



Is Sitting Good for You?

life  beats

lyondellbasell

Sitting and Muscular Skeletal Diseases

- Good sitting means you support your body so it can rest.
- When does too much sitting become an issue?
- Research indicates that too much sitting is one risk factor for Muscular Skeletal Diseases and other health problems.

This monthly topic will inform you about one aspect of declining physical fitness called “**Sedentary Behavior**”

Content

- What is sedentary behavior?
- What is your situation?
- Why do we care about sedentary behavior
- What can you do?



Sedentary Behavior

- **Sedentary Behavior** is “any waking activity characterized by an energy expenditure ≤ 1.5 MET* and a sitting or reclining posture”
- In simple words; **sitting** or **lying down**.
- Examples of Sedentary Activities
 - TV Viewing, Video Gaming,
 - Computer/Phone Use, i.e. “screen time”
 - Driving/Transport
 - Reading, Meetings, Listening to Music
 - Eating & Drinking



* MET stands for "Metabolic Equivalent for Task."

1 MET = equivalent to the energy, or oxygen, utilized by the body while at rest.

Is This Your Schedule?

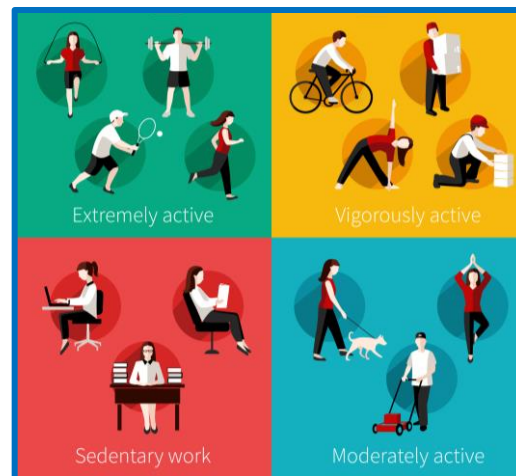
Example Control Panel/Office					
	Hr		MET	Sedentary	Sitting Hours
Breakfast	0.5	Sitting	1.5	Yes	0.5
Commuting	0.5	Sitting in Car, Bus, Train, Metro	1	Yes	0.5
Work	3.5	Sitting, meetings (control panel, office)	1.5	Yes	3.5
	0.5	Walking & other physical activities	2.5	No	0
Lunch	0.5	Sitting	1.5	Yes	0.5
Work	3.5	Sitting, meetings (control panel, office)	1.5	Yes	3.5
	0.5	Walking & other physical activities	2.5	No	0
Commuting	0.5	Sitting	1	Yes	0.5
Dinner	0.5	Sitting	1.5	Yes	0.5
Relaxing & Leisure	3	Sitting, Lying	1.1	Yes	3
	<u>13.5</u>				12.5

Example Field Operator/Maintenance/Logistics/Lab					
	Hr		MET	Sedentary	Sitting Hours
Breakfast	0.5	Sitting	1.5	Yes	0.5
Commuting	0.5	Sitting in Car, Bus, Train, Metro	1	Yes	0.5
Work	1.5	Sitting, meetings (control panel, office)	1.5	Yes	1.5
	2.5	Walking & other physical activities	2.5	No	0
Lunch	0.5	Sitting	1.5	Yes	0.5
Work	1.5	Sitting, meetings (control panel, office)	1.5	Yes	1.5
	2.5	Walking & other physical activities	2.5	No	0
Commuting	0.5	Sitting	1	Yes	0.5
Dinner	0.5	Sitting	1.5	Yes	0.5
Relaxing & Leisure	3	Sitting, Lying	1.1	Yes	3
	<u>13.5</u>				8.5

Or This?

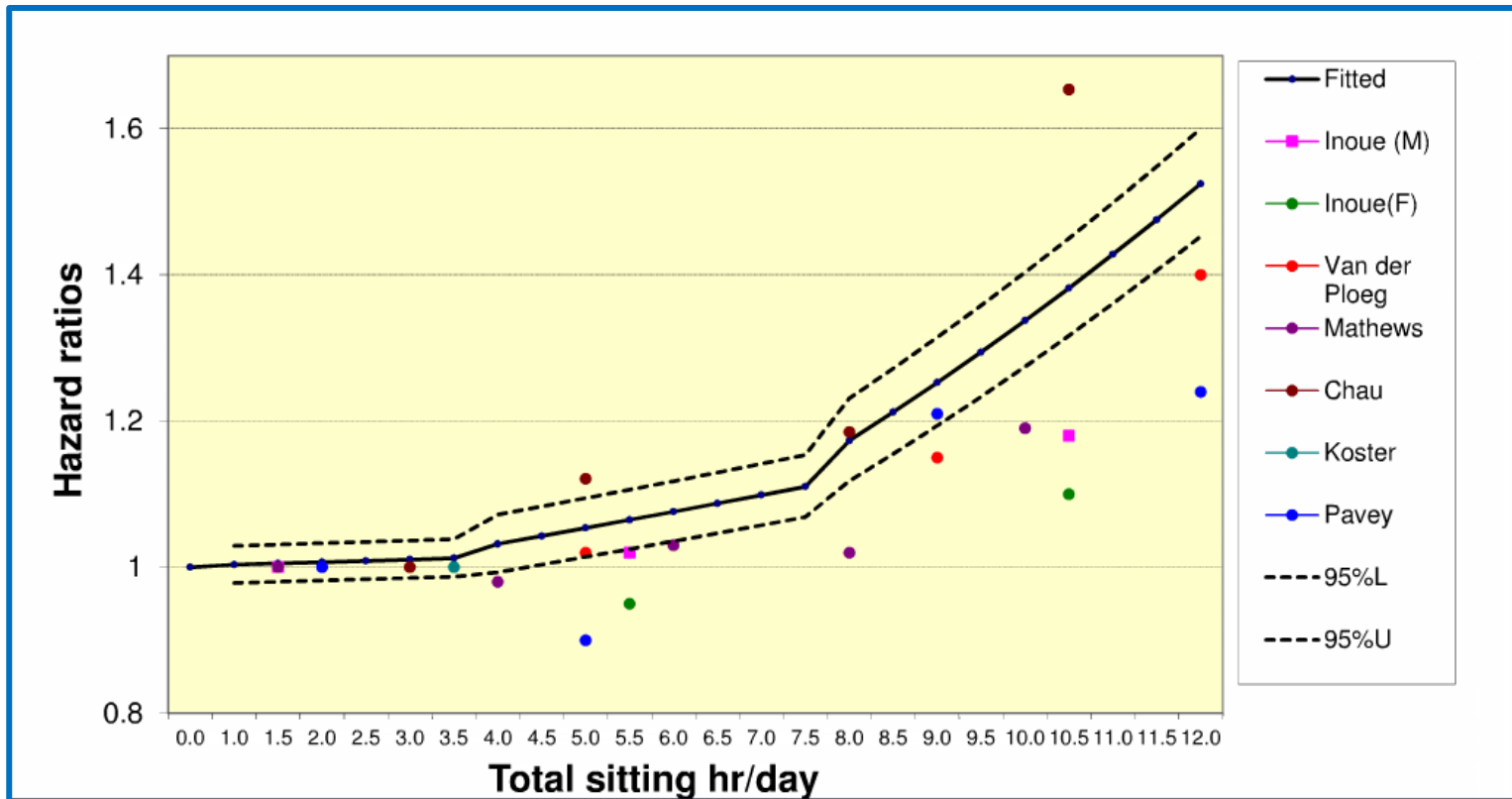
Example Household Activities					
	Hr		MET	Sedentary	Sitting Hours
Prepare & Eat Breakfast	1	Preparing & Sitting & Cleaning	2.2	No	0
House work*	2	Cleaning, Washing, Storing HH items, Gardeni	3	No	0
Shopping	1	Grocery & general shopping	2.1	No	0
Driving car	1.5	Transport to shops, get kids from school	1	Yes	1.5
Relaxing & Leisure	1.5	Sitting (Reading, TV, Coffee/Tea, socializing)	1.1	Yes	1.5
Prepare and Eat Lunch	1	Preparing & Sitting & Cleaning	2.2	No	0
House work*	1.5	Cleaning, Washing, Storing HH items, Gardeni	3	No	0
Prepare dinner	1	Sitting & preparing	2.2	No	0
Dinner	0.5	Sitting	1	Yes	0.5
Relaxing & Leisure	<u>2.5</u>	Preparing & Sitting & Cleaning	1	Yes	2.5
	13.5				6

*: Cleaning, Washing, Storing HH items, Gardening



Total Sitting Hours and Health Risks

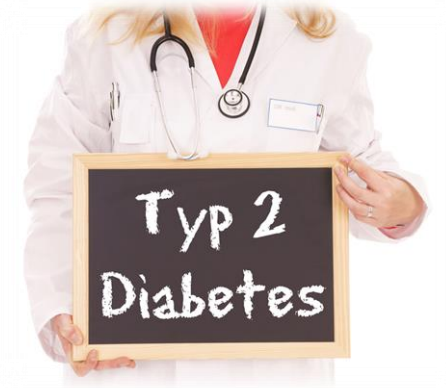
- We sit on average 6-13 hours/day
- Risk increases if total sitting time/day > 7 hrs



Chau et al., PLoS One 2013

Why Do We Care?

- Studies show that too much Sedentary Behavior increases the risk of developing several illnesses like:
 - Muscular Skeletal Diseases
 - Heart Disease, Type 2 Diabetes, Obesity
 - Various Types of Cancer
- Sedentary Behavior is increasing
- 1 hour of sport at the end of the day can't undo the damage of sitting for more than 7 hours.



What Can You Do?

- Avoid sitting for a longer time because your muscles will stop working and your heart will slow down
- **Rule of Thumb:** Walk for 5 minutes every hour to keep the muscles and the heart active
- Ideas
 - Park 'far' away
 - Get off/on the train/bus 1 station earlier/later
 - Go to work by bike or e-bike
 - Do lunch and after dinner walks
 - Go for coffee with colleagues
 - Do stretch exercises
 - Combine standing and sitting (meetings, phone-calls)
 - Use the toilet on a different floor
 - Use stairs
 - Use tools that remind you to move (colleagues, timer, smart watch, activity tracker,...)



Conclusion

- Sitting helps your body to rest and recover
- Too much sitting is negative for your health
- It's not about becoming an athlete
- Walk for 5 minutes every hour



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References & Links

- University of Amsterdam
- University of Leicester
- American College of Occupational and Environmental Medicine
- University of Sydney

Links

- [More Info About Sedentary Behavior](#)
- [Metabolic Equivalent \(MET\) Values for Activities](#)