

Late sleepers face higher diabetes risk, study reveals beyond lifestyle factors

People who prefer staying up late, face a 50% higher risk of developing type 2 diabetes compared to early risers.

People who go to bed late often have higher BMI and body fat levels, and larger waist size.

In Short

1. Late sleepers have a 46% higher risk of type 2 diabetes
2. People who sleep late tend to have greater BMI, larger waistlines
3. Disruptions in the body's internal clock could be leading to a higher risk of diabetes

People who go to bed late, often referred to as "night owls", are almost 50% more likely to develop type 2 diabetes compared to those who sleep earlier.

They also tend to have a higher Body Mass Index (BMI), larger waistlines, and more hidden body fat, such as visceral and liver fat, which contribute to metabolic health issues.

The findings of the study, which are yet to be published, will be presented at the Annual Meeting of the European Association for the Study of Diabetes (EASD) in Madrid, Spain.

Led by Dr Jeroen van der Velde from Leiden University Medical Centre, Netherlands, the study focused on the connection between sleep timing, body fat distribution, and diabetes risk.

While previous studies suggested that late sleepers are more likely to have unhealthy lifestyles, such as smoking or poor diet, this research indicates that lifestyle alone doesn't fully explain the increased risk of type 2 diabetes in night owls.

Type 2 diabetes is one of the most common non-communicable diseases in India. More than 100 million people in the country are affected by this disease.

It is a chronic condition where the body doesn't properly use insulin (a hormone released in the pancreas), leading to high blood sugar levels. It's often linked to obesity, inactivity, and poor diet.

The study analysed data from over 5,000 individuals as part of the Netherlands Epidemiology of Obesity study. Participants, with an average age of 56 years, provided details about their sleep habits, which were used to classify them into early, intermediate, and late chronotype groups (natural sleep-wake patterns).

Chronotype groups categorise people based on their natural sleep-wake patterns and preferences. These include:

Early Chronotypes: Prefer waking up and going to bed early.

Intermediate Chronotypes: Have a balanced sleep schedule, neither early nor late.

Late Chronotypes: Prefer staying up late and waking up later.

These groups reflect individual differences in internal body clocks and daily rhythms.

Their BMI, waist size, and body fat levels were also measured, while MRI scans were used to assess visceral and liver fat in a subset of participants.

Over a 6.6-year follow-up, 225 participants developed type 2 diabetes.

"We believe that other mechanisms are also at play," says Dr van der Velde. "A likely explanation is that the circadian rhythm or body clock in late chronotypes is out of sync with the work and social schedules followed by society. This can lead to circadian misalignment, which we know can lead to metabolic disturbances and ultimately type 2 diabetes."

Those with a late chronotype were found to have a 46% higher risk of developing type 2 diabetes compared to the intermediate group, even after adjusting for factors like age, physical activity, and sleep quality.

They also had higher BMI, larger waistlines, and more visceral and liver fat.

Dr van der Velde recommends lifestyle adjustments, such as avoiding late-night eating and exploring time-restricted eating, as potential strategies to improve metabolic health in night owls.

Further studies are ongoing to understand the impact of lifestyle timing on type 2 diabetes risk.

News Source:

<https://www.indiatoday.in/health/story/late-sleepers-face-higher-diabetes-risk-study-reveals-beyond-lifestyle-factors-2596515-2024-09-10>