

# DIABETES

TYPE I and TYPE II



*Improve Health and Blood  
Sugar Control through  
Education and Exercise*



*Agar*  
Physiotherapy  
Clinic

## Benefits of Structured Exercise Program for Diabetics

- improves glycemic (blood sugar) control
- reduces abdominal visceral fat by mobilizing fat as fuel for the working muscle
- increases muscle glucose uptake
- increases insulin sensitivity (the action of insulin in our body) and reduces insulin resistance
- lowers resting blood pressure
- reduces risk of cardiovascular disease
- assists in weight management and weight reduction
- reduces widespread inflammation in the body
- improves quality of life
- increases the capacity of the liver to consume glucose
- improves functional capacity
- increases resting metabolic rate
- increases muscle endurance
- improves bone density, muscle mass, strength, balance



## How Physiotherapists at the Ayr Physiotherapy Clinic Can Help You

- instruct and support use of a structured home exercise program which can have significant benefits on glycemic/ blood sugar control
- treat muscle, joint, and circulatory conditions related to diabetes
- improve your physical condition and reduce your risk factors for complications related to diabetes

## Important Components to Exercise

Our Physiotherapists will guide you on how to perform these 3 important components of exercise:

- 1 Aerobic Exercise** *This consists of rhythmic, repeated and continuous movements of large muscle groups (ie: walking, bicycling, jogging, swimming)*

Perform aerobic exercise either at a moderate intensity (50-70% of maximum heart rate) for at least 150 minutes/week or at a vigorous intensity (>70% of maximum heart rate) for at least 90 minutes/week with no more than two consecutive days without physical exercise.

The effect on insulin sensitivity of a single bout of aerobic exercise lasts 24-72 hours, depending on the duration and intensity of the activity.

- 2 Resistance/Strength Training** *This consists of activities that use muscular strength to move a weight or work against a resistive load (ie weight lifting).*

Perform 3 sets of 10 repetitions of each exercise for specific major muscle groups of the body with a weight that can safely be lifted 10 times. A Physiotherapist will teach you each of these research based exercises. Each workout should be preceded by a 5 minute warm up and followed by a 5 minute cool down, consisting of light aerobic activity.

**Perform 3 times per week.**

The effect of resistance/strength training on insulin sensitivity lasts longer than aerobic exercise because some of its effects are mediated by an increase in muscle mass. Three to six months of training is required for clinically significant muscle growth.



- 3 Flexibility Exercises**

*This consists of stretching the two calf muscles. Range of motion exercises of the joints in the feet decreases peak plantar foot pressures by 4.2%.*

Our diabetic program is based on the findings of diabetes research and utilizes evidence based practice.

*The Physiotherapist is your partner in evaluating and restoring strength, endurance, movement and physical abilities affected by injury, disease or disability. We treat people of all ages.*

## Coverage

Physiotherapy services are reimbursed by most extended health insurance plans. Check with your provider for details on your individual coverage.

## Facility

*K. Chesney Physiotherapy Professional Corporation is operated as the Ayr Physiotherapy Clinic.*

The Ayr Physiotherapy Clinic is a first contact, autonomous, client-focused health care facility. We comply with privacy legislation and promote this privacy with our individualized assessment and treatment rooms.

Free parking is available on site.



**Visit our website at:**  
**[www.ayrphysiotherapy.com](http://www.ayrphysiotherapy.com)**  
**or call our clinic at (519)632-8822**

*Ayr* Physiotherapy Clinic

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