

What daily physical activity pattern is best for your heart health?

To answer this question, researchers at the Institute for Work & Health analyzed activity tracker data in a nationally representative sample of 8,909 workers and their 10-year risk of heart disease.

Group
(sample size)

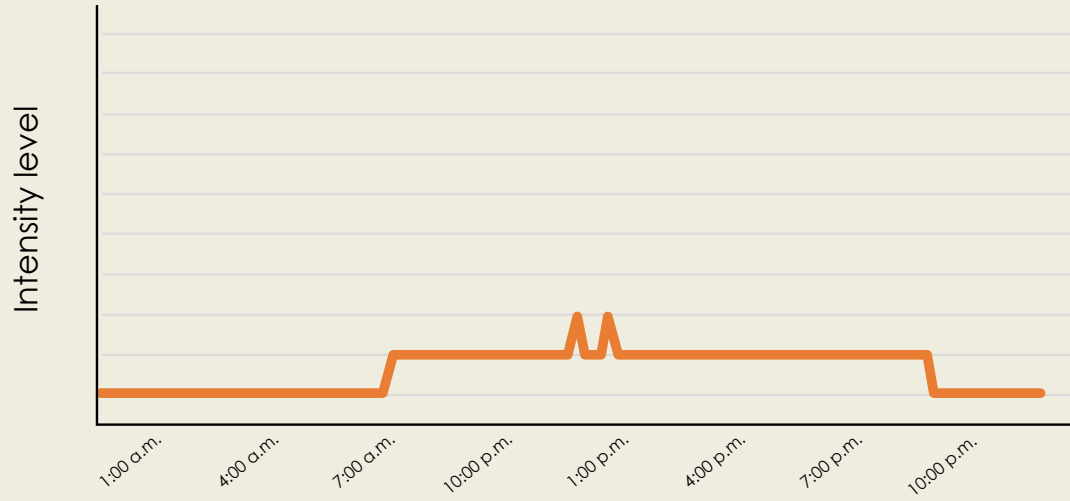
Daily physical activity pattern

10-year risk
of heart disease
(compared to
the first group)

The sedentaries



(2,808 workers)



comparison
group

These workers do low or light activity throughout the day. They may hold sedentary jobs.

They do low amounts of recreational physical activity and don't tend to use active modes of commuting.



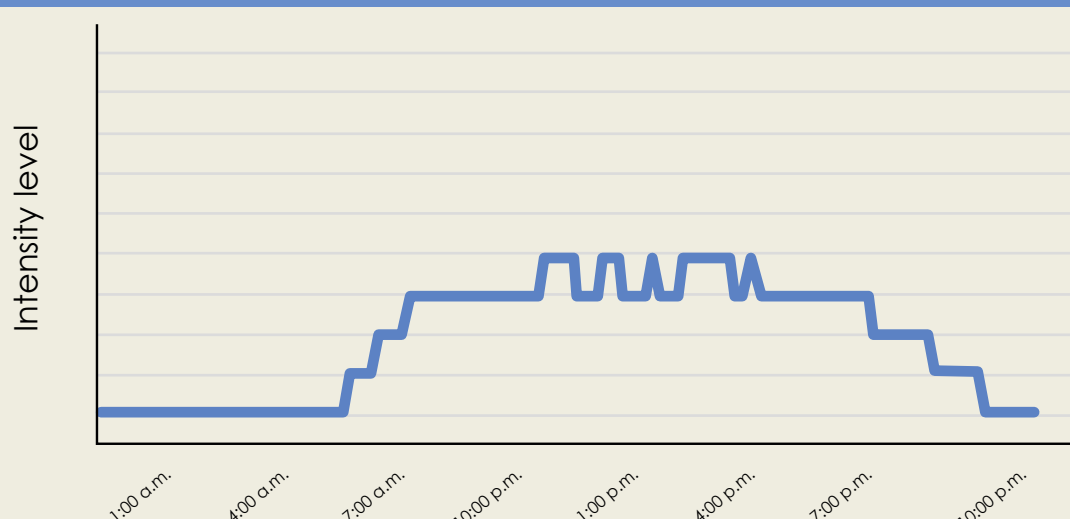
Think of:

An office worker who spends most of the day in front of the computer, drives to and from work, and spends most evenings reading or watching TV.

The steady movers



(3,219 workers)



↓
14%

lower risk

These workers are constantly on their feet or on the move throughout the day, doing light or moderate activity.

They do light activity in evening hours and low levels of recreational physical activity.



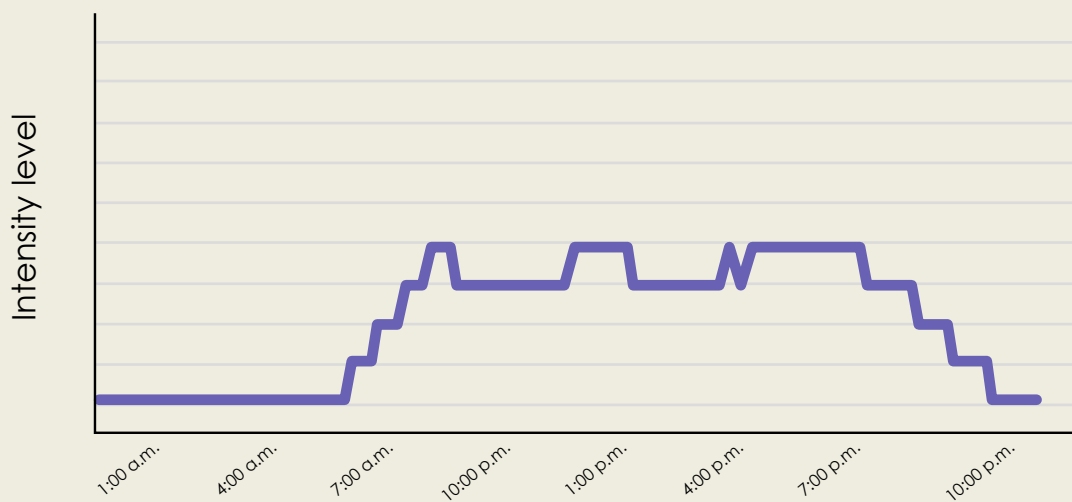
Think of:

A retail store sales associate who doesn't sit still for long at work, does light chores at home and goes on walks in the evenings.

The dynamic movers



(1,194 workers)



↓
27%

lower risk

Workers in this group alternate between doing light activity and moderate activity throughout the day.

They engage in high levels of recreational physical activity but are not likely to actively commute to work.



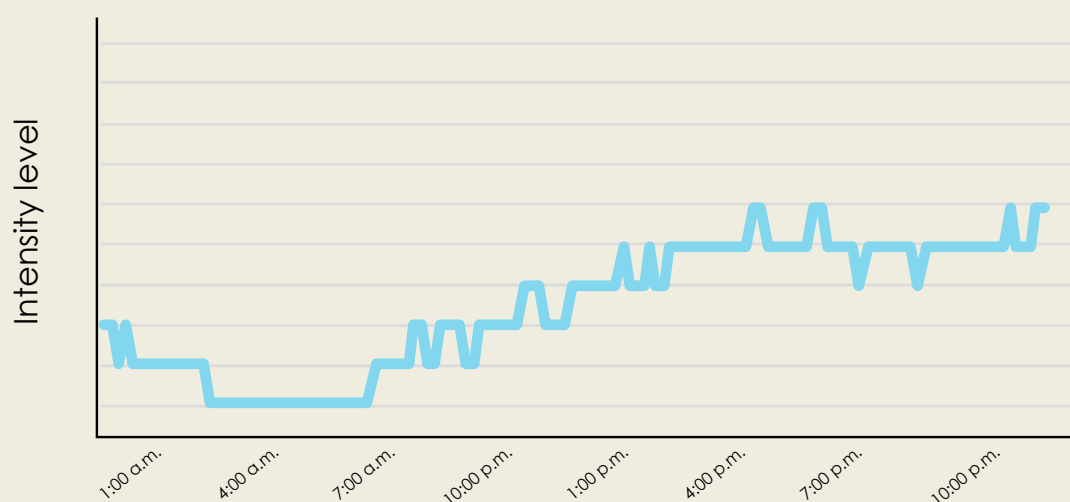
Think of:

A nurse who does a mix of desk duties and highly physical tasks, drives to and from work, and goes to the gym in the evenings.

The night-shifters



(225 workers)



↓
33%

lower risk

Workers in this group engage in moderate physical activity from midday through to midnight.

They are more likely to actively commute to work.



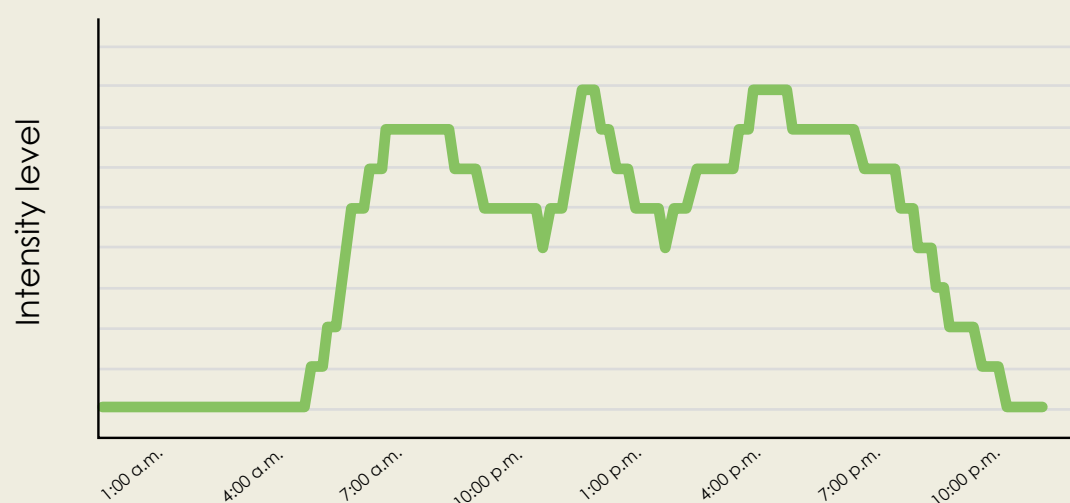
Think of:

An evening stock clerk who's on the move for most of the work shift, bikes to and from work, and does light chores at home.

The exercisers



(750 workers)



↓
42%

lower risk

These workers are slightly or moderately active part of the day.

They do vigorous physical activity at the start of the day, around noon, and again in late afternoon and early evening.

They engage in the high levels of recreational activity and actively commute to work.



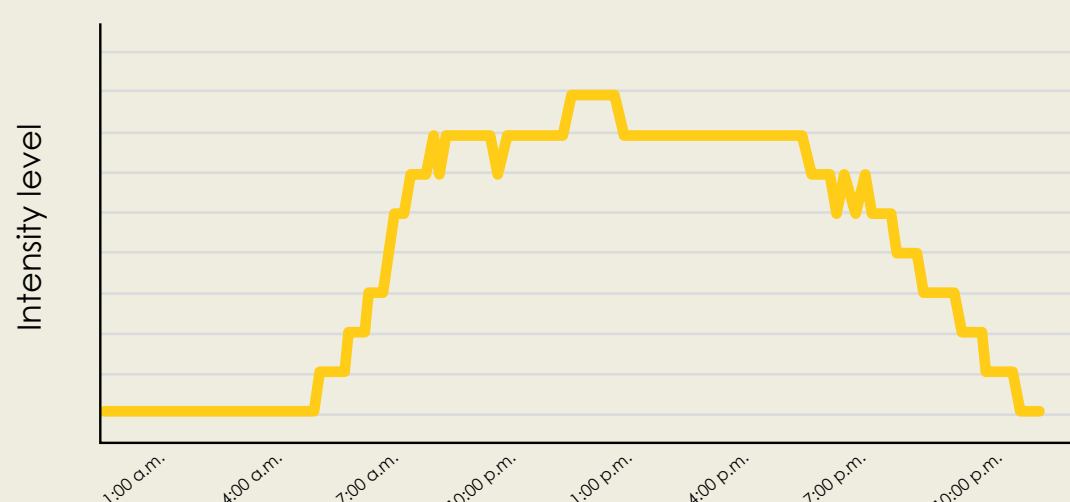
Think of:

A manager who is mostly desk-bound when at work, but commutes by bike and goes on runs during lunch breaks.

The physical workers



(713 workers)



no
difference

These workers engage in vigorous physical activity through most of the daytime hours.

They do light activity in the early morning and evening hours.



Think of:

A construction worker who does tiring work in the day, takes care of light chores at home, and sometimes plays ball in the evening hours.

About the study: The study drew on an existing, nationally representative dataset from Statistics Canada's Canadian Health Measures Survey (CHMS). In this survey, conducted over five cycles between 2007 and 2017, participants were asked to wear an accelerometer on their right hip during waking hours for seven consecutive days. Survey participants also agreed to have their clinical data collected, including data from blood and urine samples submitted at testing centres. The IWH research team used this clinical data to calculate participants' risk of cardiovascular disease as the study did not ask participants about their occupations, the job examples listed above are only conjecture.

For a written summary about the study, see: <https://www.iwh.on.ca/newsletters/at-work/109/workers-doing-vigorous-tiring-activity-all-day-no-healthier-than-those-who-are-least-active>



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