

# Research

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## Summary

This article highlights a study that looks at the influence of a walking program and a fitness centre exercise program on the way middle-aged, overweight or obese people feel about their bodies.

## Key Terms

The **ABSS (Adult Body Satisfaction Scale)** assesses aspects of body satisfaction such as satisfaction with one's body shape, weight, appearance, physical abilities, energy level, strength, endurance, and muscle tone.

**BMI (body mass index)** is used to classify people's weight. BMI is calculated by dividing a person's weight (kg) by the square of their height (m<sup>2</sup>). According to the World Health Organization (2006), a BMI score below 18.5 is underweight, a score between 18.5 and 24.9 is a healthy weight, a score between 25 and 29.9 is overweight, and a score above 30 is obese.

**Body satisfaction** refers to how content we are with our body's physical appearance and abilities.

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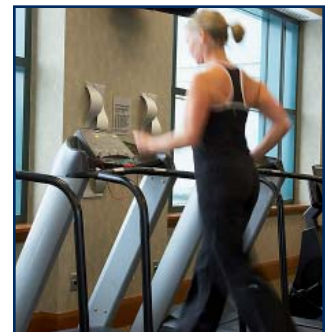
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## Body Satisfaction Among Middle-Aged, Overweight and Obese Adults Over a 16-Week Walking or Fitness Centre Program

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Body satisfaction can be viewed as how content we are with 'the picture that we have in our mind' of our body's appearance and abilities. Exercise psychology research has found that people who are more satisfied with their body are more likely to participate in physical activities (Sonstroem, Speliotis, & Fava, 1992).



For people who are overweight or obese, a psychological barrier to being physically active may be their satisfaction with their body. A low level of body satisfaction may discourage them from participating in exercise such as the typical physical activity prescription of exercising at a fitness centre three days a week.

We were interested in learning about the psychological impact of a walking program as an optional fitness program for overweight or obese middle-aged adults. This study looked at the influence of both a walking program and a fitness centre exercise program on the way middle-aged, overweight or obese people feel about their bodies.

## What We Did

We examined multiple facets of body satisfaction among a group of men and women who participated in either a 16-week fitness centre exercise program or a 16-week walking program.

The participants in this study were unique in two ways. First, the group primarily included people who are overweight or obese. The average BMI (body mass index) of the participants who completed the study was 30.9 (the maximum BMI score for a healthy weight is 24.9). The second unique characteristic of this group was their age. Their average age was 44 years. Most body image research has been conducted among adolescents or young adults from university settings.

For one week all the participants counted how many steps they walked each day with a pedometer. Their average step count at this point was 5,036 steps a day. Then participants were randomly assigned to the walking program or the fitness centre program.

The fitness centre program consisted of cardiovascular training sessions three to four days a week. Participants were able to choose between the following cardiovascular exercise equipment: treadmill, recumbent or upright bikes, rowing machine, and elliptical machine. *(Continued on page 2)*

## **Body Satisfaction Among Middle-Aged, Overweight and Obese...** (Continued from front)

Over the 16 weeks, the fitness centre program progressed in the time required to exercise, from 25- to 60-minute sessions, and from three to four times per week. The intensity of the exercise also increased. This group was asked to keep their daily step count outside the fitness centre sessions approximately the same as it was prior to beginning the program.

The walking program progressed by increasing the daily step count over the 16 weeks. Every four weeks, the daily step count increased by an additional 1,500 steps.

The two programs used the same amount of energy expenditure even as they progressed in time and intensity or number of steps. The energy expenditure calculation of the fitness centre participants included the energy expended in their sessions of exercise, observed with heart rate monitors, as well as their daily steps outside the fitness centre exercise sessions. The energy expenditure calculation for the walking group included the total daily steps of each participant.

At the initial recruitment time, participants answered a survey on basic demographic information (age, income, etc.) as well as a questionnaire called the Adult Body Satisfaction Scale (ABSS). Next a fitness assessment was performed. After eight weeks and 16 weeks of participating in one of the programs, the participants completed the same fitness assessment and the ABSS. Overall the participants completed four questionnaires and three fitness tests throughout the study.

Body satisfaction was measured four times within the study. Measures of body satisfaction included how satisfied people were with their body shape, strength, endurance, muscle tone, energy, weight, overall fitness, and physical abilities to carry out day-to-day tasks.

### **What We Found**

Body satisfaction increased among all groups of participants (men, women, fitness centre participants, and walking participants). Participating in either a walking program or a fitness centre program was related to a person being more satisfied with his or her body's appearance and abilities. However, there were some differences in body satisfaction among men and women.

First, men had greater levels of satisfaction with their overall fitness, leg strength, and muscle tone throughout the study.

Second, women's satisfaction with their physical abilities was lower than men's at recruitment time. After eight weeks of a fitness centre or walking program, the women's body satisfaction scores were equal to the men's.

Third, men and women in the fitness centre group developed significantly greater satisfaction with their bodies by the eight-week mark and even greater satisfaction by the 16-week mark than the participants in the walking group. Therefore, both types of fitness programs can improve people's satisfaction with their body, but a fitness centre program results in significantly greater improvements.

### **Practical Implications for You**

The results from this study suggest that exercise helps overweight and obese middle-aged adults increase their body satisfaction.

This result was seen in relation to both of the exercise programs in this study: cardiovascular exercise based out of a fitness centre three days a week and a walking program. However, greater increases in body satisfaction were observed in the fitness centre group than in the walking group.

Body satisfaction has been associated with positive physical and mental health. Therefore, an exercise program that includes walking and wearing a pedometer or going to a fitness centre may help people maintain or improve their physical and mental health. ↻

References for this article are available at: <http://www.centre4activeliving.ca/publications/research.html>

#### **About the Author**

**Christina Loitz** is the research coordinator at the Alberta Centre for Active Living as well as a PhD candidate in the Faculty of Physical Education and Recreation at the University of Alberta.

Her research is in the area of exercise psychology from a social cognitive perspective, particularly physical self-concept, motivation, self-efficacy, and self-discrepancy theory.

