Heart patients advised to move around every 20 minutes to prolong life

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Heart patients are being advised to move around every 20 minutes in a bid to prolong life following a study presented at the Canadian Cardiovascular Congress (CCC) 2018.

CCC 2018 is being held 20 to 23 October in Toronto, Canada. Visiting experts from the European Society of Cardiology (ESC) will participate in joint scientific sessions with the Canadian Cardiovascular Society (CCS) as part of the ESC Global Activities programme.

Heart patients spend most of their waking hours sitting, lying down, and watching television Previous research has shown that being sedentary for long periods could shorten life but taking breaks to move around may counteract the risk, particularly if it means burning more than 770 kcal a day. This study investigated how many breaks, and for what duration, are needed to expend 770 kcal.

"Our study shows that heart patients should interrupt sedentary time every 20 minutes with a 7 minute bout of light physical activity," said study author Dr. Ailar Ramadi, postdoctoral fellow, Faculty of Rehabilitation Medicine, University of Alberta, Edmonton, Canada. "Simple activities such as standing up and walking at a casual pace will expend more than 770 kcal in a day if done with this frequency and duration."

The study enrolled 132 patients with coronary artery disease. The average age was 63 years and 77% were male. Participants wore an armband activity monitor for an average of 22 hours a day for five days. The activity monitor recorded the amount of energy spent during breaks from inactivity, the amount of inactive time, and the number and duration of breaks during each sedentary hour.

Dr. Ramadi said: "There is a lot of evidence now that sitting for long periods is bad for health. Our study suggests that during each hour of sitting time, heart patients should take three breaks which add up to 21 minutes of light physical activity. This will expend 770 kcal a day, an amount associated with a lower risk of premature death."

Regarding limitations of the research, Professor Joep Perk, ESC Prevention Spokesperson, noted that this was a small, observational study with no control group. "A randomised controlled trial is needed before this can become a firm recommendation," he said. "Nevertheless, regular physical activity is key to achieving a healthy life, whether you are a cardiac patient or not."

Dr. Michelle M. Graham, Scientific Programme Committee Chair of CCC 2018, said: "We are delighted to have innovative studies such as that by Ramadi and colleagues being presented at CCC. Their novel work has very practical implications, not only for patients with cardiovascular disease, but for improving prevention by altering how people work in sedentary environments."

Professor Jeroen Bax, Past President of the ESC and course director of the ESC programme at CCC 2018, said: "Sedentary lifestyles affect more than half of the world's population. ESC guidelines on the prevention of cardiovascular disease recommend a minimum of 150 minutes of moderate activity or 75 minutes of vigorous activity per week. Any activity is better than none and more activity is better than some."

Provided by European Society of Cardiology

More information: Karjalainen JJ, Kiviniemi AM, Hautala AJ, et al. Effects of exercise prescription on daily physical activity and maximal exercise capacity in coronary artery disease patients with and without type 2 diabetes. Clin Physiol Funct Imaging. 2012;32:445–454.

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