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A remote, fully oriented personalized program of physical exercise for women in follow-up after breast cancer treatment improves body composition and physical fitness

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Objective: This study aimed to evaluate the efficacy of an individualized remote exercise program on the improvement of body composition and physical fitness of a heterogeneous group of patients who completed breast cancer treatment.

Methodology: This prospective study included 107 women aged 18–60 years, shortly after curative treatment for localized breast cancer at the Erasto Gaertner Cancer Hospital (HEG) in Curitiba, PR, Brazil. Body composition, maximal oxygen uptake, and muscle resistance were evaluated after 9 months of intervention while considering adherence to the program, level of physical activity, presence of binge eating disorder, tumor classification, and treatment type. **Results:** Seventy-eight women (72.8%) adhered to the training program. Adherent participants showed significant changes in body mass (-4.3 ± 3.6 kg; $p=0.0001$), body mass index (-1.6 ± 1.5 kg/m²; $p=0.0001$), body fat ($-3.4 \pm 3.1\%$; $p=0.0001$), VO₂ max (7.5 ± 2.0 mL/(kg×min); $p=0.0001$), and abdominal resistance (11.2 ± 2.8 reps; $p=0.0001$). In contrast, these variables did not change significantly in the non-adherent group. Among the adherent participants, those sub-classified in the severe binge group showed a more noticeable reduction in body mass, body mass index, and body fat ($p=0.05$) than those in the non-binge group. The manuscript (not published) was recently accepted for publication in the journal *Sports Medicine and Health Science*. **Conclusion:** Individualized remotely-guided physical exercise programs can improve the body composition and physical fitness of women undergoing post-breast cancer surveillance, regardless of pathological history or treatment.

Keywords: breast neoplasm; exercise training; physical therapy modalities; body weight changes; physical functional performance.