

## Influence of canine on heart rate and rate of perceived exertion during one mile walk test

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The purpose of this study was to assess the affect of walking with a canine on heart rate (HR) and rating of perceived exertion (RPE) during a 1 mile walk.

**Methods:** Subjects > 40 yo were recruited to participate in this study. Twenty individuals (Male=7, Female=13, Mean<sub>Age</sub> = 52+8) completed the 2 experimental sessions, one with a canine and one without. Prior to these sessions, subjects categorized themselves as having a low (n=8), moderate (n=8), or high (n=4) level of physical activity via the International Personal Activity Questionnaire (IPAQ). During experimental sessions, subjects were randomly assigned to walk 1 mile on a track with or without a canine while RPE and HR were assessed every ¼ mile. Subjects served as their own controls, returning in < 1 week to repeat the walk in the other condition.

**Results:** In this small sample, no significant relationships were observed between variables; however, some interesting trends were observed. In high activity subjects, HR was lower in the canine condition suggesting less physical effort (Mean<sub>nhigh</sub> = 141bpm + 12.5, Mean<sub>chigh</sub> = 137 + 11.9). In contrast, in moderate and low activity subjects HR was increased in the canine condition (Mean<sub>ncmoderate</sub> = 124bpm + 11.1, Mean<sub>cmoderate</sub> = 132.4bpm + 10.5; Mean<sub>nclow</sub> = 126.7bpm + 18.9, Mean<sub>clow</sub> = 130.75bpm + 16.5). RPE was same or decreased in all subjects in the canine condition.

**Conclusion:** Walking with a canine increased HR without increasing RPE in low and moderately active individuals in this study, providing support for canine walking as an effective fitness activity.

### Biography

Janet M. Cope completed her MS in Occupational Therapy from Springfield College, Springfield, MA and Ph.D in anthropology from the University of Massachusetts, Amherst. She is an associate professor in the Department of Physical Therapy Education, Elon University, Elon, NC, where she teaches human anatomy. Dr. Cope is investigating the relationship between canines and humans as it relates to fitness.

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