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Effect of Functional Training and TRX Suspension Training on Body Composition member Golden Fitness and Spa

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***Abstract*- Effect of Functional Training and TRX Suspension Training on Body Composition member Golden Fitness and Spa of Tanjung Morawa. The purpose of this research is to know the effect of Functional Training and TRX Suspension Training on Body Composition. This research was conducted on member of Golden Fitness and Spa of Tanjung Morawa then treatment location located at golden fitness and spa Tanjung Morawa with sample number 20 member woman. This research uses purposive sample and using matching by pairing technique and treatment by level 2 x 1. Data collection technique in this research using body composition sheet using machine TANITA DC-360. Data analysis techniques use t-test statistical procedures. The results of this study indicate that (1) there is an effect of Functional Training exercise on Body Composition on the golden fitness and spa of Tanjung Morawa member, (2) there is the effect of TRX Suspension Training exercise on Body Composition in golden fitness and spa Tanjung Morawa member, (3) the difference between Functional Training with TRX Suspension Training, (4) the most influential exercise between training Functional Training with TRX Suspension Training on Body Composition at Golden Fitness and spa Tanjung Morawa member.**

Keywords: Functional Training, TRX Suspension Training, Body Composition

I. INTRODUCTION

Quoted from INFODATIN Ministry of Health data center of the Republic of Indonesia every year more than 36 million people die from non-communicable diseases, 63% of all deaths in Indonesia. More than 9 million deaths caused by non-communicable diseases occur before the age of 60, and 90% of these deaths occur in low- and middle-income countries. Globally the number one cause of death every year is cardiovascular disease. Cardiovascular disease is a disease caused by heart and blood vessel dysfunction, such as coronary heart disease, heart failure or heart failure, hypertension and stroke.

INFODATIN (2014: 2) in 2008 an estimated 17.3 million deaths were caused by cardiovascular disease and more than 3 million deaths occurred before the age of 60 years which should have been prevented. Deaths caused by heart disease occur in the range of 4% in high-income countries up to 42% in low-income countries. Hypertension complication causes around 9.4 deaths worldwide every year. Hypertension causes at least 45% of deaths due to heart disease and 51% of deaths due to stroke. Deaths caused by cardiovascular disease, especially coronary heart disease and stroke are expected to continue to increase to 23.3 million deaths by 2030.

Quoted from the Bulletin of Health Data and Information Window, Volume 2, semester II, (2012: 1) non-communicable diseases are the main cause of death globally. WHO 'WHO data shows that of the 57 million deaths that occurred in the world in 2008, as many as 36 million or nearly two-thirds were caused by non-communicable diseases. According to the World Health Organization (WHO), deaths from non-communicable diseases are expected to continue to increase throughout the world, the biggest increase will occur in middle and poor countries. More than two thirds (70%) of the global population will die from non-communicable diseases such as cancer, heart disease, stroke and diabetes. In total, it is predicted that in 2030 there will be 52 million deaths per year due to non-communicable diseases, up 9 million from 38 million at present.

Data from Riskesdas (2013) shows that many Indonesians lack physical activity. A diet that is less healthy habits of eating foods that are high in calories, salt, saturated fat and sugar, and low in fiber can also cause an increase in excess body weight, thus increasing the risk of diabetes. Riskesdas (2013) also mentions that less than 10% of Indonesians consume fiber. This indicates that Indonesian people still consume a lot of unhealthy food.

RI INPRES NO. 1 concerning healthy living community movements (2017: 1) " establishes policies and takes steps in accordance with their respective duties, functions and authorities to realize healthy living community movements, through: 1. Increased physical activity, 2. Increased healthy life behavior ". At this time the community needs sports facilities and infrastructure, where the limited land and sports facilities provided are very limited. This is also stated in the RI INPRES NO. 1 concerning healthy living communities (2017: 2) '' Minister of Youth and Sports to improve the campaign to love exercise, facilitate the organization.

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The fitness center is also known as a fitness club, fitness center, health spa, commonly referred to as a gym which is a place that holds sports equipment for physical training purposes, has facilities and services such as the main training area consisting of free weights area including dumbbells, barbells, treadmills, cross trainer, static cycle, functional training, TRX suspension training and also studio group exercise classes. Other facilities are personal trainers, where the management of the fitness center employs personal trainers who can provide advice on nutrition, health training and consultation, and help design appropriate and appropriate training programs for each member. Body composition is the body composition of a person where there are five indicators in it: 1. Fat percentage, 2. Body mass index, 3. Visceral fat ranges, 4. Muscle mass, 5. Basal metabolic rate. Body composition itself becomes a barometer member to get fitness goals.

Golden Fitness and Spa itself provides two types of exercises to influence the members' body composition, namely functional training and TRX suspension training. Functional training is an exercise that utilizes its own weight and movements that are adapted to the program without being obstructed by tools or places and is expected to affect the body composition quickly. While TRX suspension training itself is an exercise that uses TRX tools and by utilizing weight and slope.

II. DISCUSSION

A. Body Composition

Wells and Fewtrell (2006: 612) 'aspects of the body composition, in particular the fat and the amount and composition of lean mass, are now understood to be important health.' Some aspects of body composition, especially the number and distribution of body fat and lean body mass, are now understood as an important barometer for health. Wells and Fewtrell (2006: 613) composition body composition and growth are key components of health in both individuals and populations. The ongoing epidemic of obesity in children and adults has highlighted the importance of body fat for short term and long term health. Body composition and body growth are key components of health, the ongoing obesity epidemic in children and adults has highlighted the importance of body fat in short-term health and long-term health.

Fornetti et al (1999: 1114) knowledge 'knowledge of body composition is also important in helping medical personnel in their constant surveillance of the athlete's physical and mental health.' Knowledge of body composition is also important in assisting medical personnel in constant supervision of the physical and mental health of athletes. Fornetti et al (1999: 1114) radical radical changes in body composition can be indicative of serious health concerns. Radical changes in body composition can be indicative of serious health problems.

Aragon et al (2017: 4) explains the following Body composition methods are skinfold thickness, bioelectrical impedance analysis (BIA) and bioelectrical impedance spectroscopy (BIS), hydrodensitometry (also called hydrostatic weighing or underwater weighing, Air displacement plethysmography (ADP), dual energy X-ray absorptiometry (DXA), ultrasound, Magnetic resonance imaging (MRI) and computed tomography, near-infrared interactance (NIR).

Thus the researchers used the body composition method of bioelectrical impedance analysis (BIA) and bioelectrical impedance spectroscopy (BIS), namely using the TANITA DC-360 body composition analyzer, which is an indicator as follows:

a. Physique Rating
b. Body Fat Percentage
c. Muscle Mass
d. Body Mass Index
e. Visceral Fat Ranges
f. Bassal Metabolic Rate

B. Functional Training

Functional training is basically a goal. Therefore, according to Boyle (2004: 1) functional functional training can therefore be described as a purposeful training. Functional training can be described as purposeful training, where functional training is an exercise that aims at the overall movement of exercise without specifically training the muscles. This is often found where a lot of practice is done without doing the whole of the body movement itself. The author assumes functional training is an exercise that aims to move the whole body. Like the observations of researchers in the field, many people do exercises focused only on specific exercises, even though all sports use a lot of organs. For that functional training is very good for exercises that aim at this matter to affect the body composition.

Hirshberg (2015: 9) 'a functional exercise is one that translates well to everyday life'. Functional training is an exercise that can be translated well into everyday life, where in this case the exercise is an exercise that is done and adapted in everyday life, where movements such as running, jumping, rowing, squatting are applied in this exercise. For that functional training practice is an exercise that is adapted to everyday life, so that the movement is more to the overall movement concerning the whole body movement.

Spilio (2013: 7) "functional training is for anyone inspire to get into shape from head to toe". Very clearly in this case functional training is an exercise that moves all members of the body, so that the body will look more fit in its entirety. Spilio (2013: 7) "it is also for people of any age or fitness level who want to feel good walking up stairs, running for the bus, or reaching for the top shelf and cultivating a meaningful body along the way". In this case also explained that the benefits of functional training itself are for everyday activities in human

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life in general, where the purpose of the training itself is to walk, run, jump, even to catch the bus so that the body will always be healthy always**.**

C. TRX Suspension Training

Janot (2013) in Dawes (2017: 15) found that younger (19 to 25 years) adults experienced significant improvements in flexibility, balance, core endurance, and lower body strength when performing exercises twice a week for seven weeks using a suspension trainer ". Still in the same study Janot (2013) in Dawes (2017: 15) " he researchers also discovered that middle-aged (44 to 64 years) adults using Suspension Training experienced significant improvements in both core endurance and lower-body strength as well. as improved, yet not statistically significant, increases in balance and flexibility '..

Garnacho-Castaño (2014) in Dawes (2017: 16) found that 'untrained men who performed a circuit training program (BOSU) and a three days a week for seven weeks experienced Suspension Trainer (TRX) significant improvement in maximal strength, average and peak velocity, and average peak power during both bench press and back squat exercises ". Thus it can be concluded from several studies that training using TRX suspension training can improve flexibility, balance, core endurance, and lower-body strength, it is expected that through TRX suspension training exercises can affect body composition.

According to Dawes (2017: 1) "TRX Suspension Training offers a unique approach to resistance training that only requires one piece of equipment, and it can be done almost anywhere." TRX Suspension Training an exercise pattern that offers a unique approach to endurance training that requires only one portable device to be carried out almost anywhere. In addition, TRX Suspension Training exercises can be used to handle various fitness needs such as improving and maintaining fitness.

According to Dawes (2017: 4) 'There are three methods for varying the intensity or difficulty, or both, of a single-point anchor Suspension Trainer. These include methods:

1. changing the stability demands of the exercise (e. G., From dual handles to a single handle, or by altering stance),
2. manipulating the angle of pull, and
3. changing the position of the center of gravity

There are three methods for varying the intensity of the exercise where the method includes changing the stability of the exercise where from the double handle to one handle, manipulating the tensile angle, and changing the position of the center of gravity. Training using TRX suspension training can be set and adjusted according to their respective abilities by involving these three methods

III. Conclusions and recommendations

It is hoped that the spirit of exercise in the community is expected to reduce non-communicable diseases in the community, where it is expected that the community, especially the members of Golden Fitness and Spa, know the body composition so that it is expected to reduce and avoid these non-communicable diseases.

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