

# DOCTOR'S NOTE

Monthly Newsletter for Woodlands' CCM Program

## The Importance of Regular Sleep for Longevity



BY MARK M RYAN, MD

Irregular sleep patterns are a common but often overlooked issue that many patients struggle with. However, it is important to recognize that these patterns can have significant implications for overall health, functioning, and longevity.

According to a recent [study](#), sleep regularity plays a significant role in predicting the risk of mortality. Interestingly, it is considered to be a stronger predictor compared to sleep duration.

Irregular sleep refers to a pattern where individuals go to bed at different times or inconsistently shift between various sleep durations. On the other hand, regular sleep involves consistent and predictable bedtimes and wake-up times.

Maintaining a consistent sleep schedule has been found to have several associated benefits:

- Up to a 48% lower risk of all-cause mortality
- As high as 39% lower risk of cancer mortality
- More than 50% lower risk of cardiometabolic mortality

Establishing a consistent sleep routine can be accomplished through uncomplicated yet impactful lifestyle modifications.

1. **Develop a regular bedtime ritual:** Going to bed and waking up at the same time every day, even on weekends, helps regulate your body's internal clock and could aid in falling asleep and waking up more easily.
2. **Get sunlight early in the day:** Exposure to natural sunlight helps reset your internal clock.
3. **Limit food intake before bedtime:** Avoid eating 2 to 3 hours before you sleep, as this can disrupt your sleep cycle.
4. **Reduce stimulating activities before bed:** Engage in calming activities such as reading or taking a warm bath, and avoid electronic devices or consuming caffeinated beverages too close to bedtime.

### HEALTH TIPS

NOVEMBER IS  
**NATIONAL  
DIABETES**  
AWARENESS MONTH



**Diabetes affects 37 million Americans and can lead to damage to the eyes, kidneys, nerves, and heart. If you're concerned about your risk or have been diagnosed with diabetes, now is the perfect time to take action.**

- Start by understanding the importance of a balanced diet, regular exercise, and maintaining a healthy weight.
- Know your risk factors: Family history and genetics can contribute to diabetes. Age, obesity, and a sedentary lifestyle also increase your risk.
- Monitor your blood sugar levels, adhere to your treatment plan, and consult with your healthcare professionals for guidance.

**This newsletter is brought to you by the [Woodlands Primary Care Department](#)**

## IN THE NEWS

## New Treatment for Hypertension: Engineered Bacteria Can Lower Blood Pressure

Researchers at The University of Toledo have made a groundbreaking discovery in the field of hypertension treatment. Their [recent study](#), published in the prestigious journal *Pharmacological Research*, reveals how engineered bacteria can effectively reduce blood pressure.



The study focuses on the use of genetically modified bacteria that can produce an enzyme called angiotensin-converting enzyme (ACE). This enzyme plays a crucial role in blood pressure regulation by converting angiotensin I into angiotensin II, a potent vasoconstrictor. By introducing these bacteria into the gut, researchers have observed a significant reduction in blood pressure levels in animal models.

Interestingly, the blood-pressure-lowering effects were observed exclusively in female rats, despite no differences in ACE2 expression between males and females. This finding adds an intriguing dimension to the study, suggesting potential gender-related factors in blood pressure regulation.

What makes this approach fascinating is that these bacteria can be taken orally as a probiotic. This means that instead of relying on traditional antihypertensive medications, individuals with hypertension could potentially benefit from a simple daily probiotic supplement.

Although still in the early stages of research, this new approach shows promise in revolutionizing hypertension treatment. The development of engineered bacteria as a therapeutic tool opens up new possibilities for targeted and personalized treatment options.

Further research is required to determine the long-term effectiveness and safety of this potential treatment, but the prospect of a non-invasive and natural approach to managing hypertension is exciting. This breakthrough paves the way for innovative and tailored solutions in the field of cardiovascular health.

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CALL US FIRST

### I WOKE UP AND MY ARM IS NUMB - DO I NEED TO GO TO THE EMERGENCY ROOM?

Our physicians are on-call 24/7 and can discuss your symptoms and whether they require emergency evaluation or can be seen in the office. Call **850-696-4000** and ask the operator for the Woodlands primary care physician on-call.