ANALYSIS OF THE RESULTS

TABLE (1): Shows the clinical data of the control subjects. They are 13 males and 8 females. Their age ranged 40-65, with a mean of 53.38 ± 7.02 years (mean ± S.D.).

Their weight ranged 60-90, with a mean of 72.86 ± 7.81 kg. Their height ranged 165-190, with a mean of 176.81 ± 6.90 cm. According to their age, sex, and height, their desired weight ranged 68-89, with a mean of 78.00 ± 5.51 kg. The percentage of their weight from the desired weight ranged 80-103%. Their systolic blood pressure (B.P.) ranged 110-130, with a mean of 117.38 ± 6.25 mmHg. Their diastolic blood pressure ranged 65-90, with a mean of 77.14 ± 6.81 mm Hg.

TABLE (2): Shows the clinical data of hypertensive patients. They are 7 males and 3 females.

Their age ranged 42-75, with a mean of 55.8 ± 12.17 years, which is not significantly different from the mean age of controls ($P > 0.7$).

Their weight ranged 62-80, with a mean of 71± 6.46 kg., which is not significantly different from the mean weight of controls ($P > 0.5$).

Their height ranged 158-182, with a mean of 166.3± 7.54 cm., which is significantly lower than the mean height of the controls ($P < 0.001$).

According to their age, sex and height, the desired weight ranged 62.5-82.5, with a mean of 69 ± 6.7 kg., which is significantly less than the mean desired weight of the controls ($P < 0.001$).

The percentage of their weight to their desired weight ranged 86-113%.

Their systolic B.P. ranged 150-190, with a mean of 170 ± 13.3 mm Hg., which is significantly higher than the mean systolic B.P. of controls ($P < 0.001$). Their diastolic B.P. ranged 100-120, with a mean of 107 ± 7.5 mm Hg., which is significantly higher than the mean diastolic B.P. of controls ($P < 0.001$).

TABLE (3) : Presents the clinical data of cigarette smoking subjects. They are 9 males and one female. Their age ranged 42-60, with a mean of 52.2 $\pm$ 6.39 years, which is not significantly different from the mean age of controls ($P > 0.7$).

Their weight ranged 56-80, with a mean of 68.20 $\pm$ 8.16 kg., which is not significantly different from the mean weight of controls ($P > 0.1$).

Their height ranged 165-180, with a mean of 170.3 $\pm$ 4.92 cm., which is significantly lower than the mean height of controls ($P < 0.01$).

According to their age, sex, and height , their desired weight ranged 67.5-81.5,with a mean of 72.45 $\pm$ 4.29 kg., which is significantly lower than the mean desired weight of the controls ($P < 0.005$).

The percentage of their weight to their desired weight ranged 82-111%.

Their systolic B.P. ranged 110-150, with a mean of 133 $\pm$ 11.6 mm Hg., which is signifi-

cantly higher than the mean systolic B.P. of controls ($P < 0.001$). Their diastolic B.P. ranged 70-90, with a mean of 80 ± 7.07 mm Hg., which is not significantly different from the mean diastolic B.P. of controls ($P > 0.3$).

TABLE (4): Shows the clinical data of diabetic patients. They are 7 males and 3 females.

Their age ranged 40-72, with a mean of 52.1 ± 11.28 years, which is not significantly different from the mean age of controls ($P > 0.8$).

Their weight ranged 62-83, with a mean of 70.8 ± 6.97 kg., which is not significantly different from the mean weight of controls ($P > 0.4$).

Their height ranged 155-180, with a mean of 168 ± 7.99 cm., which is significantly lower than the mean height of controls ($P < 0.01$).

According to their age, sex, and height, the desired weight ranged 60-81, with a mean of 70.6 ± 6.86 kg., which is significantly lower than the mean desired weight of the controls ($P < 0.01$).

The percentage of their weight to their desired weight ranged 83-112 %.

Their systolic B.P. ranged 110-150, with a mean of 135± 14.34 mm Hg., which is significantly higher than the mean systolic B.P. of controls ($P < 0.001$). The mean diastolic B.P. ranged 75-90, with a mean of 82.5 ± 6.77 mm Hg., which is significantly higher than the mean diastolic B.P. of controls ($P < 0.05$).

TABLE (5): Presents the clinical data of obese subjects. They are 6 males and 4 females. Their age ranged 42-70, with a mean of 52.8 ± 9.13 years, which is not significantly different from the mean age of controls ($P > 0.8$).

Their weight ranged 74-112, with a mean of 91.5 ± 10.59 kg., which is significantly higher than the mean weight of controls ($P < 0.001$).

Their height ranged 155-177, with a mean of 166.8 ± 7.54 cm., which is significantly higher than the mean height of controls ($P < 0.005$).

According to their age, sex, and height , the desired weight ranged 59-78, with a mean of 69.3 ± 6.74 kg., which is significantly higher than the mean desired weight of the controls ($P < 0.005$).

The percentage of their weight to their disired weight ranged 121-145%.

Their systolic B.P. ranged 120-150,with a mean of 140 ± 8.17 mm Hg., which is significanlly higher than the mean systolic B.P. of controls ($P < 0.001$).

Their diastolic B.P. ranged 70-95, with a mean of 85 ± 8.82 mm Hg., which is significantly higher than the mean of diastolic B.P. of controls ($P < 0.02$).

TABLE (6): Shows plasma glucose levels during fasting (F) and 2 hours after 75 g. glucose oral load in all groups investigated. In group I (controls) the fasting plasma glucose levels ranged 70-104, with a mean of 86.5_ 9.55 mg/dl. In group II, (hypertensives) the fasting plasma glucose levels ranged 70-101, with a mean of 88.3 ± 11.11 mg/dl.,

which is not significantly different from the corresponding mean of controls($P > 0.5$). In group III, the fasting plasma glucose levels ranged 70-100, with a mean of 85.80 $\pm$ 10.06 mg/dl., which is not significantly different from the corresponding mean of controls ($P > 0.5$). In group IV (diabetics), the fasting plasma glucose levels ranged 116-216, with a mean of 159.80 $\pm$ 32.65 mg/dl., which is significantly higher than the corresponding mean of controls ($P < 0.001$). In group V, the fasting plasma glucose levels ranged 75-103, with a mean of 89.30 $\pm$ 10.41 mg/dl., which is not significantly different from the corresponding mean of controls ($P > 0.2$).

The two hours plasma glucose levels in group I (controls) ranged 70-115, with a mean of 92.85 $\pm$ 11.71 mg/dl., In group II (hypertensives), the 2 hours plasma glucose levels ranged 77-100, with a mean of 88.90 $\pm$7.55 mg/dl., which is not significantly different from the corresponding mean of controls ($P > 0.2$). In group III, the two hours plasma glucose levels ranged 70-105, with a

mean of 89.70 ± 11.14 mg/dl., which is not significantly different from the corresponding mean of controls ($P > 0.2$). In group IV, the two hours plasma glucose levels ranged 232-320, with a mean of 270.1±33.361 mg/dl., which is significantly higher than the corresponding mean of the controls ($P < 0.001$). In group V, the two hours plasma glucose levels ranged 80-100, with a mean of 89.90 ± 5.57 mg/dl., which is not significantly different from the corresponding mean of controls ($P > 0.2$).

TABLE (7): Shows the serum lipids profile and apolipoproteins concentrations in control subjects.

Serum triglycerides ranged 61-124 , with a mean of 94 ± 23.86 mg/dl. Serum total cholesterol ranged 145-228 , with a mean of 180.76 ± 17.44 mg/dl. Serum high density lipoprotein cholesterol (HDL-c) ranged 30 - 59 with a mean of 42.24± 7.56 mg/dl. Serum low density lipoprotein cholesterol (LDL-c) ranged 98 - 152 with a mean of 112.86± 14.91 mg/dl. Serum apolipoprotein-A ranged 154-338 , with a mean of 253.62±44.58

mg/dl. Serum apolipoprotein-B ranged 69 - 152, with a mean of 99.9 ± 22.57 mg/dl.

The ratio of total cholesterol to HDL-c ranged 3.08 - 6.33, with a mean of 4.40 ± 0.86.

The ratio LDL.C/HDL-C ranged 1.81- 3.94, with a mean of 2.75 ± 0.57. The ratio of apolipoprotein-A / apolipoprotein-B ranged 1.2 -4.35, with a mean of 2.68 ± 0.82.

TABLE (8): Shows the serum profile and apolipoproteins concentrations in hypertensives.

Serum triglycerides ranged 82.4-322.6,with a mean of 182.07 ± 85.59 mg/dl., which is significantly higher than the corresponding mean of controls ($P < 0.005$).

Serum total cholesterol levels ranged 194.7 251.6, with a mean of 212.51 ± 17.15 mg/dl., which is significantly higher than the corresponding mean of contrls ($P < 0.001$).

Serum HDL-c levels ranged 28.3-56-8, with a mean of 38.20 ± 8.27 mg/dl., which is significantly different from the corresponding

mean of controls ($P > 0.2$). Serum LDL-c levels ranged 92.3 - 161.1, with a mean of 130.39 $\pm$ 22.46 mg/dl., which is significantly higher than the corresponding mean of controls ($P < 0.05$).

Serum Apo-A levels ranged 174.5 - 312.5, with a mean of 245.95 $\pm$ 45.797 mg/dl., which is not significantly different from the corresponding mean of controls ($P > 0.6$).
Serum Apo-B levels ranged 56-158, with a mean of 107.48 $\pm$ 37.89 mg/dl., which is not significantly different from the correspond mean of controls ($P > 0.3$).

The ratio T.C/HDL-c ranged 3.82 - 7.14, with a mean of 5.75 $\pm$ 1.05, which is significantly higher than the corresponding mean ratio of controls ($P < 0.005$).
The ratio LDL-c/HDL-c ranged 2.17-5.09, with a mean of 3.53 $\pm$ 0.86, which is significantly higher than the corresponding mean ration of controls ($P < 0.02$).
The ratio Apo-A/Apo-B ranged 1.67-3.66, with a mean of 2.51 $\pm$ 0.83, which is not significantly different from the corresponding mean ratio of controls ($P > 0.6$).

TABLE (9) : Presents serum lipids profile and apolipoproteins concentrations in cigarette smokers.

Serum triglycerides ranged 86.7-217.2,with a mean of 159.07 ± 44.55 mg/dl., which is significantly higher than the corresponding mean of controls ($P < 0.001$).

Serum total cholesterol levels ranged 176.9 - 228.4, with a mean of 210.05 ± 17.224 mg/dl., which is significantly higher than the corresponding mean of controls ($P < 0.001$).

Serum HDL-C levels ranged 25.5 - 42 , with a mean of 35.78 ± 5.99 mg/dl., which is significantly lower than the corresponding mean of controls ($P < 0.02$).

Serum LDL-c levels ranged 96.3 - 158, with a mean of 133.81 ± 21.53 mg/dl., which is significantly higher than the corresponding mean of controls ($P < 0.02$).

Serum Apo-A levels ranged 174.5-311.5, with a mean of 242.15 ± 39.42 mg/dl., which is not significantly different from the corresponding mean of controls ($P > 0.4$).

Serum Apo-B levels ranged 105-152,with a mean of 125 $\pm$ 15.25 mg/dl., which is significantly higher than the corresponding mean of controls ($P < 0.005$).

The ratio T.C./HDL-c ranged 4.62 - 7.72, with a mean of 6.02 $\pm$ 1.07, which is significantly higher than the corresponding mean ratio of controls ($P < 0.001$).

The ratio LDL-c/HDL-c ranged 2.38 - 5.22, with a mean of 3.88 $\pm$ 1.07, which is significantly higher than the corresponding mean of controls ($P < 0.05$). The ratio Apo-A/Apo-B ranged 1.28 - 2.83, with a mean or 1.97 $\pm$ 0.463, which is significantly lower than the corresponding mean of controls ($P < 0.005$)

TABLE (10) : Demonstrates serum lipids and apolipoproteins concentrations in diabetics.

Serum triglycerides levels ranged 72-260 , with a mean of 147.60 $\pm$ 60.02 mg/dl.,which is significantly higher than the corresponding mean of controls ($P < 0.02$) Serum total cholesterol levels ranged 166 -

328, with a mean of 221 ± 44.5 mg/dl., which is significantly higher than the corresponding mean of controls ($P < 0.02$).

Serum HDL-c levels ranged 29.2 -40.8, with a mean of 36.31 ± 3.77 mg/dl., which is significantly lower than the corresponding mean of controls ($P < 0.01$).

Serum LDL-c levels ranged 89.3-207.8, with a mean of 142 ± 31.6 mg/dl., which is significantly higher than the corresponding mean of controls ($P < 0.01$).

Serum Apo-A levels ranged 150 - 280 with a mean of 208.08 ± 54.73 mg./dl., which is significantly lower than the corresponding mean of cont ols ($P < 0.05$). The apo-B ranged 75.8 - 193.4 , with a mean of 135 ± 41.58 mg./dl., which is significantly higher than the corresponding mean of controls ($P < 0.02$).

The ratio T.C./HDL-c ranged 4.18 - 8.16, with a mean of 6.12 ± 1.14, which is significantly higher than the corresponding mean of controls ($P < 0.001$).

The ratio LDL-c/HDL-c ranged 2.25-5.14 , with a mean of 3.96 ± 0.96 , which is significantly higher than the corresponding mean of controls ($P < 0.02$).

The ratio Apo-A /Apo-B ranged 1.03-3.14 , with a mean of 1.65 ± 0.64 , which is significantly lower than the corresponding mean of controls ($P < 0.001$).

TABLE (11) : Shows serum lipids and apolipoproteins concentrations in obese subjects.

Serum triglycerides levels ranged 131-354.5, with a mean 241.32 ± 62.1 mg/dl., which is significantly higher than the corresponding mean of controls ($P < 0.001$).

Serum T.C. levels ranged 167-246, with a mean of 205.7 ± 28.19 mg/dl., which is significantly higher than the corresponding mean of control ($P < 0.02$).

Serum HDL-c levels ranged 24.1 -42.5, with a mean of 32.77 ± 5.48 mg/dl., which is significantly lower than the corresponding mean of controls ($P < 0.001$).

Serum LDL-c levels ranged 86-176.4, with a mean of 126.31 ± 29.39 mg/dl, which is significantly higher than the corresponding mean of controls ($P < 0.001$).

Serum Apo-A levels ranged 112.5-300.0 with a mean of 210.15 ± 55.90 mg/dl., which is significantly lower than the corresponding mean of control ($P < 0.05$).

Serum Apo-B levels ranged 90.6-158 ,with a mean of 124.2 ± 23.96 mg/dl., which is significantly higher than the corresponding mean of controls ($P < 0.01$).

The ratio T.C/HDL-c ranged 5.12-7.88,with a mean of 6.37 ± 0.99, which is significantly higher than the corresponding mean of controls ($P < 0.001$). The ratio LDL-c/HDL-c levels ranged 2.81-5.2, with a mean of 3.89± 0.81 , which is significantly higher than the corresponding mean of controls ($P < 0.001$). The ratio Apo-A/Apo-B levels ranged 1.32 - 2.11 , with a mean of 1.68 ± 0.26 , which is significantly lower than the corresponding mean of controls ($P < 0.001$).