## **Exercise Appears to Benefit Mental** Function in Patients With Dementia

#### BY HEIDI SPLETE Senior Writer

WASHINGTON — A regular exercise program not only promotes flexibility, balance, and strength in elderly people with dementia, but it also might improve their mental function.

'You won't get oxygen to the brain if you don't get air down into the alveoli," said Marge A. Coalman, Ed.D., vice president of wellness and programs at Touchmark, an Oregon-based company that builds and operates retirement communities in the United States and Canada. She spoke at a joint conference of the American Society on Aging and the National Council on Aging.

The World Health Organization and the President's Council on Physical Fitness and Sport endorse exercise for people with Alzheimer's disease (AD) and other dementias, Dr. Coalman pointed out. The first research confirming that stand came 5 years ago in a randomized, controlled trial of 153 AD patients, she added. Those who participated in supervised exercise for at least 60 minutes per week had significantly better physical function and less depression than did patients who didn't exercise (JAMA 2003;290:2015-22). Since then, studies in mice and people have suggested that exercise creates new cells in areas of the brain that are affected by agerelated memory loss.

If nothing else, exercise offers hope to people with dementia that they can improve their condition.

The "memory care exercise program" developed for residents with dementia and used at Touchmark communities rests on four fundamentals-deep breathing, posture, range of motion, and strength. The degree of participation varies according to the resident's condition. Some patients continue exercising for as long as 30 minutes, but the average is 7 minutes.

Dr. Coalman's tips for conducting an exercise program with elderly dementia residents include keeping the movements slow but smooth, using straight-backed chairs with good back support, and invoking visual imagery such as marching in place to make the movements purposeful and fun.

Dr. Coalman described one exercise program developed by a physical therapist for Touchmark that starts with participants taking one to three deep breaths while raising their arms overhead. This promotes airflow into the lower lungs.

The program then addresses posture, which is important for balance and stability. Chest muscles tend to become weak with age, so it's hard for many older longterm care residents to draw the shoulder blades together and sit up straight.

A caregiver places a rolled-up towel or small inflatable ball behind a resident's back to help the person sit upright and attain maximum movement. The resident then rotates his or her neck, bending the head forward and towards each shoulder (never tilting it back), which promotes range of motion in the neck. Shoulder range of motion exercises include "pick an apple," which is reaching up and across the body and back down to the opposite side, and "swing the bat," in which the person holds an imaginary baseball bat on one shoulder and swings it down and across the body.

To strengthen the lower body, residents make circles with their ankles and to straighten one knee at a time and hold the lower leg up for a few seconds.

The exercise class ends with "stand-up sit-down" exercises for residents who are willing and able to rise from a sitting position with little or no assistance. Start patients with one repetition and work toward five rounds of stand-up sitdown, Dr. Coalman advised. 



A small ball is placed behind the patient's back to help her sit upright and attain maximum movement.

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