



شبكة المعلومات الجامعية  
التوثيق الإلكتروني والميكرو فيلم

# بسم الله الرحمن الرحيم



**HANAA ALY**



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التوثيق الإلكتروني والميكروفيلم



# شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

### قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



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## **Effect of nutritional intervention on some metabolic syndrome risk factors among adults**

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## **List of Abbreviation**

<b>ADA</b>	American Diabetes Association.
<b>AHA</b>	American Heart Association.
<b>AST</b>	aspartate amino transferees
<b>ALT</b>	alanine amino transferees
<b>BMI</b>	Body mass index.
<b>BP</b>	Blood pressure.
<b>Cal</b>	Calorie.
<b>CVD</b>	Cardiovascular disease.
<b>CHO</b>	Carbohydrates
<b>DBP</b>	Diastolic blood pressure.
<b>DM</b>	Diabetes mellitus
<b>DMT2</b>	Diabetes mellitus type 2.
<b>DPP</b>	Diabetes Prevention Program.
<b>DNPCNCD</b>	Diet nutrition and prevention of chronic non-communicable diseases
<b>FBG</b>	Fasting blood glucose.
<b>FDA</b>	Food and Drug Administration.
<b>GI</b>	Glycemic index.
<b>HC</b>	Hip circumference.
<b>HDL-c</b>	High density lipoproteins cholesterol.
<b>HFHSD</b>	High fat high sucrose diet.
<b>HRQoL</b>	Health-related quality of life.
<b>IDF</b>	International Diabetes federation.
<b>IGT</b>	Insulin glucose intolerance.
<b>IR</b>	Insulin resistance.
<b>LDL-c</b>	Low density lipoproteins cholesterol.
<b>LGL</b>	Low glycemic load.
<b>MeD</b>	Mediterranean diet.
<b>MS</b>	Metabolic syndrome.
<b>MUFA</b>	Monounsaturated fatty acid.
<b>M</b>	Mean
<b>NCEP ATP: Treatment</b>	National Cholesterol Education Program Adult Panel III.
<b>NNI</b>	National Nutrition institute.
<b>PUFA</b>	Polyunsaturated fatty acid.
<b>RDA</b>	Recommended Dietary Allowance.
<b>SBP</b>	Systolic blood pressure.
<b>SD</b>	Standard deviation.
<b>SFAs</b>	Saturated fatty acids.
<b>T2D</b>	Type 2 diabetes.
<b>TC</b>	Total cholesterol.

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<b>TFCs</b>	Trans-fatty acids.
<b>TG</b>	Triglycerides.
<b>US</b>	United States.
<b>WC</b>	Waist circumference.
<b>WHO</b>	World Health Organization.

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## **ABSTRACT**

### **Effect of nutritional intervention on some metabolic syndrome risk factors among adults**

The aims of this thesis are to estimate the presence of metabolic syndrome risk factors among adults and its relation with their dietary pattern and to estimate the effect of dietary life style intervention on some risk factors of metabolic syndrome among selected adult cases. The study was conducted on 140 adults, (20 – 60 years), males and females suffering from one or more of metabolic syndrome risk factors. Dietary lifestyle intervention (Suitable diet, healthy life style and nutritional education for 3 months) was made for 50 cases that were selected with high risk factors. Anthropometric, laboratory and dietary assessments were made at baseline and at the end of intervention for selected cases.

**Results:** Main results of our study showed high significant relation between MS and dietary pattern of the studied sample. Dietary life style intervention showed very high significant changes especially for anthropometric measurements of cases whom included with our intervention (n=50)  $p < 0.000$ , weight and BMI were decreased about 13.7 %, waist circumferences were decreased about 13% and hip circumferences were decreased about 9 % by the end point of intervention period. These changes also lead to laboratory improvement in syndrome indicators like FBG, lipid profile (TC, TG, LDL-c, and HDL-c). **Conclusion:** Diet and lifestyle modifications are the first line of treatment in dealing with MS. Diet planning to reduce about 10% from body weight is very useful for preventing or reducing metabolic syndrome risk factors and its complications among adults. **Recommendation:** balanced caloric intake and physical activity is essential to achieve and maintain a healthy body weight as possible as.

**Key words:** Metabolic syndrome - risk factors - adults - Dietary intervention

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# Introduction

