



# Exercise Protocol Weight Loss On the Anti-Gravity Treadmill

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**DISCLAIMER:** It is recommended that you receive medical clearance from a physician before beginning any exercise program. Stop exercising if you feel short of breath, dizziness, nausea, or chest pain.

## GENERAL PRINCIPLES

This protocol for Weight Loss is designed as a general guideline for use of the AlterG Anti-Gravity Treadmill as an exercise tool. We recommend conferring with a physical therapist or doctor before beginning this program, as the progression should be individualized and based on the your specific needs, physical examination, progress, and complications or pain.

## WHY THE ANTI-GRAVITY TREADMILL?

Exercise, including walking, can be painful for anyone who is overweight. In fact, Obesity and a higher Body Mass Index are risk factors associated with osteoarthritis. Exercise is a proven way to reduce body fat; however, osteoarthritis or other injuries can limit exercise capability because of increased joint pain. By Reducing your effective weight during exercise with the AlterG Anti-Gravity Treadmill, you can reduce or eliminate pain you might experience while walking. Reducing your pain means you can increase your activity levels and caloric burn.

## GOAL

Enable consistent exercise activity as part of a weight loss program

- Monitor heart rate and Rating of Perceived Exertion 1-10 (RPE) throughout activity.
- Aim for 30 minutes of physical activity at least 3 days a week, either continuously or at regular intervals of at least 10 minutes duration (as tolerated).
- Physical activity should begin at a low to moderate intensity, target heart rate = 20-40% of your age predicted heart rate maximum. This is calculated by:  $(206.9 - (0.67 \times \text{age})) \times 20$  and 40% respectively. RPE should be low, 1-3 on a modified Borg scale of 1 – 10.

## EXERCISE PROTOCOL

- 1 Begin with light stretching for the legs as instructed by a personal trainer or a physical therapist
- 2 Anti-Gravity Treadmill Exercise
  - Walk at 50-70% body weight for 15-30 minutes
  - Reach target heart rate by increasing walking speed as necessary to 1.5-3.5 mph.
  - If walking is comfortable and heart rate is below the target zone, add treadmill incline.
  - Progressively increase each session by increasing one of the following: body weight, exercise intensity (speed and/or grade), and/or duration by 1-5% as tolerated pain free. Effective body weight should be increased based on your level of pain. When increasing exercise intensity and/ or duration, keep the heart rate in the target.
- 3 Stretch again after exercising on the Anti-Gravity Treadmill
- 4 Apply ice as necessary to prevent muscle soreness or joint pain from activity and to allow exercise activity the next day.
- 5 Follow the progression table below with goal of consistent exercise activity at least 3 days/week

## AlterG Anti-Gravity Treadmill Progression Table

| Week | BW%    | Speed (mph) | Incline (grade) | Time(min) | Target HR | RPE (1-10) |
|------|--------|-------------|-----------------|-----------|-----------|------------|
| 1-6  | 50-70% | 1.5-2.5     | 1%              | 15-30     | 20-40%    | 1-3        |
| 6-12 | 70-80% | 2.5-4.0     | 3-5%            | 30-45     | 40-60%    | 3-5        |
| 12+  | 80-95% | 4.0+        | 3-5%            | 45-60     | 60-85%    | 5-7        |

## NOTES

- Weight loss cannot generally be achieved by solely increasing physical activity; modifying diet will also be necessary. Log a food diary in order to calculate a 500 Calorie/day deficit to meet ACSM's guidelines for a 1-2 pound/week weight loss.
- Healthy weight loss requires long-term changes in eating habits. Well-balanced, micronutrient dense meals before, during, and after exercise is important.
- Maintain adequate hydration.
- Set up regular meetings with a nutritionist for further guidance and instruction regarding diet planning.

## REFERENCES

Bercier K & Simonson SR. (2012) AlterG Weight Loss Exercise Protocol