Volume 6:10, 2021

ISSN: 2573-0312 Open Access

# Physical Activity has Numerous Advantages for People with Type 2 Diabetes

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### Introduction

For patients with type 2 diabetes, regular exercise, which includes both aerobic and resistance training, has numerous and significant health advantages. Exercising has been demonstrated in studies to improve blood glucose management and help people lose weight, both of which are substantial risk factors for diabetes. Specific types of exercise may also help with health issues that diabetic older persons frequently face, such as reduced balance and flexibility.

Other research suggests that not exercising may raise the risk of type 2 diabetes complications. Cardiovascular disease, which refers to illnesses that affect the heart and blood vessels, as well as problems associated to blood vessel damage, such as eye and renal disease are among these dangers.

## What are the Benefits of Exercise for those with type 2 Diabetes?

Exercise is vital for blood glucose management, according to the American Diabetes Association (ADA). It's easy to see how physical activity can help with type 2 diabetes once you understand how blood glucose levels grow.

Insulin is a hormone produced by the pancreas that allows cells to absorb glucose from the blood and utilise it as energy. Insulin resistance is a condition that arises in persons with type 2 diabetes, where the cells become less sensitive and receptive to insulin.

To get the cells to respond, the pancreas produces extra insulin as a compensatory strategy. Blood glucose levels eventually rise because the pancreas is unable to keep up with the required rate.

Exercise can help people with type 2 diabetes in a variety of ways. It boosts insulin sensitivity, allowing cells to use any available insulin to absorb glucose from the bloodstream. Muscle cells can also take in glucose when they contract during exercise, even if insulin isn't available.

Exercise's blood glucose-lowering effects might extend up to 24 hours after a workout. Although all forms of exercise help to combat the symptoms of diabetes by promoting weight reduction and improving insulin sensitivity, the ones listed below have extra benefits:

Regular Aerobic Activity: reduces blood pressure, triglyceride levels, and A1C test results, which show the average blood glucose level over the previous two to three months. In patients with diabetes, moderate-to-high intensity aerobic exercise has been associated to significantly lower cardiovascular and overall death risks.

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Received 08 October 2021; Accepted 22 October 2021; Published 28 October 2021

Diabetic muscular weakness is a risk factor for resistance exercise. Resistance training, which increases muscular mass and strength, helps to counteract this effect.

Other sorts of exercise: Balance and flexibility are sometimes limited in older persons with diabetes. Balance training reduces the chance of falling and improves gait, while stretching activities increase flexibility and range of motion. Tai chi has been shown to improve balance, increase quality of life, and reduce diabetes-related nervous system symptoms.

#### What are the Consequences of not Exercising?

A person who does not exercise on a regular basis misses out on a variety of health benefits. Without exercise, persons with diabetes have a reduced level of cardiovascular fitness, which can be an issue because their risk of cardiovascular disease is two to four times higher than that of people without diabetes. This elevated risk is caused by a number of health conditions, including high blood pressure, high cholesterol, and obesity.

In those with diabetes, a lack of cardiovascular fitness is significantly linked to an increased risk of death from any cause.

#### Glucose Levels in the Blood are High

Blood glucose levels remain greater than they would be if exercise were not present. Elevated A1C levels have been linked in studies to diabetes complications involving blood vessel damage. High blood glucose damages blood vessels in ways that can lead to a variety of health problems, including retinal impairment, which can result in blindness.

Exercise aids in the maintenance of a healthy blood glucose level. Blood vessel damage is prevented by maintaining a healthy blood glucose level.

#### **Other Diabetes-Related Lifestyle Changes**

In the treatment of type 2 diabetes, lifestyle changes are quite effective. Aside from exercise, the ADA suggests that you do the following:

- Consume a healthy, well-balanced diet.
- · Maintain a healthy weight
- Control your anxiety.
- · Give up smoking.

#### Summary

Workouts assist raise insulin sensitivity, which promotes healthier blood glucose levels, according to the findings of studies on type 2 diabetes and physical activity. Resistance training also slows the loss of muscle strength that comes with diabetes. Aside from exercise, there are a number of additional lifestyle choices that are advantageous. These include eating a healthy diet, maintaining a healthy weight, stopping smoking, and reducing stress.

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How to cite this article: Fathima, Amreen. "Physical Activity Has Numerous Advantages for People with Type 2 Diabetes". Physiother Rehαbil 6 (2021):246.