

Comprehensive health and fitness assessment report

Part 1

Body composition

Waist to hip ratio which is a body composition test that shows the individual where they store body fat. It compares the size of the persons waist to their hips. This risk of carrying more body fat around the stomach area can cause high blood pressure, heart disease and type 2 diabetes. The test is very suitable because it's very simple and easy to conduct that only requires a tape measure. To calculate your waist to hip, measure the Waist at the smallest part of the belly button and measure the hips at the widest part.

Cardiovascular fitness

Step test is used to measure cardiovascular fitness to show how well the lungs and heart work during exercise. When the body recovers from exercise it measures how quick we are able to recover. A person who is very fit will have a lower heart rate after the test as of someone who is unfit will have a more rapid heart rate. The client will step up and down on a platform or a bench at a set speed for around 3 minutes, after the test you will measure your heart rate 5 second after the test. The test provides meaningful information because it can predict the cardiorespiratory fitness and give you the estimate of your VO2 max which is the ability for the body to use oxygen from exercise.

Muscular strength

Hand Grip test helps measure the strength in the hands, fingers and the forearm muscles. The test is to indicate the body's overall upper body strength. The hand grip test is a easy and quick test to perform. The muscular strength test can help identify the muscular weaknesses and be useful to track any changes of strength over time. It may also be helpful to predict physical performance and general health.

Muscular endurance

Sit up test is to measure abdominal and core muscles. It shows how long the abdominal muscles can keep working during exercise before becoming tired. The sit up test is a

test that does not require any special equipment, which is a simple test that can be carried out by anyone and in schools, gym and fitness centres. Having strong core strength is very important for posture, balance and daily activities when moving .

Flexibility

Sit and reach is to test flexibility in the lower back and hamstrings muscles. The sit and reach test requires simple equipment such as a ruler and a sit and reach box. This test is very simple and quick which can be performed in school and gyms. Having a good range of flexibility can improve posture balance and movement. It can also lower the risk of injury during sport and exercise.

Part 2

Waist to hip ratio test requires a tape measure and a recording sheet. The client should be standing straight and upright with their feet together and arms relaxed by their side. To calculate your waist to hip, measure the Waist at the smallest part of the belly button and measure the hips at the widest part.

To calculate the waist to hip you need to divide the waist measurement by the hip measurement for example if the hip measurement is 80cm and hips are 100cm the waist to hip ratio is 0.80. It's important that the measurements are taken in the same place each time so the results are accurate and reliable. Measuring the wrong area or holding the tape unevenly can give inaccurate results.

Step test requires a stop watch, bench and a metronome and a heart monitor. The client will step up and down on the bench for 3 – 5 minutes, after the test has finished you will record your heart rate 5 seconds after the test has finished. A lower recovery heart rate usually means better fitness because the heart recovers more quickly after exercise. To ensure the rest remains accurate you need to ensure that you are using the equipment correctly and that your height of the step remains the same height and stepping speed for reliable results. Stepping and an incorrect speed or the steps aren't the same height can give you inaccurate results from previous tests. The errors can be reduced by the instructor giving clear instructions. Measuring the heart rate carefully.

Hand grip test requires a hand grip dynamometer, the client should stand upright and with their arm either by their side or up straight by their ear and squeeze the dynamometer with their hand as hard as possible, the test is usually complete with both hands. To ensure the dynamometer is used correctly you can adjust the dynamometer to fit the clients hand. The client will complete the test at least twice on each hand. It's important that you use the dynamometer in the same hand position and equipment settings for reliable results. Some errors from the test can be not squeezing the dynamometer hard enough, having the dynamometer on the wrong settings, to ensure the test is done correctly ensure the instructions are clear and said and practice the test before hand.

Sit up requires a mat, a stopwatch and sometimes a partner to help hold your feet down when doing the sit ups. The client will lie on their back with bent knees and their hands over their head. You will conduct the test for 1 minute when the stopwatch starts and the client starts the test to perform as many sit ups in 1 minute with correct technique when the elbows are touching the knees or thighs. It's important that the same time limit for the test and body position. Some errors that can occur is counting incorrectly, poor technique or not completing a full sit up. To ensure this doesn't happen a demonstration can be performed and having a second partner count as well.

Flexibility

The sit and reach test requires a ruler and a sit and reach box and a mat. The client must sit on the floor with their legs straight with their feet flat against the box and straight knees. You must reach forward slowly with straight arms and reach as far as possible. When the test is being performed the client will get 2-3 attempts and the best score is recorded from the fingertips. We need to ensure to warm up and have the same body position and equipment each time. The client should not touch their knees or push the ruler forward. To ensure these errors aren't repeated ensure you use the same assessor and equipment and clear instructions.

Part 3

Waist to hip test was measured at 88cm for waist and hip was 102. From normative data this gives us a total of 0.86 waist to hip for a 20 year old female. A healthy waist to hip ratio is usually below 0.85 but a 0.86 suggests a slightly increase of a health risk but overall a good waist to hip ratio.

Hand grip shows the highest score on the right hand was 22.4kg and the highest on the left side was 17.7 the results recorded shows an overall average score for the grip test for a female at 20 years old although the left side is noticeably weaker this could suggest an imbalance upper body strength. The client may be relying more on her right hand when doing daily activities which shows that her right hand is stronger. Improving her left hand can balance the body's imbalanced muscles in the hands

The results recorded for the sit up test in 1 minute was 39 sit ups is very good for a female at 20 years old showing a strong muscular endurance for the abdominal and core muscle strength. Strong core muscles help with support in posture, balancing and lifting. From these results it shows that the client practices and participates in regular activities .

The flexibility test score was 43cm. These results are excellent results and suggest very good flexibility in the lower back and in the hamstrings , good flexibility can benefit balance, movement and posture. From the results recorded it shows that the client often incorporates stretches and flexibility training to help with movement which can be increase overtime.

The step test was recorded after 3 minutes and the heart rate was recorded at 170bpm this suggest that the client has a high intensity during the test . When the heart recovers quickly after exercise it suggest good cardiovascular fitness however if the heart recovers slower it can suggest cardiovascular fitness may need some improvement.

Overall the client's strengths are flexibility and muscular endurance. Some areas that need some improvement include body composition, cardiovascular fitness and muscular strength.

Overall the client's BMI is at 26.1 which places her in the overweight category according to the standard BMI classification. However BMI does not take into consideration your

muscle mass and body fat which could indicate that the client isn't overweight but has a higher muscle mass which puts her in the overweight categories a way to find this out would be to do the in-body test which calculates your muscles mass, water intake, body fat and other aspects on where your body stores more fat and how much fat or muscles the body carries and stores.

Part 4

The client's strengths are flexibility and muscular endurance this should be maintained with regular stretching and core exercises.

To improve cardiovascular fitness, the client should aim to do aerobic training 3-5 times a week for around 30-45 minutes. Good activities to suggest is walking, jogging, running or swimming.

Body composition can be improved by regular exercise and healthier eating habits. This can include more fruit and vegetables, protein and reduce foods in high sugar and starchy carbs and also drinking more water.

When improving upper body strength, we can suggest some resistance training at least 2-3 times a week this can be done by doing bicep curls, shoulder press, resistance band and to help with hand grip squeezing stress balls or using a hand grip dynamometer.

Since the client has great flexibility, continuing with stretches after exercise or during exercise is really important to keep up their strength like static stretching, dynamic stretching., we can suggest doing yoga once or twice a week to keep the client interested in doing stretching.

Referencing

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