

## The health paradox of work and leisure time physical activity



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*A physically active lifestyle is acknowledged as one of the best investments for a long life, free from chronic diseases. If physical activity is such a valuable life insurance, people with high physical work demands - being occupationally physical active for several hours per day - should be expected to live a long healthy life and being fit.*

However, this is not the case. Paradoxically, workers with high occupational physical activity (often low and semi-skilled workers) are well known to have high incidences of cardiovascular disease (CVD) and premature mortality – also when adjusting for lifestyle and other confounding factors. How can this be? *Does high physical activity at work not impose the same health promoting effect as leisure time physical activity?*

High proportions of the working population still have work tasks which require them to be highly physically active and International guidelines on physical activity do not differ between occupational and leisure time. Therefore, me and my colleagues have investigated this question in several cohorts and randomized controlled trials. Moreover, we have investigated if workers with low cardiorespiratory fitness and being sedentary during leisure are at particularly high risk for CVD from high occupational physical activity. Overall, we find that workers with the combination of high physical work demands with a sedentary leisure / low physical fitness are at particular increased risk for CVD. The findings of these studies will be presented, and potential underlying mechanisms and future preventive initiatives will be opened for discussion. Moreover, develop technical diurnal measurements of physical activity and sedentary behavior for larger epidemiological studies will be presented.

Andreas Holtermann has a background in Human Movement Science and PhD in Health Science from Trondheim, Norway. He is currently a professor at the National Research Centre for the Working Environment in Copenhagen, Denmark. His main research focus is on health consequences from physical activities at work and leisure, and on prevention of musculoskeletal pain, sickness absence and early retirement among blue collar workers.

<b>Date</b>	Tuesday 7 <sup>th</sup> March, 2017
<b>Time</b>	1:00pm – 2:00pm
<b>Room</b>	113
<b>Location</b>	Public Health Building, Herston.

**No RSVP required**