Sedentary Behavior, Physical Activity, and Bone Health in Postmenopausal Women

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The purpose of this study was to determine if bone health at the femoral neck (FN) and lumbar spine (LS) could be predicted from objectively-measured sedentary behavior and physical activity in 44 postmenopausal women. Bone health (normal and osteopenia/osteoporosis) was measured by dual energy x-ray absorptiometry. Binomial logistic regression analysis indicated that sedentary time and interruptions in sedentary behavior were significant predictors of osteopenia/osteoporosis at the FN, but not at the LS. Our findings suggest that sedentary time and interruptions in sedentary behavior are associated with better bone health in postmenopausal women.

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The study examined if bone health at the femoral neck (FN) and lumbar spine (LS) could be predicted from objectively-measured sedentary behavior and physical activity data in 44 postmenopausal women. Bone health (normal and osteopenia/osteoporosis) of FN and LS was measured by dual energy x-ray absorptiometry. Binomial logistic regression analysis indicated that sedentary time and interruptions in sedentary behavior were significant predictors of osteopenia/osteoporosis at the FN, but not at the LS. Adherence to physical activity guidelines was not a significant predictor of FN or LS bone health. Our findings suggest that greater interruptions in sedentary behavior are associated with better bone health in postmenopausal women.