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# EFFECTS OF DAILY WORKOUT ON AGILITY, FLEXIBILITY AND REDUCED THE WEIGHT AMONG THE IRAQIAN WOMEN

# HODA BADAWY<sup>1</sup>, GHUSOON NATIQ<sup>1</sup>

#### Abstract

*Purpose.* Core strength has been subject to research since the early 1980s. The research has highlighted the benefits of training these processes for people with back pain and for carrying out everyday activities. However, less research has been performed on the benefits of Daily workoutfor employed women. Hence, The research aims to identify the effective use of group exercises Daily workout) in develop my recipe agility and flexibility for non - practice of sports activity. and effective use of group exercises Daily workout) in Weight Loss Non practices for sports activity.

*Methods.* The sample contains (20) female from Iraq, work in establishes, all of them were fat women and practice table work (mean  $\pm$  SD, age 49  $\pm$  6.5 years High, 160.64  $\pm$  6.69 cm. Weight, 82.39  $\pm$ 2.82kg). Subjects were required to read and complete a health questionnaire that collected detailed that confirmed that there was no history of injuries, diabetes or recent surgery.

*Results.* In this study we revealed a statistically significant increase in Skinfold Measurements (Abdominal, Subscapular and Thigh) Sit and Reach Flexibility Test and Agility Shuttle Run Test in female group.

*Conclusions.* Finally, Daily workout for 10 weeks, resulted in an increase in physical variables (flexibility and agility) and skinfold test, and decreases the weight. These results have to be taken into account by women in order to better understand and implicated of these concepts in their daily life.

Key words: Daily workout, agility, employed women.

#### Introduction

Proved many of the studies that the practice of moderate physical activity at least on a regular basis helps an individual to maintain his physical and psychological well -being and to achieve ideal weight has On the other hand, the lack of practice of physical activity on a regular basis and comfort may contribute to exposing the individual to serious diseases that may affect the health of the individual is or another. As the relationship of physical activity with obesity correlation where influenced by each other shows through the mutual relationship between the energy consumed by food or low physical activity, or both upset the energy balance equation which leads to obesity.

Obesity is one of the common health problems associated with the non- exercise physical activity and is intended to obesity (over weight) any increase in weight and thus increase the percentage of fat in the body and collects in certain places may affect one way or another on the shape of the body and its movement has been seen by some to the disease being something simple may be seen others that he simply unacceptable view or distortion of the body and its beauty. But it may end up to very serious things and therefore we are not able to shut off. (Parshad, 2004).

So the researchers came to the use of physical activity (represented a group exercises to develop agility and flexibility)(Yoga exercises for weight loss) within the training curriculum is intended for a sample of the wives who practice Activities desktop is far from sports activity.

The importance of this research use of group exercises (Daily workout) in the development of agility, flexibility, and Weight Loss for non-practices of sports activity.

There is no doubt about that the regular practice of sports activity moderate severity at least a high fitness of the individual carries with it the positive effects great on various body functions and health benefits, the physical inactivity and stagnation for comfort driving to a number of negative effects on the health of the individual and society. (Van Puymbroeck, et al. 2007).

So, emerged from the research problem of argument prevailing ] obesity a disease of the times and agility demand for the fact that obesity a state of metabolic disorders occur when there is a difference to the balance between energy consumption and stored the body as well as the weight loss has become a necessity of life, but the research sample group of women who suffer from obesity and the office of the nature of their businesses and practice lackof Sport , which of us had to find a group of exercises intended to develop agility and flexibility and thus reduce weight throughpracticethose various exercises + private yoga exercises for weight loss.

Obesity is increased body weight for the normal limit as a result of the accumulation of fat in which this accumulation is the result of an imbalance between food intake and energy consumed in the body. Or is the cumulative increase in body fat for the missing



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consumption. Or is the increase in fatty substances in the body for a perfect border accepted. Where fatty substances accumulate under the skin and in various tissues and are on degrees which is not just a numerical increase in weight as it is affecting the appearance of human movement and activity and health in general.Or learn it for this pathological condition in which accumulate excess fat in the body to cause a degree in the occurrence of adverse effects on health , leading thus lower the average age of the individual and of falling increased health problems.

Obesity can be divided according to their distribution in the body to:

**General obesity:** - is the product of the fat to accumulate in various areas of the body and internal virtual resulting in inconsistency in shape with weight gain.

**Topical Obesity:** - a specific cluster of fat in certain areas of the body varies depending on race, sex, genetic and environmental factors.

And concentrated these lipid gatherings when women in the hip, buttocks, thighs and the lower abdomen and arms.

There are two types of obesity:

The first type: - show obesity in middle age is caused due to an increase in the size of the fat cells and this can be cured proper nutrition and increased sports activities.

Type II: - Obesity talked since childhood and continues to be treated often harder than the first type because of the increased number of fat cells in the body which cannot be disposed of in old age through diet and physical activity, but may need surgical interventions.

Often produces obesity more excess calories with the lack of movement and others as.

- Lack of activity and movement
- Style food
- Psychological factors
- Breach of the endocrine glands

Relationship of physical activity with obesity is correlated with affected each other, As has the physical activity since antiquity a clear role and important in the equation of equilibrium energy as the increase in energy consumed through food or low physical activity, or both prejudice equation balancing energy which leads to obesitywhichaffect a negative impact on fitness, which in turn react negatively and offered with physical activity.

The distribution of fat in a woman's body in multiple places where this distribution is normal " and healthy " When the weight naturally " as the fat involved in many important functions, but when they exceed the normal limit as these increase and clear in the body from the outside in areas clear under skin and grease usually distributed in areas of the hip, buttocks, abdomen, arms, and it is possible to focus on the chin and knees. (Hagins, et al. 2007).

The collected grease in the regions of the chest and abdomen of the most dangerous areas gathered grease being help in the incidence of many diseases, especially diabetes where to collect fat in the abdominal area directly contribute to the reduction or loss of activity and the sensitivity of the work of the enzyme leads to the occurrence of diabetes.

And prevention methods to get rid of grease and excess weight:

- Diet
- Aerobic exercise include- :
- I. aerobics exercises
- II. walking and jogging
- III. Pilates exercises
- Sports equipment for Weight Loss
- Medical drugs
- Use Clothing Slimming
- Bariatric (weight loss surgery)

Work out in a quiet and spacious location (music is okay). Work toward improvement in every exercise that you do, otherwise it is not worth doing. Stretching, jumps and tumbling drills must be practiced every day! Develop a plan for cardiovascular and strength training that will work for you. Bolded items are new!

#### STRECH OUT

It is important that all exercises and weight training is preceded by a full stretch out. Injuries occur without thorough stretching. Additionally, cheerleading and tumbling required flexibility. Hold each stretch for 30 seconds to the point of slight burning. Do not bounce. Work towards increased flexibility with each stretch out.

The research aims to identify the effective use of group exercises (Daily workout) in develop my recipe agility and flexibility for non - practice of sports activity. and effective use of group exercises Daily workout) in Weight Loss Non practices for sports activity.

#### Material and Methods: Subjects:

The sample contains (20) female from Iraq, work in establishes, all of them were fat women and practice table work (mean  $\pm$  SD, age 49  $\pm$  6.5 years High, 160.64  $\pm$  6.69 cm. Weight, 82.39  $\pm$ 2.82kg). Subjects were required to read and complete a health questionnaire that collected detailed that confirmed that there was no history of injuries, diabetes or recent surgery.

## Daily workout routine:

This is a 7-day routine, for general fitness, which is suitable for any female that has never lifted a weight before; it is in fact the routine that I began with, having never lifted a weight. It is also very practical for those not wishing to go to a gym, because all the exercises can be performed at home, with a few



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pieces of equipment; all of the equipment will be based around your own level of strength.

The plan:

- Day 1: Weight Routine A
- Day 2: Cardio 45 minutes

Day 3: Weight Routine B

- Day 4: Cardio 45 minutes
- Day 5: Weight Routine C

Day 6: Cardio 45 minutes

Day 7: A 60 minute walk/cycle ride (at a good pace, based on your current fitness level)

The routine has been set out as Day1 through to Day 7, because it is important to realize that you can start the plan on the best day to suit your own schedule; for some, Saturday is the best day for day 7, for others it will be Sunday or maybe even Thursday. Because Day 7 is the only session that you need to do outdoors, even though you can also do this indoors as well, try to place day 7 at the most convenient time in your weekly schedule for you to be outdoors; so, if you place Day 7 on a Wednesday, then Day 1 will be a Thursday because it is the day that immediately follows it and because this is a 7-Day routine.

## Procedures

Subjects were assessed before and after a 10week training program Tests followed a general warmup that consisted of running, calisthenics, and stretching.

## **Skinfold Measurement**

Taking skinfold measurement is a common method for determining body fat composition. Accurate measurement technique is important. Here is the standard technique that is used. You should read this information in conjunction with the description of each of the standard measurement sites.

equipment: skinfold calipers, tape measure

#### **Procedure:**

Estimation of body fat by skinfold thickness measurement. Measurement can use from 3 to 9 different standard anatomical sites around the body. The right side is usually only measured (for consistency). The tester pinches the skin at the appropriate site to raise a double layer of skin and the underlying adipose tissue, but not the muscle. The calipers are then applied 1 cm below and at right angles to the pinch, and a reading in millimeters (mm) taken two seconds later. The mean of two measurements should be taken. If the two measurements differ greatly, a third should then be done, then the median value taken.

## **Skinfold Measurement Sites**

There are three sites around the human body at which the skinfold pinch can be taken. The most common sites are featured below, with some of the less common and outdated sites also listed. Whenever skinfold measure taken, it is important for accuracy to find the correct location to take the skinfold pinch, and therefore the correct anatomical terms are used to describe the landmarks. The caliper is applied 1 cm below and at right angles to the pinch.

## Abdominal Skinfold

The abdominal skinfold site is one of the common locations used for the assessment of body fat using skinfold caliper.



#### Subscapular Skinfold

The subscapular skinfold site is one of the common locations used for the assessment of body fat using skinfold calipers.



#### **Thigh Skinfolds**

The anterior thigh skinfold site (also called the front thigh or mid-thigh) is one of the common locations used for the assessment of body fat using skinfold calipers. Less commonly the posterior thigh site is used, and another site on the leg is the patella or knee cap site (details below).



Sit and Reach Flexibility Test

The sit and reach test is a common measure of flexibility, and specifically measures the flexibility of the lower back and hamstring muscles. This test is important as because tightness in this area is implicated in lumbar lordosis, forward pelvic tilt and lower back pain. This test was first described by Wells and Dillon (1952) and is now widely used as a general test of flexibility.



**Equipment required:** sit and reach box (or alternatively a ruler can be used, and a step or box)

**Procedure:** This test involves sitting on the floor with legs stretched out straight ahead. Shoes should be removed. The soles of the feet are placed flat against the box. Both knees should be locked and pressed flat to the floor - the tester may assist by holding them down. With the palms facing downwards,



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and the hands on top of each other or side by side, the subject reaches forward along the measuring line as far as possible. Ensure that the hands remain at the same level, not one reaching further forward than the other. After some practice reaches, the subject reaches out and holds that position for a one-two seconds while the distance is recorded. Make sure there are no jerky movements.

**Scoring:** The score is recorded to the nearest centimeter or half inch as the distance reached by the hand. Some test versions use the level of the feet as the zero mark, while others have the zero mark 9 inches before the feet. There is also the modified sit and reach test which adjusts the zero mark depending on the arm and leg length of the subject. The table below gives you a general guide for expected scores (in cm and inches) for adults using zero at the level of the feet (otherwise add 23cm or nine inches).

#### **Agility Shuttle Run Test**

This test describes the procedure as used in the President's Challenge Fitness Awards. The variations listed below give other ways to also perform this test.

**Purpose:** this is a test of speed and agility, which is important in many sports.

**Equipment required**. Woodenblocks, marker cones, measurement tape, stopwatch, non-slip surface.

**Procedure:** This test requires the person to run back and forth between two parallel lines as fast as

possible. Set up two lines of cones 30 feet apart or use line markings, and place two blocks of wood or a similar object behind one of the lines. Starting at the line opposite the blocks, on the signal "Ready? Go!" the participant runs to the other line, picks up a block and returns to place it behind the starting line, then returns to pick up the second block, then runs with it back across the line.



## **Statistical Analysis**

All statistical analyses were calculated by the SPSS statistical package. The results are reported as means and standard deviations (SD). Differences between pre and posttests were reported as mean difference  $\pm 95\%$  confidence intervals (mean diff  $\pm 95\%$  CI). Student's t-test for dependent samples was used to determine the differences in fitness parameters between the pre and posttests. The P<0.05 was considered as statistically significant.

#### **Results.**

Table 1. The differences in Skinfold Measurements and physical tests in the experimental group.

Experimental		T sign
Pre	Post	
44.17± 2.60	38.22±5.81	Sign
39.92±2.75	35.81±1.93	Sign
47.33±4.21	41.57±2.55	Sign
82.39 ±2.82	77.64 ± 2.13	Sign
•	· · ·	
14.08±0.79	$15.73 \pm 0.40$	Sign
9.75±0.41	8.34±0.76	Sign
	44.17± 2.60 39.92±2.75 47.33±4.21 82.39 ±2.82 14.08±0.79	$44.17 \pm 2.60$ $38.22 \pm 5.81$ $39.92 \pm 2.75$ $35.81 \pm 1.93$ $47.33 \pm 4.21$ $41.57 \pm 2.55$ $82.39 \pm 2.82$ $77.64 \pm 2.13$ $14.08 \pm 0.79$ $15.73 \pm 0.40$

The T score showed significant differences in all variables between the pre and post-training for the experimental group. ( $P \le 0.05$ )

#### Discussion.

The hypothesis of the present study was daily workout improves flexibility, agility and body composition. In this study we revealed a statistically significant increase in Skinfold Measurements (Abdominal, Subscapularand Thigh) Sit and Reach Flexibility Test and Agility Shuttle Run Test in female group. The physiologic responses to daily workout and yogic practices have been well studied (O'Sullivan, Bell, 2000). Yoga training is associated with improvement of flexibility and agility (Madanmohan, et al. 1992). Earlier studies also noted a statistically significant increase in flexibility and agility with 8 weeks of yoga practice in informal caregivers; as evaluated by chair stand test (Van Puymbroeck, et al. 2007) Similar results were found by the other researchers with yoga practice (Parshad , 2004; Tran, et al. 2001).





During daily workout, muscles of the entire body experience stretch and pressure alternately and therefore it is said to give more benefits in short duration of time (Unkule, 2004; Kirkwood, et al. 2005). Many of its exercise build flexibility because they require sustained contractions of many muscle groups of the entire body, which is comparable to resistance training (Campbell, et al. 1994). In the present study, more improvement is observed in flexibility and agility of upper body.

The Daily Workout gives more motivated and feeling great to stick with it.

Agility depends on skeletal muscle characteristics, oxygen uptake, its circulation and utilization. Performing yoga as a compound of Daily Workout is similar to aerobic exercise as it involves static stretching and slow dynamic component with optimal stress on cardio-respiratory system (Sinha, et al. 2004). Incorporating yoga session contributes to significantly intense physical activity to improve cardio-respiratory fitness in unfit or sedentary individuals (Hagins, et al. 2007). Yogic practices increase oxygen uptake, which correlated with agility (Parshad, 2004). With increase in these parameters, Daily Workout practice leads to improvement in agility.

In the present study, Daily Workout practice has led to decrease in body weight and% body fat and increase in% lean body mass. Daily Workout practices lead to increase in energy expenditure resulting in statistically significant changes in body composition (Sahay, 2007; Bera, Rajapurkar, 1993). Practice of only hatha yoga for 30 min a day increased MET to 2.5 in females. (MET is multiple of resting metabolic rate. 1 MET= oxygen uptake of 3.5 ml/kg/min) But inclusion of sun salutation in the session increased the MET to 3.74 (C. Clay, et al. 2005). Thus yoga incorporates a significant aerobic component to the yoga activity. This fact is reflected in the change of body weight and body fat percent. However, the changes in% body fat were statistically significant in females.

## Conclusions.

Finally, Daily workout for 10 weeks, resulted in an increase in physical variables (flexibility and agility) and skinfold test, and decreases the weight .These results have to be taken into account by women in order to better understand and implicated of these concepts in their daily life.

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