بسم الله الرحمن الرحيم


# شبكة المعلومـــــات الجامعية

# التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

# جامعة عين شمس

## التوثيق الالكتروني والميكروفيلم

## ﴿ قـــســـم ﴾

نقسم بالله 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 %**


# بعض الوثائق الأصلية تالفة


# بالرسالة صفحات

# لم ترد بالأصـــل

# CORRELATIVE STUDY BETWEEN PLASMA RENIN ACTIVITY, SERUM LEPTIN AND SERUM INSULIN IN PATIENTS WITH CONTROLLED AND UNCONTROLLED ESSENTIAL HYPERTENSION

**Thesis**

Submitted to the Faculty of Medicine,
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*in partial fulfillment of the requirements*
*of the degree of*

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# LIST OF ABBREVIATIONS

| *Abb.* | *Meaning* |
|---|---|
| %B/T | Percent of bound over total |
| μCi | Micro-Curie |
| μg | Microgram |
| μL | *Microliter* |
| $^{125}I$ | Radioactive iodine with molecular weight 125 |
| ACTH | Adrenocorticotrophic hormone |
| ANOVA | Analysis of variance test |
| AT | Angiotensin receptor |
| BAT | Brown adipose tissue |
| BMI | Body mass index |
| cAMP | Cyclic adenine monophosphate |
| cGMP | Cyclic guanosine monophosphate |
| CHD | Coronary heart disease |
| CPM | Count per minute |
| DBP | Diastolic blood pressure |
| dL | Deciliter |
| DNA | Deoxyribonucleic acid |
| EC | Enzyme classification |
| EDTA | Ethylene diamine tetra-acetic acid |
| ELISA | Enzyme linked immunosorbant assay |
| FI | Fasting insulin |
| HDL | High density lipoprotein |
| hr | Hour |
| IGF-1 | Insulin-like growth factor-1 |
| IgG | Immunoglobulin G |
| IGT | Impaired glucoes tolerance |
| IRMA | Immunoradiometric assay |
| ISH | International society of hypertension |
| JAK | Janus kinase |
| JNC VI | Sixth Joint National committee on Hypertension |
| kb | Kilobase |
| kBq | Kilo-Bequerell |
| kg | Kilogram |
| L | Liter |
| LDL | Low density lipoprotein |
| m | Meter |
| ml | Milliliter |
| mRNA | Messenger ribonucleic acid |
| MW | Molecular weight |
| ng | Nanogram |
| ng | Nanogram |
| nmol | Nanomol |

| *Abb.* | *Meaning* |
|---|---|
| Ob-Ra | Truncated isoform of leptin receptor |
| Ob-Rb | Full-length leptin receptor |
| pmmol | Picomol |
| PMSF | Phenylmethlysulfonylfluride |
| PPI | Post-prandial insulin |
| PRA | Plasma renin activity |
| RAAS | Renin angiotensin aldosterone system |
| RAS | Renin angiotensin system |
| RIA | Radioimmunoassay |
| RNA | Ribonucleic acid |
| SBP | Systolic blood pressure |
| SD | Standard deviation |
| WHO | World health organisation |

# INTRODUCTION

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## SYSTEMIC HYPERTENSION

The second half of the twentieth century has seen a progressive decrease in cardiovascular mortality in North America, Western Europe, Japan and Australasia.[1] At the same time, the control of hypertension in these regions has improved considerably.

The Health Examination Surveys in the USA have demonstrated that whereas 10% of hypertensive subjects had their blood pressure lowered to below 140/90 mmHg in 1976-80, the proportion had risen to 27% by 1988-91.[2] On the other hand it is important to note that this leaves over 70% of hypertensive subjects with imperfect control (or no treatment at all), as has been reported in many other countries.[3,4]

More worrying is the rapid development of the "second wave" epidemic of cardiovascular disease that is now flowing through developing countries and the former socialist republics. It is evident that death and disability from coronary heart disease (CHD) and cerebrovascular disease are increasing so rapidly in these parts of the world that they will rank No. 1 and No. 4 respectively as causes of the global burden of disease by the year 2020.[5]

Given the central role of elevated blood pressure in the pathogenesis of both CHD and stroke, it is clear that one of the biggest challenges facing