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Mobility Improvements Are Found in Older Veterans After 6 Months of Gerofit Regardless of Body Mass Index Classification

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Abstract

Veterans represent a unique population of older adults, as they are more likely to self-report a disability and be overweight or obese compared with the general population. We sought to compare changes in mobility function across the obesity spectrum in older veterans participating in 6 months of Gerofit, a clinical exercise program. A total of 270 veterans (mean age: 74 years) completed baseline, 3-, and 6-month mobility assessments and were divided post hoc into groups: normal weight, overweight, and obese. The mobility assessments included 10-m walk time, 6-min walk distance, 30-s chair stands, and 8-foot up-and-go time. No significant weight × time interactions were found for any measure. However, clinically significant improvements of 7–20% were found for all mobility measures from baseline to 3 months and maintained at 6 months (all *ps* <05). Six months of participation in Gerofit, if enacted nationwide, appears to be one way to improve mobility in older veterans at high risk fordisability, regardless of weight status.

Keywords

exercise; older adults; overweight; obese

Two thirds of older adults are overweight, with an estimated one third of those now considered obese (Flegal, Carroll, Ogden, & Curtin, 2010). Obesity increases the risk of multimorbidity in older adults, including the presence of common health conditions such as diabetes, heart disease, and stroke (Rillamas-Sun et al., 2014; van den Bussche et al., 2011). Furthermore, obesity is a leading cause of mobility limitations in older adults (Samper-Ternent & Al Snih, 2012; Villareal et al., 2005; Villareal, Banks, Siener, Sinacore, & Klein, 2004). Obese older adults experience impairments in activities of daily living 5 years earlier and are twice as likely to develop mobility impairments, such as difficulty rising from a chair or slow gait speed, compared with normal-weight individuals (Peeters, Bonneux, Nusselder, De Laet, & Barendregt, 2004). These findings suggest that obese older adults represent a high risk population for the development of a disability.

Exercise may be one intervention to improve mobility function in older adults (Villareal et al., 2011). Unfortunately, older adults tend to become more sedentary with age, and the majority do not meet the minimum physical activity recommendations (Blackwell & Lucas, 2014). Previous research demonstrates contrasting findings on the effect of obesity status on changes in mobility with exercise (Koster et al., 2007; Kritchevsky et al., 2017; Manini et al., 2010; Rejeski et al., 2011). While some trials demonstrate the largest benefits of exercise in obese older adults (Kritchevsky et al., 2017), others suggest that obesity may blunt the effect of an exercise intervention on mobility improvements (Manini et al., 2010). Furthermore, the majority of trials to date have been randomized control trials with strict intervention protocols and exclusion criteria that limit their applicability across the spectrum of community-dwelling older adults (Kritchevsky et al., 2017; Manini et al., 2010; Rejeski et al., 2011).

The U.S. Department of Veterans Affairs (VA) provides health care to over nine million veterans. When compared with the general population, veterans who receive care through VA facilities represent a unique population of older adults. Approximately 60% of older veterans who utilize VA health care services report activity levels below the published recommendations (Littman, Forsberg, & Koepsell, 2009; Nelson, 2006). Veterans are also more likely to self-report physical disability (Nelson, 2006), experience higher rates of comorbid conditions (Littman et al., 2009; Nelson, 2006), and are more likely to be overweight or obese then the general population (Littman et al., 2009; Nelson, 2006). These data highlight the need to identify interventions for veterans to promote activity and mobility. None of the current trials examining the effect of weight status on mobility and functional changes target veterans with an elevated risk for mobility disability.

Gerofit is an outpatient exercise and health promotion program designed specifically for veterans aged 65 years and older who are at risk for mobility decline due to chronic disease or deconditioning (Morey, Crowley, Robbins, Cowper, & Sullivan, 1994; Morey et al., 2018). Enrollment is continuous, and participation in the program is open-ended, with veterans encouraged to exercise up to 3 days per week in a supervised setting. We have

previously demonstrated that veterans who participate in Gerofit for 3–6 months improve their mobility function (Morey et al., 1994, 2018); however, the effect of obesity status on these gains is currently unknown and may provide important insight as to how best to prevent functional decline in this high-risk population. Thus, we sought to compare the changes in mobility function across obese, overweight, and normal-weight older veterans participating in Gerofit. We hypothesized that participation in Gerofit would result in improved mobility function for all participants, but that the gains would be smaller in obese veterans.

Methods

Recruitment

We have previously published on the implementation of Gerofit across six sites: Baltimore, MD; Canandaigua, NY; Los Angeles, CA; Durham, NC; Salem, VA; and Honolulu, HI (Morey et al., 2018). For this secondary analysis, veterans enrolled into the Gerofit clinical demonstration program from these VA medical center's catchment areas prior to September 1, 2016, with complete baseline, 3- and 6-month mobility assessments were included in the analysis. The data were collected for clinical purposes; however, individuals signed an informed consent for their respective sites to allow their data to be entered into a database for the subsequent analysis of the effectiveness of the clinical program. The Durham Institutional Review Board provided a waiver to allow the data to be combined across Gerofit sites.

Gerofit Program

Gerofit functioned as a specialty outpatient clinic, and veterans were referred by any VA care provider. Approval from each participant's VA primary care provider was necessary to begin. After the initial referral, a local Gerofit team member reviewed the veterans' medical records to ensure that they met the participation criteria. To be considered for Gerofit, participants were required to be ≥65 years old and medically stable. Veterans were excluded from Gerofit if they were unable to independently perform activities of daily living; had a cognitive impairment that precluded safe unassisted exercise; reported unstable angina, active proliferative diabetic retinopathy, oxygen dependence, frank incontinence, active open wounds, or active substance abuse; or were homeless. Veterans were also excluded if they were deemed unable to work successfully in a group setting, demonstrated volatile behavioral issues, or were unwilling to commute and/or unable to secure their own transportation to the clinic.

Demographics and Performance-Related Mobility Tests

The participants enrolled in Gerofit underwent a standardized assessment of mobility function testing by a trained exercise staff at each site to establish a baseline mobility status. The body mass index (BMI) was determined from a baseline assessment of height and weight. The mobility function assessment included the (a) time to complete a 10-m walk with a self-selected gait speed (Middleton, Fritz, & Lusardi, 2015), (b) 6-min walk distance (ATS Committee on Proficiency Standards for Clinical Pulmonary Function Laboratories, 2002), (c) number of chair stands completed in 30 s (Rikli & Jones, 2013), and (d) time to

complete the 8-foot up and go (Rose, Jones, & Lucchese, 2002). Standardized instructions and equipment were used across all sites for each test. The testing was repeated after 3 and 6 months of participation in Gerofit.

Self-Reported Functional Assessment

The participants also answered specific questions related to physical function on a self-administered short form survey (SF-36) health-related Quality of Life Questionnaire (Ware & Sherbourne, 1992). Individuals reported how they believed their current health influenced their ability to perform a variety of activities and intensities by rating questions with a 3-point scale: limited a lot, limited a little, or not limited at all.

Exercise Prescription

After the testing was completed, progressive exercise prescriptions were developed following the American College of Sports Medicine criteria for older adults (Westcott et al., 2009). Individual exercise prescriptions were designed to include the major components of an exercise program: aerobic, strength, and flexibility training. However, due to individual preferences, goals, and medical comorbidities, there was variation in each individual program. A target intensity of 11–13 on the Borg 6–20 scale was utilized for the aerobic and strength training programs. Individual attention was provided to the veteran for the initial session, with emphasis on the safe performance of exercise and technique, and instruction on communicating the signs and symptoms of exercise intolerance. Subsequent exercise sessions were under the general supervision of an exercise interventionist, with vital signs monitored once per week. Individuals completed their individual exercise prescriptions during set gym hours dedicated to Gerofit. Gerofit-specific group exercise classes were also offered during Gerofit gym hours at each site and included activities such as tai chi, line dancing, stretching, and balance classes. Veterans were encouraged to participate in Gerofit three times per week, and exercise prescriptions were progressed by the supervising exercise interventionist according to the American College of Sports Medicine guidelines, as tolerated by the veteran.

Statistical Analysis

Each site was given a database for storing and tracking program related data behind their medical center firewalls for data security. Data were downloaded and shared behind an encrypted SharePoint site for pooling of the data. Analyses were performed using SAS (version 9.4; SAS Institute Inc, Cary NC) and STATA (College Station, TX).

Three weight groups were established based on the baseline BMI of individuals: normal weight (BMI = 18.5–24.9 kg/m^2), overweight (BMI = 25.0–29.9 kg/m^2), and obese (BMI = 30.0+ kg/m^2). We originally intended to analyze an underweight group (BMI < 18.5 kg/m^2); however, we found that no individuals enrolled in Gerofit were underweight. The descriptive statistics of the baseline characteristics of each weight group, including the mean and SD for continuous variables or percentage for categorical variables, were calculated. A two-way analysis of variance was used to determine if there were group, time, or Groups × Time changes for the performance-related measures of function (10-m walk, 6-min walk distance, 30-s chair stands, and 8-foot up and go). Because the residuals of the two-way analysis of

variance for the performance related tests were highly skewed, the two-way analysis of variance was performed on the rank of these functional outcomes. The percentages of patients in each limitation category (not-limited, limited a little, and limited a lot) at baseline, 3 months, and 6 months were calculated for each of the ten self-reported functions for the short form survey (SF-36). Chi-square tests were used to determine whether the Gerofit participants in the weight groups had significantly different self-reported limitation levels at each time point. Chi-square tests were also applied to examine whether the overall differences in self-reported functions were statistically significant across time. Randomization tests were used to test if the change across time in the percentages of patients in each limitation category for the self-reported function differed across weight groups between any of the two time points and to test for the changes across all time points. Significance was set at $p<.05$; because this was a secondary data analysis, no adjustments for multiple comparisons were made (Li et al., 2017).

Results

In total, 277 individuals across the six Gerofit sites had complete data from the baseline, 3-month, and 6-month assessments and were included in this analysis. The majority of the veterans were male (93%); 11.1% were normal weight, 38.0% overweight, and 48.7% obese (Table 1). The veterans who were obese were on average younger and more likely to be African American compared with normal-weight and overweight individuals.

Performance-Related Mobility Changes

At baseline, a trend was noted ($p= .08$) whereby the distance walked by the obese group was 5% less during the 6-min walk compared with the overweight and normal-weight groups (Table 2). There were no other significant differences between the groups in any other performance-related baseline mobility measurements. No significant Weight × Time interaction effects were found for the weight groups in any performance-related mobility measure. However, significant ($p< 02$) improvements were found for all performance mobility measures from baseline to 3 months. Across the combined weight groups, the largest improvements were seen in the 30-s chair stands, whereby individuals as a whole improved by 20% over 3 months. The smallest changes were made in the 10-m walk, whereby collectively, individuals improved by 7% (Table 2). No further changes were found for any performance mobility measure from 3 to 6 months, indicating that improvements gained in the first 3 months of exercise were maintained to the 6-month time point.

Self-Reported Functional Assessment Changes

At baseline, a significant difference was noted in the self-reported function in obese individuals ($p= .004$), whereby 26% reported that they were limited a lot in bending and kneeling, compared with only 3.9% in normal-weight and 12.9% in overweight individuals (Table 3). Significant ($p< 05$) Weight × Time changes were reported from baseline to 6 months for bending and kneeling and for 3–6 months for bathing and dressing; a larger percentage of normal-weight individuals reported some degree of difficulty with these tasks at follow-up, and obese individuals generally self-reported improvements in function. No other significant Weight × Time changes were found for any self-reported functional

assessment questions. In general, a greater percentage of obese adults reported more severe functional limitations at baseline, 3 months, and 6 months, although most of these were not statistically significant.

Discussion

Regardless of having, on average, baseline functional levels below normative/threshold values, veterans who participated in Gerofit demonstrated significant and meaningful improvements, exceeding the minimal clinical important difference in all measures of performance mobility over 3 months, and maintained these improvements for the subsequent 3 months, independent of weight status (Bohannon & Crouch, 2017; Perera, Mody, Woodman, & Studenski, 2006; Wright, Cook, Baxter, Dockerty, & Abbott, 2011; Zanini et al., 2018). Over 6 months, veterans participating in Gerofit improved their 6-min walk distance by 41 m, a 9% improvement from the baseline, and even more important, a change that exceeds the minimal clinically important change of 14–30 m reported in the literature for older adults with comorbid conditions (Bohannon & Crouch, 2017). Our findings are promising, as they indicate that an outpatient exercise program in a VA population of older adults is effective at improving mobility and function, regardless of the obesity status of the veteran. This was especially promising in our cohort of high-risk older adults, as it showed the feasibility of initiating an exercise program in those with multiple comorbidities. Due to the high burden of multiple comorbid conditions (~16 conditions on average), the participants in Gerofit represent a population of individuals that would normally be excluded from exercise intervention trials. Furthermore, it is likely that, due to this high burden of comorbid conditions, many of these veterans would also struggle with exercise participation and compliance to a highly structured, progressive program, especially without clinical supervision. While we did not examine adherence or attendance in this current analysis, in our previous study, we reported that 53% of veterans were still active in the program after 3 months, and 42% after 6 months (Morey et al., 2018). This suggests that long-term participation in Gerofit is feasible.

Contrary to our original hypothesis, and despite having greater performance-related and self-reported mobility and functional limitations at baseline, we found that obese individuals made similar clinically significant changes in performance measures of mobility compared with overweight and normal-weight individuals. Previous work has demonstrated that obesity may attenuate exercise improvements in mobility (Manini et al., 2010). The Health ABC study found that obesity status was the most important predictor for the development of self-reported mobility dysfunction over an average of 6.5 years follow-up (Koster et al., 2007). However, the Health ABC study was an observational study of self-report, and enrollment was limited to those who reported the ability to walk a quarter mile at baseline, thus, likely representing a significantly higher functioning population than those enrolled in Gerofit. Over 1 year of participation in the LIFE-P trial, obese individuals demonstrated a 3.1% decline in gait speed during a 400-m walk, despite consistent participation in a physical activity intervention that included walking, balance, and strength interventions (Manini et al., 2010). However, the follow-up LIFE trial later found that, regardless of obesity status, a year-long physical activity intervention reduced the risk of mobility disability, with the greatest benefit found in obese individuals (Kritchevsky et al., 2017). We

similarly found that, regardless of the baseline weight status, participants made clinically significant improvements in mobility. The veterans participating in Gerofit improved their 30-s chair stands by an average of 3.8 stands over 6 months. This exceeds the minimally clinical important difference of 2–2.6 stands and likely represents an improvement in everyday functional abilities (Perera et al., 2006; Zanini et al., 2018). Furthermore, the 7% decrease we observed in the 10-m walk time translates to a clinically meaningful gait speed improvement of 0.08 m/s and exceeds the minimally clinically important difference of 0.05 m/s (Perera et al., 2006). Improvements in gait speed are associated with a decreased risk of mortality and improved functional mobility (Hardy, Perera, Roumani, Chandler, & Studenski, 2007). This is a promising finding, as it demonstrates that physical activity as a therapeutic intervention is beneficial regardless of BMI status and points to the potential benefit of Gerofit if implemented across the VA system.

Generally, only small self-reported functional improvements were observed with Gerofit, which is similar to those reported previously following exercise interventions in older adults (Villareal, Banks, Sinacore, Siener, & Klein, 2006). We found limited significant Weight × Time interaction effects, indicating similar changes in self-reported function across BMI groups. However, generally greater dysfunction was self-reported in those who were obese at baseline, 3 months, and 6 months. This lack of Weight × Time interaction could be due to several factors, including that the self-reported measures of function reflect a more generic burden of physical dysfunction than what we measured with our performance mobility measures of function. Older adults may also underreport their mobility limitations with self-report (Mizner et al., 2011). While the Gerofit program specifically targets mobility impairments with its individualized exercise prescription, it may not effectively intervene on these more global self-reported measures of physical dysfunction, as previous studies suggest that performance mobility measures of physical performance are better able to identify functional limitations than self-reported measures (Thomas, Marren, Banks, & Morley, 2007). However, self-reported functional assessments, such as those used in this study, can be useful in contextualizing the capacity to complete activities of daily living (Angel & Frisco, 2001). Furthermore, clinical evaluations of function are often restricted to self-report measures due to time and space constraints; therefore, a combination of self-report and performance-related measures may be the best way to fully represent mobility disability in older adults.

The strengths of this study include the effective implementation of an exercise program in a group of high-risk veterans and the successful integration of performance-related and self-reported measures of mobility into a clinical program. This information also may be useful for setting realistic expectations for older veterans beginning the Gerofit program. However, the results should be considered in light of the lack of underweight individuals included in the cohort, the limitations of BMI in older adults, the lack of a true control group, and the use of secondary analysis of the data. The lack of underweight individuals most likely occurred due to the nature of the veteran population to be more overweight or obese than the general population, as well as the need for individuals to function independently with exercise to be included in the Gerofit program. It is also likely that, if a large sample size were available, underweight individuals might be included. We also recognize that BMI is a surrogate measure of body fat, and in older adults, it does not account for age-related

changes that occur with body fat distribution. Finally, we recognize that limited conclusions can be drawn from a secondary analysis that was not originally powered to detect differences in changes between weight groups.

Despite these limitations, these findings have clinical importance. Gerofit is currently in 13 of the 170 VA medical centers nationwide, reaching approximately 4,800 older veterans. Gerofit, if enacted nationwide, may be one way to improve the engagement of older, high-risk veterans in exercise and improve mobility of the participants regardless of BMI status. The customized goals, initial 1:1 help, and multiple group classes may appeal to older individuals who would otherwise choose not to engage in physical activity. In conclusion, Gerofit implementation resulted in improvements in mobility and function in veterans, regardless of weight status.

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Table 1

Baseline Characteristics of Veterans Participating in Gerofit

Mean (*SD*)	**All (*N* = 277)**	**Normal weight (BMI = 18.5–24.9 kg/m^2; *N* = 31)**	**Overweight (BMI = 25–29.9 kg/m^2; *N* = 108)**	**Obese (BMI = 30.0+ kg/m^2; *N* = 135)**
Age (years)	74.24 (7.20)	78.39 (7.77)	75.32 (7.23)	72.04 (5.87)
BMI (m/kg^2)	30.89 (5.72)	23.03 (1.31)	27.61 (1.33)	35.31 (4.72)
Race (%African American)	36.10	32.26	28.70	43.70
Sex (%male)	93.14	83.87	95.37	93.33

Note. BMI = body mass index.

Table 2

Effects of 3 and 6 Months of Gerofit Participation on Mobility in Veterans Across BMI Categories

Functional test	BMI group	Baseline	3 months	6 months
10-m walk (s)	All	9.59 (3.11)	8.91[a] (2.65)	8.77[a] (2.70)
	Normal weight	9.10 (2.29)	8.95 (2.80)	9.07 (2.97)
	Overweight	9.53 (3.57)	8.77 (2.72)	8.57 (2.85)
	Obese	9.67 (2.83)	9.00 (2.54)	8.81 (2.54)
6-min walk (yards)	All	500.39 (142.60)	536.73[a] (138.02)	545.13[a] (143.93)
	Normal weight	518.94 (119.25)	537.44 (140.98)	544.03 (145.57)
	Overweight	514.93 (143.36)	555.42 (127.09)	570.11 (137.21)
	Obese	487.96 (145.39)	523.19 (143.40)	527.86 (147.02)
30-s chair stand (#)	All	11.72 (4.38)	14.13[a] (5.29)	14.99[a] (5.66)
	Normal weight	12.00 (4.22)	14.00 (5.07)	14.12 (5.96)
	Overweight	11.81 (4.11)	14.61 (5.16)	15.42 (5.56)
	Obese	11.68 (4.56)	13.79 (5.28)	15.06 (5.74)
8-foot up and go (s)	All	7.28 (4.12)	6.57[a] (3.39)	6.33[a] (3.43)
	Normal weight	6.75 (2.29)	6.71 (2.59)	6.70 (3.18)
	Overweight	7.19 (4.16)	6.35 (3.20)	6.18 (3.49)
	Obese	7.28 (3.89)	6.54 (3.14)	6.23 (3.43)

Note. All values are means (*SD*). BMI = body mass index.

[a]Change is significantly different ($p < .05$) from baseline.

Table 3

Effects of 3 and 6 Months of Gerofit Participation on Self-Reported Function

		Baseline			3 months			6 months		
	BMI groups	**Not limited (%)**	**Limited a little (%)**	**Limited a lot (%)**	**Not limited (%)**	**Limited a little (%)**	**Limited a lot (%)**	**Not limited (%)**	**Limited a little (%)**	**Limited a lot (%)**
Vigorous activities	All	15.42	46.25	38.34	13.85	55.41	30.74	21.25	49.58	29.17
	Normal weight	15.38	46.15	38.46	10.34	55.17	34.48	17.86	57.14	25.00
	Overweight	20.79	45.54	33.66	17.98	59.55	22.47	25.26	53.68	21.05
	Obese	11.38	47.15	41.46	11.61	51.79	36.61	18.97	44.83	36.21
Moderate activities	All	54.15	33.99	11.86	61.47	31.60	6.93	61.25	31.25	7.50
	Normal weight	53.85	30.77	15.38	55.17	31.03	13.79	57.14	39.29	3.57
	Overweight	63.37	25.74	10.89	67.42	28.09	4.49	74.74	18.95	6.32
	Obese	47.15	42.28	10.57	58.04	34.82	7.14	50.86	39.66	9.48
Carrying groceries	All	69.17	23.32	7.61	72.73	21.65	5.63	72.92	22.50	4.58
	Normal weight	61.54	38.46	0	86.21	13.79	0	71.43	25.00	3.57
	Overweight	72.28	19.80	7.92	76.40	17.98	5.62	78.95	16.84	4.21
	Obese	69.11	22.76	8.13	66.07	26.79	7.14	68.97	25.86	5.17
Several flights of stairs	All	39.13	41.50	19.37	40.26	42.86	16.88	40.42	40.00	19.58
	Normal weight	38.46	53.85	7.69	37.93	55.17	6.90	28.57	64.29	7.14
	Overweight	44.55	36.63	18.81	51.69	35.96	12.36	49.47	35.79	14.74
	Obese	35.77	41.46	22.76	32.14	44.64	23.21	36.21	37.07	26.72
One flight of stairs	All	68.38	26.88	4.74	72.73	22.51	4.76	67.08	28.33	4.58
	Normal weight	73.08	26.92	0	75.86	24.14	0	60.71	39.29	0
	Overweight	76.24	18.81	4.95	82.02	13.48	4.49	77.89	18.95	3.16
	Obese	61.79	32.52	5.69	64.29	29.46	6.25	59.48	33.62	6.90
Bending kneeling	All[a]	30.04	50.99	18.97	35.06	50.22	14.72	33.75	47.50	18.75
	Normal weight	50.00	46.15	3.85	48.28	48.28	3.45	25.00	71.43	3.57
	Overweight	34.65	52.48	12.87	43.82	46.07	10.11	45.26	41.05	13.68
	Obese	21.95	52.03	26.02	25.00	53.57	21.43	25.86	47.41	26.72
Walking more than 1 mile	All	45.06	26.09	28.85	48.92	29.44	21.65	43.33	31.25	25.42
	Normal weight	42.31	30.77	26.92	37.93	41.38	20.69	42.86	42.86	14.29
	Overweight	52.48	16.83	30.69	61.80	19.10	19.10	51.58	25.26	23.16

		Baseline			3 months			6 months		
	BMI groups	**Not limited (%)**	**Limited a little (%)**	**Limited a lot (%)**	**Not limited (%)**	**Limited a little (%)**	**Limited a lot (%)**	**Not limited (%)**	**Limited a little (%)**	**Limited a lot (%)**
	Obese	39.84	32.52	27.64	41.96	33.93	24.11	36.21	33.62	30.17
Walking several blocks	All	56.13	25.69	18.18	62.34	25.11	12.55	58.33	27.08	14.58
	Normal weight	57.69	26.92	15.38	62.07	27.59	10.34	53.57	42.86	3.57
	Overweight	59.41	20.79	19.80	69.66	22.47	7.87	65.26	22.11	12.63
	Obese	52.85	30.08	17.07	56.25	26.79	16.96	53.45	27.59	18.97
Walking one block	All	75.89	17.39	6.72	79.22	13.85	6.93	79.17	15.00	5.83
	Normal weight	92.31	3.85	3.85	86.21	10.34	3.45	82.14	17.86	0
	Overweight	75.25	15.84	8.91	82.02	13.48	4.49	86.32	7.37	6.32
	Obese	73.17	21.14	5.69	75.00	15.18	9.82	72.41	20.69	6.90
Bathing/dressing	All[b]	84.98	11.86	3.16	87.01	10.82	2.16	87.87	10.46	1.67
	Normal weight	84.62	15.38	0	96.55	3.45	0	78.57	21.43	0
	Overweight	90.10	5.94	3.96	87.64	8.99	3.37	93.62	3.19	3.19
	Obese	81.30	15.45	3.25	83.93	14.29	1.79	85.34	13.79	0.86

Note. All values are percentage of people reporting in each category. BMI = body mass index.

[a]Change is significant ($p < .05$) from baseline to 6 months.

[b]Change is significant ($p < .05$) from 3 to 6 months.