研究: 夜猫子患糖尿病和心脏病的风险更

高 Night owls at high risk of certain chronic diseases, study says

众所周知,晚睡晚起不利于身体健康,但还是有很多人喜欢当"夜猫子"。 新研究发现,夜猫子对胰岛素的抵抗性更强,新陈代谢燃烧的脂肪也更 少,这会增加患2型糖尿病和心脏病的风险。



Photo/Pexels

If you prefer to go to bed and get up later – a sleep chronotype known as being a night owl – you may be at higher risk for type 2 diabetes and heart disease, a new study found.

一项新研究发现,如果你喜欢晚睡晚起的夜猫子睡眠模式,你患2型糖尿病和心脏病的风险可能会更高。

Night owls were more sedentary, had lower aerobic fitness levels and burned less fat at rest and while active than early birds in the study. Night owls were also more likely to be insulin-resistant, meaning their muscles required more insulin to be able to get the energy they need, according to the study published Monday in the journal *Experimental Physiology*.

这项于9月19日发表在《实验生理学》期刊上的研究指出,相比早起的人,夜猫子更不爱动、体能更差、休息和活动时燃烧的脂肪也更少。 夜猫子对胰岛素的抵抗性也更强,这意味着他们的肌肉需要更多胰岛素 才能获得自身所需的能量。

"Insulin tells the muscles to be a sponge and absorb the glucose in the blood," said senior study author Steven Malin, an associate professor in the department of kinesiology and health at Rutgers University in New Jersey.

该研究的资深作者、美国新泽西州罗格斯大学运动技能与健康学副教授 史蒂芬·马林说:"胰岛素让肌肉像海绵一样吸收血液中的葡萄糖。"

"Think about it like water from a water faucet: You turn the water on and a drop touches the sponge and is immediately absorbed," Malin said. "But if you' re not exercising, engaging those muscles, it's like if that sponge was to sit for a couple days and get rock hard. A drop of water isn't going to make it soft again."

"你可以将其想象成水龙头里流出的水:你打开水龙头,一滴水落到海绵上,立刻就被吸收了。但是如果你没有锻炼和使用你的肌肉,就像把海绵放了两三天,已经变硬了。这时候一滴水就无法让海绵重新变软。"

If sleep chronotype is affecting how our bodies use insulin and impacting metabolism, then being a night owl might be useful in predicting a person' s risk for heart disease and type 2 diabetes, Malin added.

马林指出,如果睡眠类型会影响人体使用胰岛素以及新陈代谢的方式, 那么夜猫子习性便可以用来预测一个人患心脏病和2型糖尿病的风险。

Sleep chronotype can have profound effects on productivity, school performance, social functioning and lifestyle habits, experts say. Early birds tend to perform better in school, and are more active throughout the day, which may partly explain why studies have found they have less risk of cardiovascular disease, Malin said. 马林称,睡眠类型对工作效率、学业成绩、社交能力和生活习惯都会产 生深远影响。早起的人通常在学校表现更好,白天也更活跃,这在某种 程度上可以解释为什么研究发现早起的人患心血管疾病的风险更低。

Evening types may take more risks, use more tobacco, alcohol and caffeine, and are more likely to skip breakfast and eat more later in the day. In addition, research suggests "later cronotypes have higher body fat located more in the stomach or abdominal region, an area which many health professionals believe to be worse for our health," Malin said.

马林表示, 夜猫子患心血管疾病的风险则更高, 他们摄入的烟酒、咖啡 因都更多, 而且更可能不吃早饭, 在午饭和晚饭时大吃大喝。此外, 研 究还表明, "夜猫子在腹部囤积的脂肪更多, 许多健康专家都认为这块 区域脂肪堆积不利于健康"。

Researchers classified 51 adults without heart disease or diabetes into morning or evening chronotypes, based on their natural sleep and wake preferences. During the study, the participants ate a controlled diet and fasted overnight while their activity levels were monitored for a week. 研究人员将 51 名没有心脏病或糖尿病的成年人基于天生睡眠喜好分成 早起者和夜猫子两组。这些研究参与者在一周时间内控制饮食并在夜里 禁食,与此同时研究人员对他们的活动水平进行监测。

The research team determined each person's body mass, body composition and fitness level, and measured levels of insulin sensitivity. In addition, researchers looked at how each person's metabolism obtained most of their energy, either via fat or carbohydrates.

研究团队测量了每个人的体重指数、身体成分和体能水平,以及对胰岛素的敏感度。除此以外,研究人员还查看了每个人是从脂肪还是碳水化合物中获取新陈代谢所需的大部分能量。

"Fat metabolism is important because we think if you can burn fat for energy that' s going to help the muscle pick up the glucose in a more enduring fashion," Malin said.

马林说:"脂肪代谢很重要,因为我们认为,如果你可以通过燃烧脂肪 获取能量,就可以帮助肌肉更持久地吸收葡萄糖。"

Burning fat can promote endurance and more physical and mental activity throughout the day. Carbohydrates, on the other hand, are what the body uses for intense physical activity. Carbs are burned more quickly, which is why many athletes carb-load in advance of a race or marathon.

燃烧脂肪可以增强一个人的耐力, 让其有精力在一天中开展更多体力和脑力活动。身体在进行剧烈运动时则会燃烧碳水化合物。碳水化合物燃烧得更快, 这就是为什么许多运动员在比赛或马拉松长跑前要摄入充足的碳水化合物。

Results of the test showed early birds used more fat for energy at both rest and during exercise than night owls in the study, who used more carbohydrates as a source of fuel.

测试结果显示,早起的人在休息和运动时燃烧的脂肪比夜猫子更多,而 夜猫子则会燃烧更多碳水化合物来获取能量。