

## Nutritional improvements with aerobic physical activities for healthy weight

**Bekhouche Brahim**

university batna -2- (Algeria), [brahim7265@gmail.com](mailto:brahim7265@gmail.com)

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### **Abstract:**

The study aims to regulate the right dietary habits while programming classes for aerobic physical activities. This is to obtain a healthy weight. The experimental curriculum was used on a woman chosen in the intended way. In our results, we relied on laboratory tests and physical measurements.

The most important results obtained were the effect of correct dietary habits accompanied by quotas for aerobic physical activities in weight improvement and healthy weight acquisition.

**Keywords:** Dietary habits , Aerobic physical activities , healthy weight

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**BEKHOUCHE BRAHIM**

### **Introduction :**

Physical and mental health is one of the most important things that a person seeks to achieve in his life, and dietary habits and physical activities play an important role in achieving these goals. They significantly affect access to and maintenance of healthy weight and thus help prevent chronic diseases associated with nutrition and lifestyle.

In recent decades, the world has seen high rates of obesity and excess weight, and this phenomenon is one of the greatest health problems facing today's societies. Although there are several reasons for weight gain, the identification of healthy dietary habits and appropriate physical activities can help in obtaining healthy weight.

Scientific research shows that there are several factors that affect healthy weight, including healthy dietary habits and daily physical activities. For example, studies suggest that eating foods rich in fibre, proteins and healthy fatty acids, Reducing the intake of high calorie foods and saturated fat can help achieve and maintain healthy weight, A study by the National Institute of Public Health revealed the increased risk of deaths due to high cholesterol among a wide range of Algerians due to diet, lack of mobility and long-term television, Causing 51% of citizens to become obese , which specialists placed in the department of chronic diseases to combat . The study announced by the Algerian Society of Cardiology on the occasion of its annual conference was based on 66% of women living with obesity and increasing cholesterol. (Mansuri, 2015, p. 195)

From this point of view, regular physical activities help increase calorie burning and reduce body fat accumulation, thereby achieving healthy weight as dietary habits directly affect body weight. Which prompted us to build the article that aims at the impact of correct dietary habits accompanied by aerobic physical activities in improving and obtaining healthy weight.

### **General questions :**

Are programmes to modify food behaviours accompanied by aerobic physical activities affected by a woman's improved health weight.

### **Sub-questions:**

-Are there statistically significant differences between tribal and dimensional measurement of the BMI and in favour of dimensional measurement as a result of the application of the dietary behavioral modification program accompanied by aerobic physical abrasions?

-Are there statistically significant differences between tribal and dimensional measurement of body fat ratio and in favour of dimensional measurement of n as a result of the application of the dietary behavioral modification program accompanied by aerobic physical abrasions?

-Are there statistically significant differences between tribal and dimensional measurement of certain oceans (abdominal surroundings, waistlines, humerus surroundings, throat surroundings, thickness surroundings) and in favour of dimensional measurement as a result of the application of the nutritional behavioral modification program accompanied by aerobic physical activities?

-Are there statistically significant differences between tribal and dimensional measurements of certain biological measurements (Low-density lipoproteins LDL, high-density lipoproteins, HDL)

and in favour of dimensional measurement that counts triglycerides as a result of the application of the nutritional behavioural modification program accompanied by aerobic activity exercises?

**Research hypotheses:**

**General hypotheses:**

The nutritional behavioural adjustment programme, accompanied by aerobic physical activities, has an impact on improving women's healthy weight.

**Partial hypotheses:**

-There are statistically significant differences between tribal measurement and BMI dimensional measurement in favour of dimensional measurement as a result of the application of the dietary behavior modification program accompanied by aerobic abrasions .

- There are statistically significant differences between tribal and postmetric measurement of body fat and for the benefit of the dimensional measurement of n as a result of the application of the dietary behavior modification program accompanied by aerobic abrasions .

- There are statistically significant differences between tribal measurement and dimensions of certain oceans (abdominal circumference, waistline, humerus circumference, throat circumference, thickness circumference) and for dimensional measurement as a result of the application of the nutritional behaviour modification programme accompanied by aerophysical activities .

- There are statistically significant differences between tribal and dimensional measurements of certain biological measurements (low-density lipoproteins LDL, high-density lipoproteins, HDL) and for dimensional measurement calculating triglycerides as a result of the application of the accompanied dietary behavior modification programme .

**Identification of research concepts and terminology:**

**Procedural definition of food behaviors :**

is the way a person takes a negative or positive daily diet.

**Procedural definition of physical measurements:**

These are the functional indicators of the human body that appear through measurement by using different measurement methods to express the general state of the body's response or one of its organs as a result of the condition or behaviour of an individual, such as measurement of blood sugar, pulse rate and blood pressure.

**Procedural definition of biometrics:**

It is a laboratory test used to measure the level of the nutrient in the blood.

**Procedural definition of aerobic exercises:**

We mean all the programming of a stakes for trot, running and cycling.

### Previous and similar studies:

**Zayani Zakaria (2021): Lifestyle and its relationship to weight gain and obesity, comparative study between two samples of young people, practitioners of food training programmes and non-practitioners .**

with overweight and obesity through a comparison between two samples of young people ‘who practice nutritional training programs and non-practitioners ‘and to know the degrees of body mass indexes from the normal weight of obesity ‘The study sample included (164) young people from the city of El-Bayadh who were selected in a simple random way ‘divided into a group practicing the nutritional training programs with a normal weight and a group with overweight. social ‘dietary pattern ‘level of physical activity) and body mass index ‘The results of the study revealed that there are statistically significant differences in lifestyle (social data ‘dietary habits ‘level of physical activity) and obesity between practitioners of nutritional training programs and non-practicing youth . Article in Algerian Journal of Research and Studies in Volume 4 Issue 4, page 518 to 499 .

**Zayani zakaria , several ghouls , El arabi muhammad (2021) Response of blood lipids (hdl-ldl-triglycerides) to a ketogenic diet combined with high-intensity exercise for weight loss.**

The aim of the study is to know the effect of a ketogenic diet combined with high-intensity exercise on weight loss and blood lipid responses (HDL-LDL-Triglycerides), and a case study approach was used due to the nature of the study, The study sample is represented in one member of the Bears Gym in El-Egg City, on which a ketogenic diet was applied for more than three months, and to collect data, a tool (Inbody 230) was used to measure body composition, and medical slides were taken to measure ketone levels in a sample. search, Medical analyzes were also used to measure blood fats (HDL-LDL-Triglycerides), One of the most important results of this study is that the ketogenic diet associated with high-intensity exercises contributes to the reduction of fat mass, and this was reflected in the responses of blood lipids, where high total cholesterol, low-density lipoprotein (HDL) and high-density lipoprotein (LDL) were found. Low levels of triglycerides (triglycerides )Article in Challenge Magazine Volum. 13, issue. 2, page 178 to 159 .

### The research curriculum and its field procedures:

#### User Approach:

The semi-experimental approach was based.

#### Community and sample research:

#### Research Community:

The original research community is an overweight female teacher aged 56-58 in the municipality of Mila .

#### Sample Search:

The sample was selected in the intentional way. The aim of the selection was to control the diet and daily continuous follow-up. The sample was also selected in the intentional way to easily communicate with it and easy to control the timing of aerial activities.

One parameter was selected to provide features and the sample is considered close to facilitate the search process..

### **Search Variables:**

**Independent variable:** improvements in nutritional behaviors and aerobic physical activities.

**Dependent variable:** healthy weight.

### **Survey:**

The researcher conducted an exploratory experiment on one individual where he was selected from the research community that was excluded from the basic experiment and consisted in measurements of physical composition.

On 16 January 2021, the same measurements on the same reconnaissance sample were reinstated on the date of 17 January 2021 with the same tools being used.

### **Second Survey:**

The second survey was conducted on 5 February 2021 on the same first survey sample by applying a unit of the Food Behavioral Modification Program and a unit of aerobic activities to identify:

- Ensure the validity of the program.
- Identifying the difficulties the researcher finds facing the sample.
- Identification of security and safety factors during aerial activities

### **7 . Search Tools:**

Sources, references and also previous studies (study reference list)

#### **- devices used in the study:**

- Restameter, Medical Balance, Measuring Device, Skin Folds Thickness Measuring Device.
- a medical balance.
- medical devices for medical analysis.

#### **measurements and tests used in the study:**

**Physical measurements :** Weight, Length .

#### **Body mass indicator.**

**Ocean measurement :** Waist circumference - abdominal cortex - humerus circumference - thigh circumference - leg circumference

#### **Biometrics:**

**Hdl:** A blood cholesterol vector, sometimes called good cholesterol, is responsible for removing cholesterol from the blood and transporting it to where cholesterol is used there in the manufacture of bile juice.

**LDL:** A blood cholesterol vector, sometimes called bad cholesterol, is responsible for the transfer of cholesterol (whether produced from the body or coming from food). (Al-Hazza, 2009, p. 816)

**Triglycerides:** triglycerides represent the equivalent of 95% of body fat, consisting of glycerol with three fatty acids (free fatty acids), also called triglycerides, which are lipids that are considered necessary in reasonable quantities, but their increased concentration in the blood is associated with coronary heart disease, as they are an indicator of the residue of lipoproteins, triglycerides are consumed via food, and the body makes them in the liver from sugary substances, where their concentration increases significantly after eating. (Al-Hazza, 2009, p. 820)

**Cholesterol:** It is a fat-like substance that does not dissolve in water and is found in animal fats. The body also manufactures it and it is necessary for the body as it enters into the formation of cell walls. (Al-Hazza, 2009, p. 826)

### Food Program:

After conducting tribal measurements, an initial lunch programme was designed to achieve the study's objectives. And this is using references from books, previous studies, the Internet network and Tadhadha specialists. and after consulting the supervisor and taking the conciliator on a program distributed to arbitrators from inside and outside the country and relying on the experts' opinions, it was modified and designed in the final form.

Phase 1: Record dietary habits in 24 hours.

**Phase II:** Modify nutritional behaviors.

**Phase III:** Reduce the amount of food available within the first seven days while not exceeding the necessary calories.

**Phase IV:** Reduce calories taken during weeks (2,3,4,5,6, 7) 200 calories per week .

### Programme Aerobic Physical Activities:

The program was applied with aerobic exercises (trot, bicycle) and this continued throughout the program at an average of one hour a day.

The jog is done outdoors. Mother cycling at home.

Physical intensity between 40-60%.

### Scientific foundations of research tools:

**Honesty:** Honesty was used arbitrators and authenticity content

**Validated by the arbitrators:** The measurements and the programme were presented to a group of experts and specialists and were substantially satisfied with the programme's validity and approved measurements.

**Authenticity of content:** The training programme was presented to arbitrators on the appropriateness of the content of the program and the procedures followed, depending on the observations made by the experts.

**Stability:** Test ability to give the same analysis, considering laboratory medical analysis and physical measurements such as height and weight were not re-tested.

**Statistical means:**

Data processing by SPSS \_ 25

Exel 2007

**View and analyze research results:**

**Discussion of the first hypothesis of research:** There are statistically significant differences between tribal and adversarial measurement in favor of dimensional measurement as a result of the application of the dietary modification program accompanied by aerobic exercises.

**Table No. (01): Shows the computational average and standard weight deviation and body mass index:**

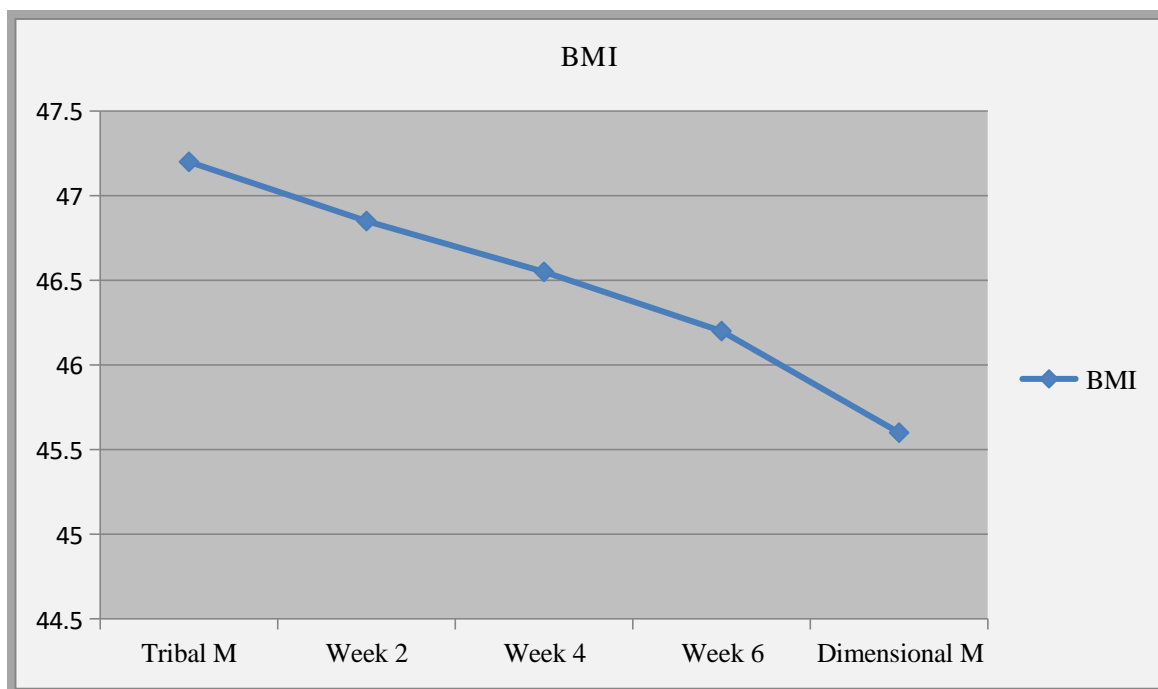
Telemetric	Week 6	Week 4	Week 2	Tribal measurement		
91.5	92.75	94.2	95.4	96	_X	Weight
3.53	3.60	4.52	5.09	5.65	sd	
33.77	34.26	34.81	35.25	35.86	_X	body mass index
1.65	1.60	1.96	2.18	2.93	sd	

**Through Table No. (01):** which shows us the results of the arithmetic average and the standard deviation of tribal and dimensional measurement accompanied by the sequential measurements of weight and body mass index.

The computational medium of the weight variable in tribal measurement is 96kg with a standard deviation (5.65). Two weeks after the application of the program, the computational average (95.4kg) with a standard deviation (5.09).

Likewise, the computational medium of the BMI variable in tribal measurement has reached (35.86 kg/cm<sup>2</sup>) and standard deviation (2.93) and two weeks after the application of the program became the arithmetic average (35.25kg/cm<sup>2</sup>) with standard deviation (2.18) and then in the fourth week it became the average (34. 81kg/cm<sup>2</sup>) with standard deviation (1.96) and in the sixth week (34. 26kg/cm<sup>2</sup>) with standard deviation (1.60) while the calculation medium in dimensional measurement (33. 77kg/cm<sup>2</sup>) with standard deviation (1.65). It has been observed that there is an improvement in weight level and body mass index and this is through continuous retention on the computational average.

We conclude that the state of the study has achieved a remarkable development in the drop in weight and thus in the decline in the index of body mass and therefore there are statistically significant differences between tribal and dimensional measurement.



**Figure No. (01): Shows the curve of modifications of the computational average of the body mass in terms of time**

There are statistically significant differences between tribal and dimensional measurement of the BMI and in favour of dimensional measurement as a result of the application of the dietary modification program accompanied by aerobic exercises .

**In the light of the second hypothesis:** there are statistically significant differences between tribal and infectious measurement in favour of dimensional measurement as a result of the application of the nutritional behavioural modification program accompanied by aerobic exercises .

**Table No. 02: Computational Average and Standard Deviation of Body Fat Ratio:**

		Tribal measurement	Week 2	Week 4	Week 6	Dimensional measurement
SKIN FOLDS	$\bar{X}$	%47.2	%46.85	%46.55	%46.2	%45.6
	sd	0.70	0.91	0.91	0.70	0.77

**Through Table No.:** (02) which shows us the results of the calculation average and the standard deviation of tribal and dimensional measurement the body fat ratio, as it shows that the computational medium of the body fat ratio in tribal measurement has reached (47.2%) with a standard deviation (0.70) and two weeks after the application of the program became the average computational (46.85%) with standard deviation (0.91) and then in the fourth week the average (46.55%) with standard deviation (0.91) and in the sixth week it was (46.2%) Benchmark deviation (0.70) while arithmetic medium in dimensional measurement (45.6%) reached standard deviation (0.77).

It has been noted that there is an improvement in the level of body fat and this is due to the continuous decline in computational average. From this point of view, we can conclude that the state of the study has achieved a remarkable development in the decrease in body fat and therefore



there are statistically significant differences between tribal measurement and dimensional measurement in body fat ratio.

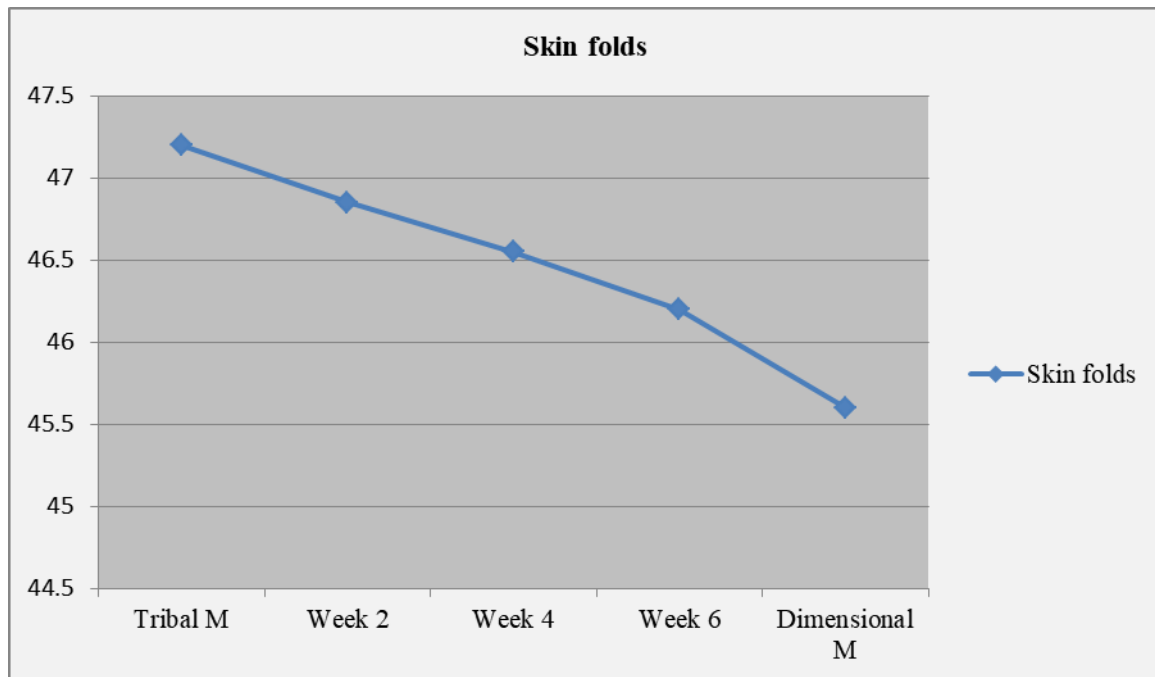


Figure No. (02): Shows the curve of average changes of body fat ratio by time.

We note through the curve that the average calculation of body fat percentage is gradually decreasing by an increase in time as the tribal measurement was 47.2% and two weeks after the application of the program began to decline by 46.85%. After the fourth week, the decrease increased by 46.55% and continued to decrease by 46.2% in the sixth week to 45.6%.

"There are statistically significant differences between tribal and dimensional measurement of body fat and in favour of dimensional measurement as a result of the application of the dietary behavioural modification programme accompanied by walking exercises."

The data obtained from the analysis of the results of the second hypothesis using the comparison between the calculation averages and the standard deviation of the fat ratio shown in table No. (02) which recorded differences between average fat ratio in tribal measurement and dimensional measurement in favor of dimensional measurement, which confirm the validity of the hypothesis and which shows a positive effect of the program of modifying dietary behaviors accompanied by walking of the research sample on fat decrease and this result is consistent with the majority of the results of studies.

The more body weight the more calories are lost in a given physical performance in the sense that if two heavier people than the other perform the same set of exercises for the same period of time, the heavier person will lose more calories due to that particular activity requires the heavier person to move the weightier organs and therefore more calories will be lost. (Chateh, 2004, p. 325)

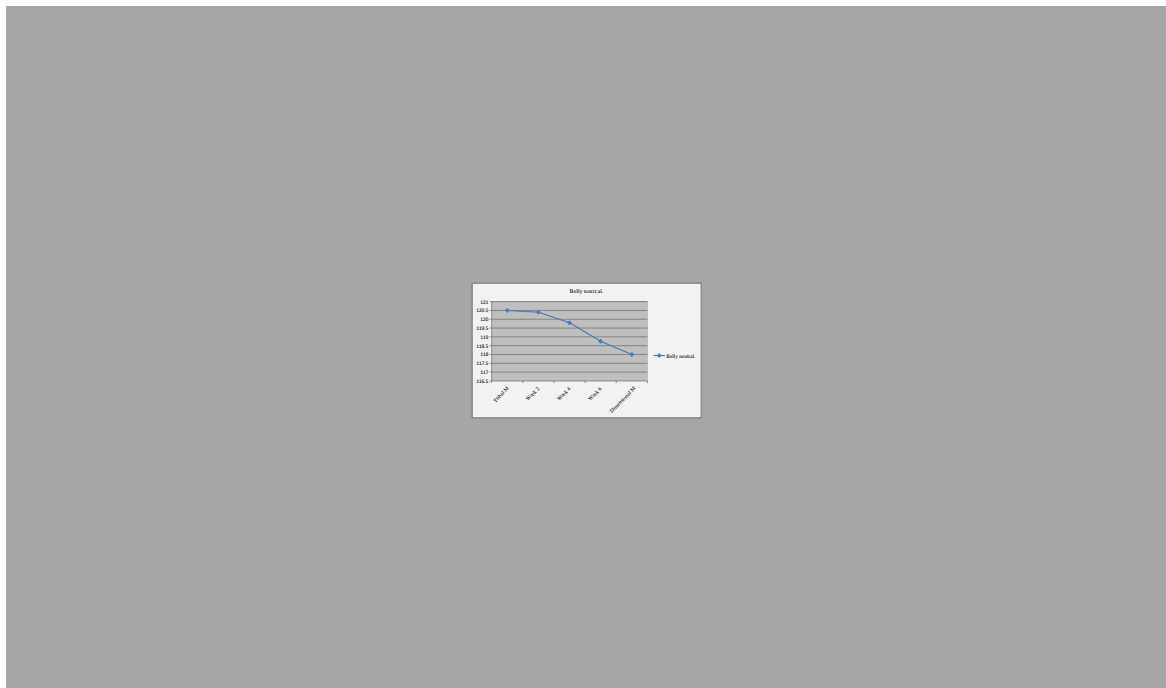
**In the light of the third hypothesis:** There are statistically significant differences between tribal and infectious measurement in favor of the dimensional measurement of certain meats as a result of the application of the nutritional behavioral modification program accompanied by walking exercises.

**Table No. 03: Computational average and standard abdominal deviation:**

		Tribal measurement	Week 2	Week 4	Week 6	Dimensional measurement
<b>Belly neutral.</b>	$\bar{X}$	120.5	120.4	119.8	118.75	118
	sd	6.36	6.50	6.78	6.64	6.07

**Through Table No.: (03)** which shows us the results of the computational average and standard deviation of the tribal and dimensional measurement of the abdominal ocean.

The computational medium of the abdominal ocean in tribal measurement is found to have reached 120.5cm by standard deviation (6.36). Two weeks after the application of the program, the computational average (120.4cm) by standard deviation (6.50).



**Figure No. (03): Shows the curve of average abdominal changes by time.**

We note through the curve that the average computational abdominal ocean gradually decreases by increasing time as it was in tribal measurement 120 .5cm and two weeks after the application of the program began to decline as 120 .4cm and after the fourth week the decrease increased as it became 119.8 cm and the decrease continued to be in the sixth week 118.75 cm and continued to fall to the end target of the program to 118cm.

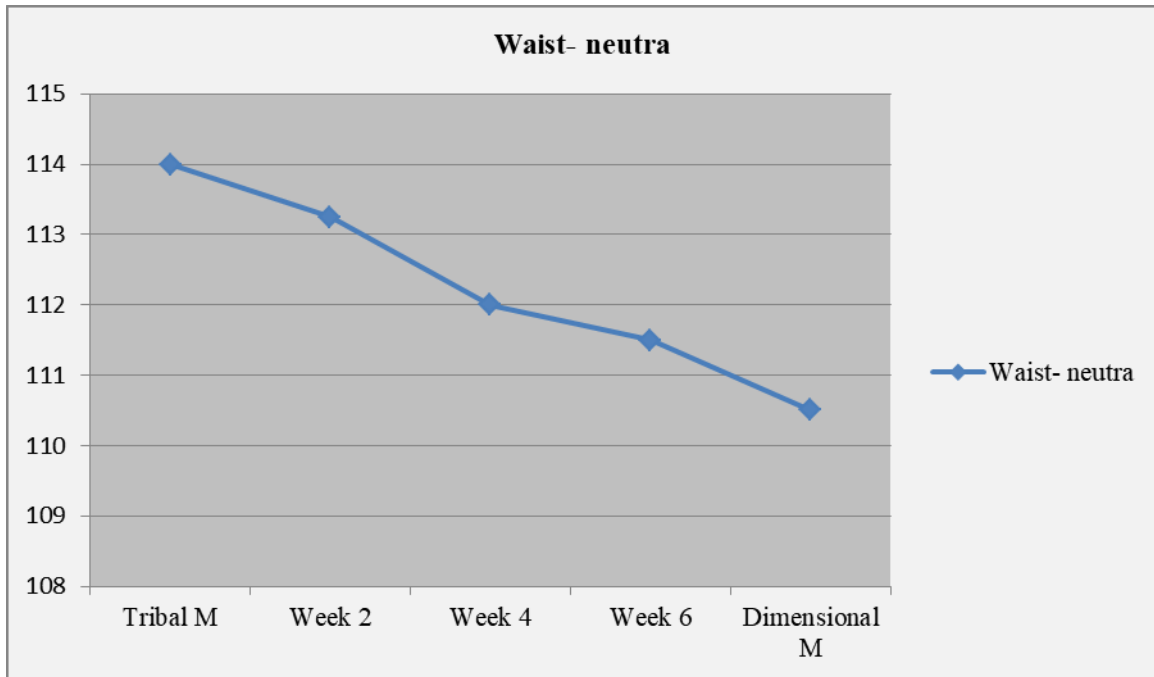
**Table No. 04: Computational average and standard waistline deviation:**

		Tribal measurement	Week 2	Week 4	Week 6	Dimensional measurement
<b>Waist-neutra:</b>	$\bar{X}$	114	113.25	112	111.5	110.5

	Sd	2.82	2.74	1.71	1.90	2.12
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**Through Table No. (04)** showing us the results of the arithmetic average and standard deviation of the tribal and dimensional measurement of the waist surroundings.

The computational medium of the tribal measurement periphery is found to have reached 114cm with a standard deviation (2.82). Two weeks after the application of the program, the computational average (113.25cm) with a standard deviation (2.74).



**Figure No. (04):** Shows the curve of average changes of waist surroundings by time.

We note through the curve that the average calculation of waist surroundings is gradually decreasing by an increase in time as the tribal measurement was 114cm and two weeks after the application of the program began to decline as 113.25cm and after the fourth week the decrease increased as it became 112cm and the decrease continued to become at the sixth week 111.5 cm and continued to fall to the end target of the program to 110.5cm.

**Table No. 05** shows the arithmetic average and standard deviation of the groin ocean

		Tribal measurement	Week 2	Week 4	Week 6	Dimensional measurement
Thigh neutral	X	71.5	71.05	70.45	68.6	68
	Sd	2.12	2.33	3.9	2.29	1.41

**Through Table No. (05)** which shows us the results of the arithmetic average and standard deviation of tribal and dimensional measurement accompanied by sequential measurements of the groin ocean.

The calculus of the hip ocean in tribal measurement is found to have reached 71.5cm with a standard deviation (2.12). Two weeks after the application of the programme, the calculative average (71.05cm) with a standard deviation (2.33).

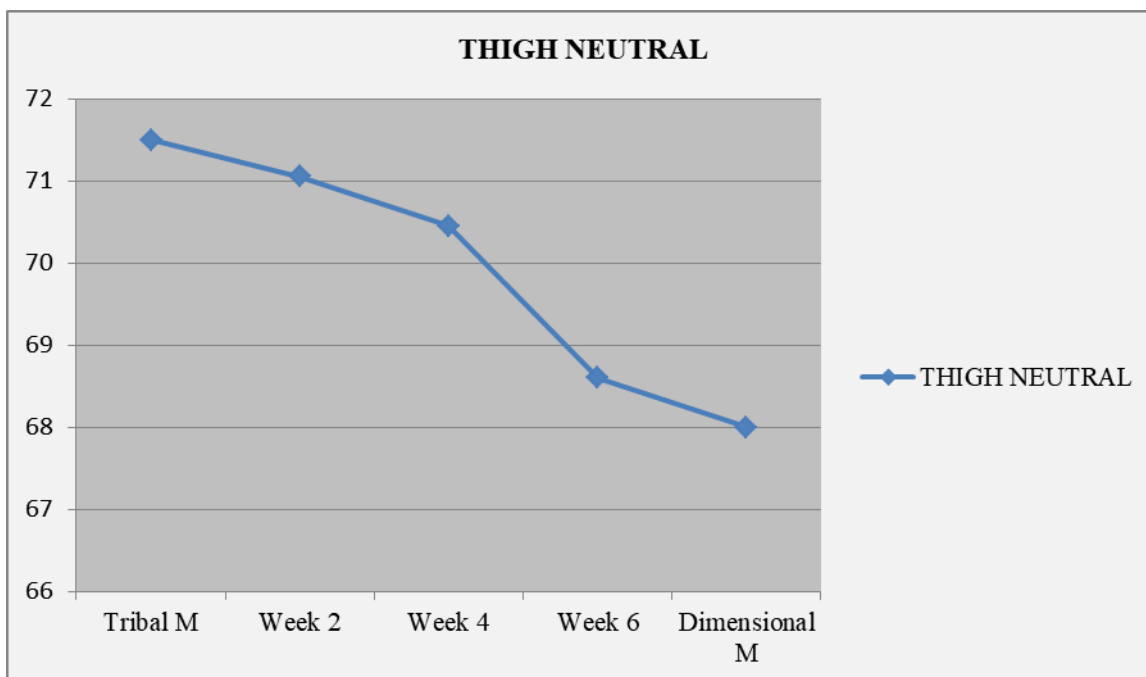


Figure No. (05): Shows the curve of average changes of thigh surroundings by time.

We note through the curve that the average calculation of the hip ocean is gradually decreasing by increasing time as it was in tribal measurement 71.5cm and two weeks after the application of the program began to decline as it became 71.05cm and after the fourth week the decrease increased as it became 70.45cm and the decrease continued to be in the sixth week 68.6 cm and continued to fall to the end target of the program to 68.8cm.

Table No. (06) shows the computational average and standard deviation of the Samanah Ocean.

		Tribal measurement	Week 2	Week 4	Week 6	Dimensional measurement
Peripheral obesity	X	41.5	41.25	40.65	39.85	39.50
	Sd	0.70	0.35	0.49	0.49	0.70

Through Table No. (06) showing us the results of the arithmetic average and standard deviation of tribal and dimensional measurement of the fatty ocean.

The calculus of the Samanah ocean in tribal measurement is shown to have reached (41.5cm) with a standard deviation (0.70). Two weeks after the application of the program, the arithmetic average (41.25cm) with a standard deviation (0.35). In the fourth week, the average (40.65cm) with a standard deviation (0.49) and in the sixth week was estimated at (39.85cm).

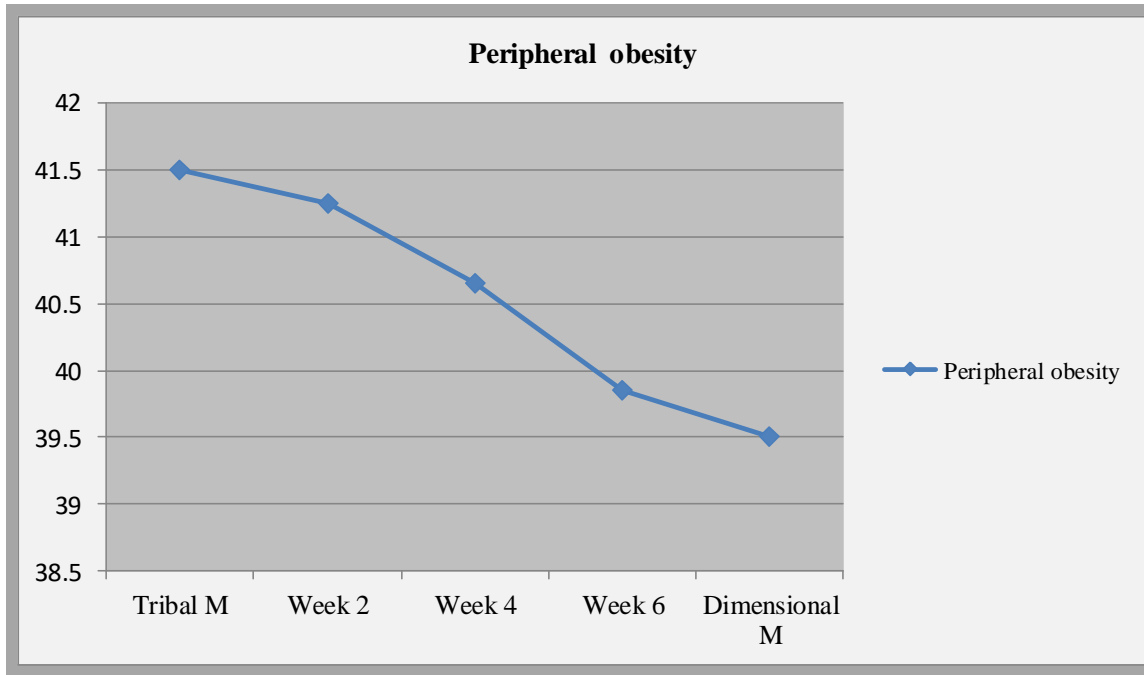


Figure No. (06): The curve of the average changes of the fatty ocean shows the significance of time.

We note through the curve that the average calculation of the hip ocean is gradually decreasing by increasing time as it was in tribal measurement 41.5 cm and two weeks after the application of the program began to decline as 41 .25cm and after the fourth week the decrease increased as it became 40.65cm and the decrease continued to be in the sixth week 39.85 cm and continued to fall to the end target of the program to 39 .50cm.

Table No. 07: Computational average and standard deviation of the humerus ocean show:

		Tribal measurement.	Week 2	Week 4	Week 6	Dimensional measurement
The perimeter of the humerus	X	39.5	38.9	38	37	37
	Sd	3.53	2.96	2.82	2.62	2.82

Through Table No. (07) showing us the results of the computational average and standard deviation of tribal and dimensional measurement of the humerus ocean. The calculus of the Samanah ocean in tribal measurement is found to have reached 39.5cm with a standard deviation (3.53). Two weeks after the application of the program, the calculation average (38.9cm) with a standard deviation (2.82).

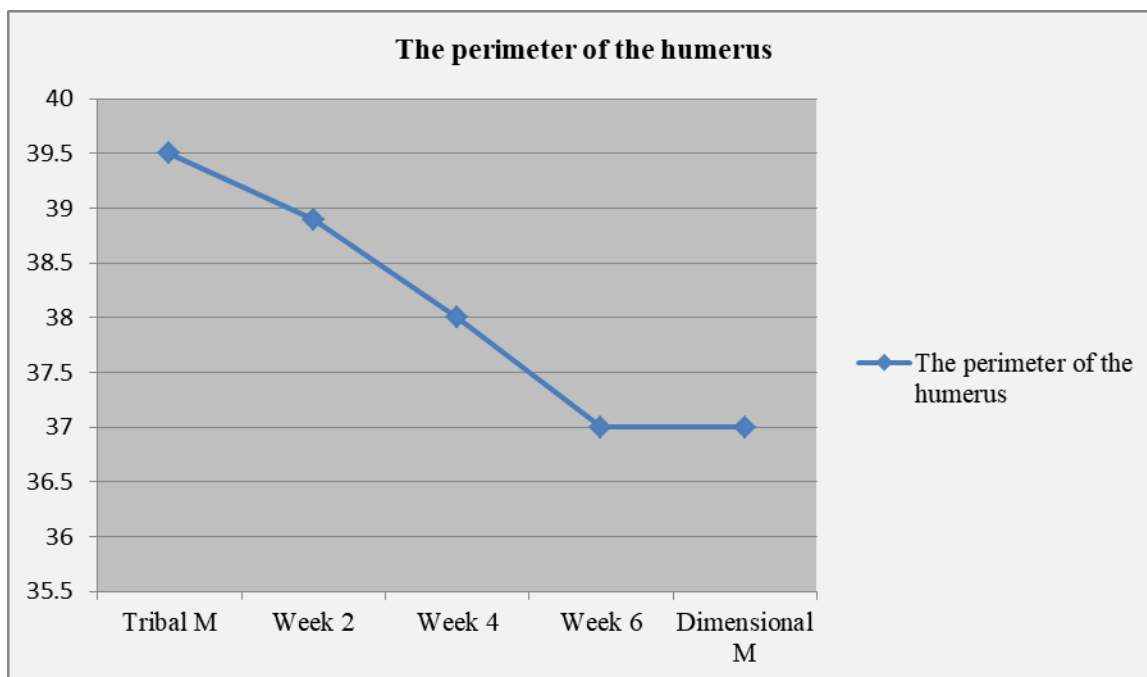


Figure No. (07): Shows the curve of moderate changes of the humerus ocean in the sense of time.

We note through the curve that the average calculation of the hip ocean is gradually decreasing by an increase in time as the tribal measurement was 39.5cm and two weeks after the application of the program began to decline by 39.85 and after the fourth week the decrease increased by 38cm and continued to decrease by 37 cm in the sixth week and continued to fall to the end target of the program to 37cm.

There are statistically significant differences between tribal and dimensional measurement of some of the body's oceans (Abdominal surroundings, waist, humerus, thigh, honesty) And in favour of dimensional measurement as a result of the application of the dietary behavioral adjustment program accompanied by walking exercises, the data obtained from the analysis of results for the third hypothesis using a comparison between computational averages and the standard deviation of certain oceans of the body (Abdominal circumference, waist, brachytherapy, thigh, thickness) and shown in Table No. (08, 09, 10, 11, 12)

which recorded differences between some of the body's oceans (abdominal surroundings, waist, humerus, throat, honesty) In tribal measurement and dimensional measurement in favor of the dimensional test, which confirms the validity of the hypothesis and which shows a positive effect of modifying the dietary behaviors accompanied by walking of the research sample on the loss of some of the body's oceans (abdominal circumference, waist, brachytherapy, thigh, fatty) This result is consistent with the majority of the results of studies where a study has found (Mohammed Jamal Ali, 2019) There are statistically significant differences between the two dimensional measurements of the control and experimental group in favour of the dimensional measurement of the experimental group in the variables under consideration (Weight, body mass index, middle/pelvic circumference) The researchers are due to the effectiveness of the qualifying program of the experimental group of objective fat fragmentation devices, diet and sports program. (Zarulu Ali and Mohammed Adnan Khalfouni 2018) There are statistically significant differences between tribal and dimensional measurements and for the benefit of dimensional measurements in ocean

measurement. In the researcher's view, this is due to the proposed food programme with training, which has led to differences in overall measurements. Accordingly, the proposed sports programme accompanied by a food programme was effective and the intake of calories that played a role in the weight reduction process was controlled, with the results obtained, it can be said that the proposed food training programme affects the reduction of grease and therefore a decrease in the body's oceans. Many studies have indicated that using low-calorie meals of 1,200 calories per day with outdoor exercise, as well as changing dietary habits and dietary patterns, leads to noticeable retention of weight, shortage of buttocks, waists and upper arms. (Dalimi, 2016, p. 34)

**In the light of the fourth hypothesis:** There are statistically significant differences between tribal and infectious measurement in favor of dimensional measurement as a result of the application of the dietary behavioral modification program accompanied by walking exercises. And to verify the validity of the hypothesis used .

**Table No. (08) shows the average computational and standard deviation of tribal and remote measurements of certain biological measurements**

	Tribal measurement.		Normal Level	Dimensional measurement	
	Sd	X		X	Sd
<b>TRIGLYCERIDES</b>	<b>0.46</b>	<b>1.53</b>	<b>Confined between: 0.40g/L-1.6g/l</b>	<b>1.45</b>	<b>0.63</b>
<b>CHOLESTEROL</b>	<b>0.33</b>	<b>2.17</b>	<b>Less than: 2.00g/l</b>	<b>1.87</b>	<b>0.07</b>
<b>HDL</b>	<b>4.24</b>	<b>43</b>	<b>Bigger than: 38mg/dl</b>	<b>47.5</b>	<b>4.94</b>
<b>LDL</b>	<b>12.2</b>	<b>148.5</b>	<b>Less than : 150mg/dl</b>	<b>104</b>	<b>4.94</b>

Through Table No. (08) showing the computes average and standard deviation of tribal and remote measurement of certain biological measurements compared to normal levels, we note that the average tribal measurement of triglyceride was (1.53g/l). (With standard deviation (0.46) and dimensional measurement as b (1.45g/l) with standard deviation (0.63) and after comparison between tribal and dimensional measurement, there was a decrease in triglyceride average after modification of dietary behaviours accompanied by physical activity, which means that there are statistically significant differences between tribal measurement results and dimensional measurement.

The computational average of tribal measurement of high-density HDL fat in the blood (43mg/dl) With standard deviation (4.04) and dimensional measurement as much as B (47.5mg/dl) with standard deviation (4.94), after comparison between tribal measurement and dimensional measurement, there was an improvement in the level of high-density lipids and became normal, after modification of the nutritional behaviors accompanied by physical activity, which means that

there are statistically significant differences between results for tribal measurement and measurement.

The computational average of tribal measurement of low-density lipids LDL in the blood (148.5mg/dl) With standard deviation (12.2) and dimensional measurement as high as 104mg/dl with standard deviation (4.94). After the comparison between tribal measurement and dimensional measurement, there was an improvement in the level of low-density fat and it became normal after modification of the nutritional behaviors accompanied by physical activity. This means that there are statistically significant differences between the results of tribal measurement and bypass

Calculated average tribal measurement of glucose in blood (1.12g/l) with standard deviation (0.62) and dimensional measurement as much as b (1.1g/l) with standard deviation (0.9) and after comparison between tribal and dimensional measurement, there was an improvement in glucose level and it became normal after modification of nutritional behaviors accompanied by physical activity (Walk) This means that there are statistically significant differences between the results for tribal measurement and dimensional measurement.

Calcular average of tribal cholesterol measurement (2.17g/l) with standard deviation (0.33) and dimensional measurement as B (1.87g/l) With standard deviation (0.07), after comparison between tribal measurement and dimensional measurement, there was a decrease in cholesterol level and became normal after modification of dietary behaviors accompanied by physical activity, which means that there are statistically significant differences between results for tribal measurement and dimensional measurement.

The results shown in table (13) when comparing both tribal and remote measurement revealed moral differences in the averages' values for both cholesterol levels, Low-density fat and high-density lipids and a level of triglycerides, on the other hand, the results showed that there was a noticeable statistical rise in the values of both high-density and triglyceride levels and a decrease in cholesterol and low fat.

"There are statistically significant differences between tribal and dimensional measurements of certain biological measurements (triglyceride low-density lipoproteins LDL high-density lipoproteins HDL) and in favour of dimensional measurement. As a result of the application of the dietary behavioral modification program accompanied by aerobic exercises.

The data obtained from the analysis of the fourth hypothesis results using a comparison between the averages and the standard deviation of certain biometrics (, triglyceride low-density lipoproteins LDL high-density lipoproteins HDL) Table 13 shows differences between certain biological measurements, low-density lipoproteins (LDL) and high-density lipoproteins (HDL). In tribal measurement and dimensional measurement in favor of dimensional measurement, which confirms the validity of the hypothesis and which shows a positive effect of the dietary modification program accompanied by walking of the research sample on modifying certain biometrics (, triglyceride low-density lipoproteins LDL high-density lipoproteins HDL) This result is consistent with the majority of the results of the studies where a study was found (Samir Mohamed Muhyiddin O'Shadi), which provides for statistically significant differences between tribal and dimensional measurement averages in biochemical variables, for the benefit of dimensional measurement averages of the individuals in question, where statistically significant differences between tribal and dimensional



measurements in biochemical variables for cholesterol dimensional measurement are found This improvement is due to the effect of aerobic mathematical training that lowers the concentration of cholesterol to a constant level and for low-density lipoproteins LDL there are statistically significant differences between tribal and dimensional measurements of research individuals in favor of dimensional measurement in low-density lipoproteins, where it has an improvement of 45.01%.

The researcher confirms that this improvement in these variables to the regularity of the sample ladies research in the proposed program (dietary-athletic) and that the air energy system that relies on glycogen and fat as an indirect source of energy. Also what he found (Zarulu Ali and Mohammed Adnan Khalfouni 2018)

It confirms the existence of statistically significant differences between tribal and dimensional measurements and in favour of remote measurements of physiological variables (cholesterol, triglyceride). In the researcher's view, this is due to the proposed food programme with training, which has led to differences in overall measurements. Therefore, the proposed and accompanying sports programme was effective and the intake calories that were involved in the weight reduction process were controlled, with the results obtained arguably affecting the reduction of physiological variables. (Cholesterol, triglyceride) Many studies have indicated that using low-calorie diets 1200 calories per day with outdoor exercise, In addition to changing dietary habits and dietary patterns, it leads to significant retention in weight, improvement in blood pressure, significant improvement in blood glucose level and normal body activity, and And many studies have shown that the use of high-fibre diets reduces body weight, fat and cholesterol in blood plasma. (Dolimi, 2016, p. 34) Low calories, a study published in the British Medical Journal showed that people who consume many snacks in addition to their daily meals have much lower cholesterol than those who eat fewer meals. Researchers have observed that eating continuously (frequent throughout the day) makes the body's insulin rates constant and these lead to lower cholesterol ratios when the body metabolizes foods.

The most effective means of weight loss is a double combination of organized workouts and useful diets.

One study of women indicated that food alone had a suitable result in weight reduction, but much of that lost weight resulted in a lack of some body tissue. The previous study showed that when the same women ran out of a fitness program that contained exercises, they lost the same weight, but the weight loss resulted from the loss of more body fat. All good physical exercises and healthy dietary habits can be useful in reaching the body's acceptable composition.

### **Conclusion:**

Studies show that obesity is seeing a dramatic rise, with about 1.9 billion adults worldwide, of whom 650 million are obese and 13% are obese, compared to 5 to 19 years old. The number of obese and overobese children is about 340 million. These are fictional figures. These are serious figures from the duty to undertake several studies on such topics, Ensure that nutritional behaviours are sensitized and participate in the various physical activities of all age groups. for example, lack of mobility or lack of physical activity and poor nutritional behaviour are direct causes of obesity.

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