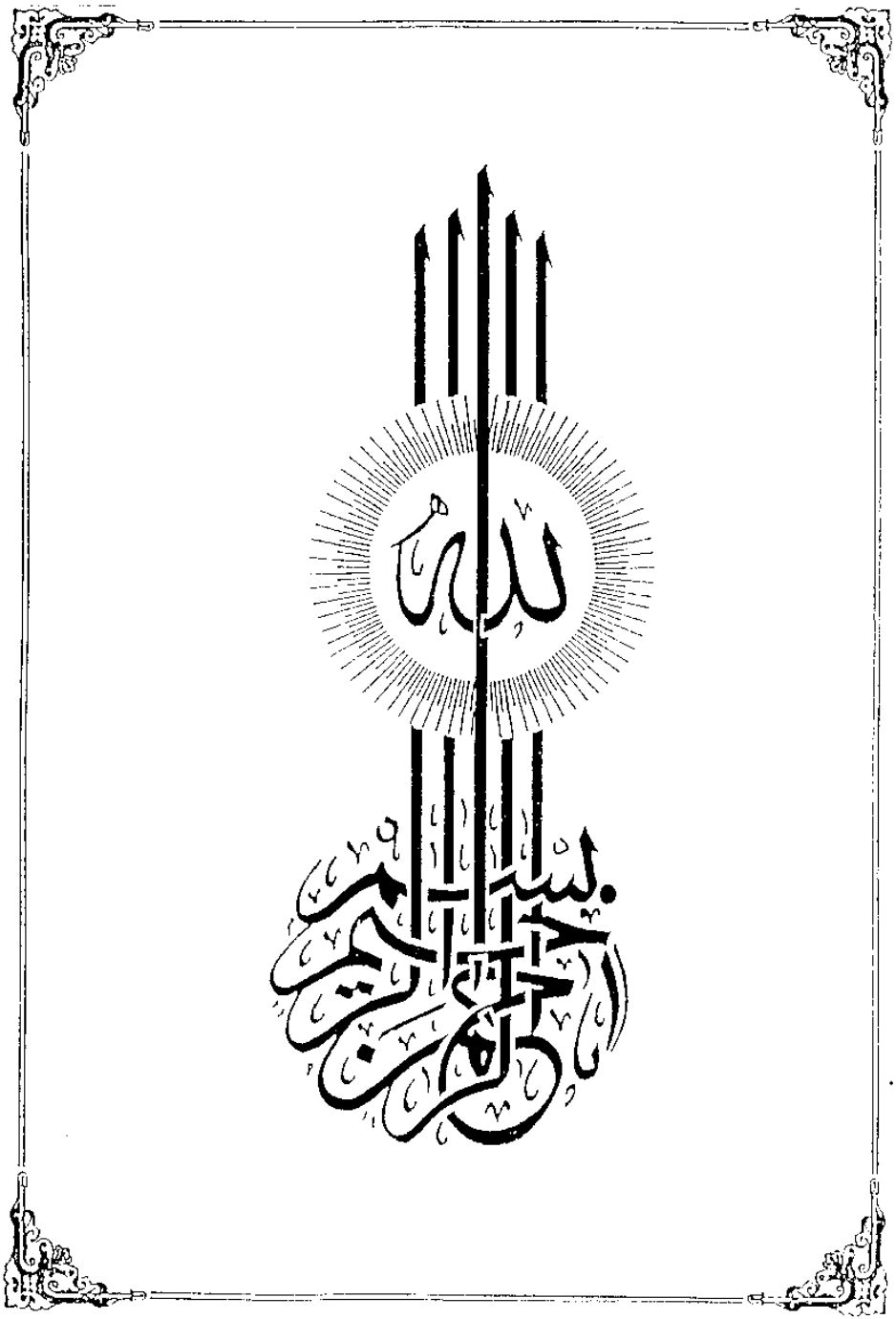
1994

To my family...



ACKNOWLEDGEMENT

I would like to express my sincere gratitude and much thanks to **Professor Dr. Rabah Mohamed Shawky,** *Professor of Pediatrics and Genetics, Faculty of Medicine, Ain Shams University, for her kind supervision, keen guidance, support, and encouragement throughout the whole work.*

My deep thanks are also offered to **Dr. Zeinab A. El-Kabbany,** *Assistant Professor of Pediatrics, Faculty of Medicine, Ain Shams University, for her valuable remarks, a lot of precious time and effort for her generous help throughout this work.*

I am also greatful to the children and their parents, without their help, this work would not have been completed.

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LIST OF ABBREVIATIONS

Cm	Centimetres
GnRH	Gonadotropin releasing hormone
GH	Growth hormone
HCG	Human chorionic gonadotropin
H.C.	Head circumference
Ht.	Height
FSH	Follicle stimulating hormone
LH	Luteinizing hormone
No.	Number
S.D.	Standard deviation
SHBG	Sex hormone binding globulin
T_3, T_4	Thyroxin hormone
TSH	Thyroid stimulating hormone
Wt.	Weight

Introduction and Aim of the work

INTRODUCTION

Growth is a vital process in human life that can be affected by so many factors including, Genetic, Racial, Geographical location and climate.

Stature is a good indicator of human growth, the assessment of linear growth is one of the most sensitive means for evaluating the overall wellbeing of a child, since it represent the net expression of genetic make up, adequacy of nutrition and environment and the residual effect of preivous disease *(Marshall, 1977)*.

Height is in most circumstances the best single index as it is at least a measure of a single tissue which is the bone. Weight is a measure of all tissues and is a much less useful parameter than height in long-term follow up of a child's growth *(Falkner & Tanner, 1986)*.

Height is a stable measure compared with body weight which flactuates markedly in health while height remain unaffected.

Growth has three phases, the rapid growth of infant, the gradually decelerating growth of the prepubertal child and the growth spurt of adolescence.

Tall stature is defined as 2 to 3 S.D. above the mean height for age *(Whitehouse & Tanner, 1985)*.

AIM OF WORK

The aim of this study is to assess the height of Egyptian children and to find out the various causes of tall stature among these children.

Review of Literature

1- Prenatal growth which include

a) The ovum (Lasting for a fortnight after conception).

b) Embryo (which differentiates into various structures and organs and is completed by the twelfth or fourteenth week after conception.

c) The foetus in whom the various vegetative functions are established.

2- Postnatal growth

Consisting of infancy, childhood and adolescence. It includes:

a) Infancy: This age period is generally accepted to be the first year of life and consists of:

1. Perinatal period: which is the most important period in the infant's life, where there is urgent need for adjustment to extrauterine conditions. It includes the period of labour, delivery and the first 24 hours of life (Bower, 1977).
2. Neonatal: This period consists of a continuation of the former with better establishment of feeding and gaining weight. It includes the first four weeks of extrauterine life *(Brazelton, 1973)*.
3. Post neonatal period: During which the infant acquires more independance and show ability to

reached during foetal life when the growth is fairly rapid and constant.

The growth rate is considerably reduced in the phase during early infancy and continues to be so during mid-childhood. With the onset of late childhood, the rate of growth again shows a spurt which lasts for a year or two and gradually declines during puberty and finally all growth diminishes and altogether ceases with the completion of adolescence *(Holt, 1962)*.

There are milde ranges of differences in the rate of growth of different children at every age. These are mainly due to individual, environmental and racial factors *(Abbouud et al., 1957)*.

Fig.1: Main types of postnatal growth of the various parts and organs of the body. In Harris B et al. The measurement of man minnea polis, University of Minnesota Press, 1930.