

Obesity and Mobility: Outcomes from a Multidisciplinary Team Weight Management Program

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Mobility disability is prevalent in obese older populations, yet little is known about the effect of obesity and weight loss on mobility in younger populations.

PURPOSE: To determine the effect of a clinical weight loss program conducted by an integrated multidisciplinary team including physicians, registered dietitians, and clinical exercise physiologists on selected anthropometrics and mobility in obese patients.

METHODS: Program evaluation of patients (n=66); 46.6±8.3 y; 114kg ± 22; BMI= 41.3 kg/m², enrolled in a 12 week weight loss program. Integrated team visits included medical, nutrition and physical activity assessments; weekly follow-ups included weight loss behavior education, lifestyle strategies, tracking and guidance. Physical activity visits included functional field assessments, pre-exercise screening, medical and current activity status. Patients received a Accusplit 120-XLE pedometer with step tracking instructions and a *First Step to Active Health*® kit. An individualized home/gym exercise program based on ACSM guidelines was designed and progressed over time. Dietitians reviewed patient’s food and step log/activity records. Physicians reviewed patient’s health status, with intervention as needed.

RESULTS: The following table summarizes results.

Assessment	Baseline	12 week	Change
Weight (kg)	114±21.8	107± 18**	-6%
BMI (kg/m ²)	41.3±18.2	38.9±16**	-5.8%
Percent body fat (%)	43.8±7.1	41.9±5.8**	-4.3%
Muscle mass (kg)	58.8±5.1	57.8±5.6**	-1.62%
Walking: Pedometer steps	5100±1574	8040±773**	+57.6%
Strength/lower: Sit to stands	11.6±4.9	14.7±5.8**	+26.7%
Strength/upper: Arm curls	17.3±4.6	20.4±5.2**	+17.9%
Balance (seconds)	26.4±9.3	27.8±5.8	+5.3%
Left leg	24.1±9.3	26.7±7.3*	+10.7%
Right leg			
Flexibility: Back Scratch (inches)	-7.0±5.1	-5.1±4.6**	+28%
Right arm	-8.6±5.4	-6.6±4.6**	+23%
Left arm			

* p<.05, **p<0.0001

Measures revealed significant improvement in all areas with a p-value of 0 .0001 and a p-value of 0.05 for right leg balance only. The left leg balance did not show significant change after 12 weeks.

CONCLUSION: Within a clinical setting, an integrated multidisciplinary team including a clinical exercise physiologist can help obese patients improve both their weight and mobility. Older adult-based mobility assessments may provide useful data for designing exercise prescriptions for younger obese adults and provide encouragement as patients experience changes related to their quality of life outside of weight measures. Without access to a fitness facility, The *First Step To Active Health*® and Accusplit 120-XLE pedometers were effective tools for patients to achieve weight and mobility goals within an office or home-based setting.