PHOTO: **ORCHID CHAKMA**

How your food habits effect your sleeping pattern

BUSHRA ZAMAN

Are you familiar with the "No sugar before bed" rule? Have you ever been encouraged to have greens as part of your regular dinner? Turns out, there is actually some truth to these tips that we often tend to overlook. However, once dissected, they start to make a lot more sense.

It is common knowledge that various types of carbohydrates affect your sleep differently. Part of this has to do with the surge of energy that sugar provides. An article published by Time4Sleep discusses how the consumption of sugar helps generate more brain waves even in a state of unconsciousness.

To further consolidate the validity of this phenomenon, *The New York Times* published an article that tackles this concern. According to the article, regularly eating sugar before bedtime can cause disruptions in one's sleep. So, maybe your recent string of unwarranted nightmares has been brought on by late-night sugar consumption.

Moreover, Time4Sleep also conducted a survey where participants mentioned that consumption of dairy products were more likely to give them nightmares in comparison to other types of food.

Not all carbohydrates are bad, however. In their piece, *The New York Times* stated that carbohydrates help the transfer of sleep-inducing chemicals to the brain faster. One such chemical, tryptophan, is required for the synthesis of the well-known sleep-wake regulator, melatonin. In normal circumstances, it is difficult for tryptophan to successfully be transported to the brain efficiently. When food in the form of carbohydrates is consumed, the transfer of tryptophan to the brain is facilitated, resulting in a person falling asleep faster. According to *The New York Times*, there were studies conducted showcasing how food that's rich in protein decreases the probability of tryptophan crossing the blood-brain barrier. Cherry juice is a beverage which is known for increasing tryptophan levels, and thereby potentially being of use to individuals struggling with sleep.

As someone who has been dealing with sleeping issues for years now, I have found chamomile tea to be comforting. It personally never makes me drowsy, but it does contribute to a feeling of comfort that helps me to get a good night's sleep. Another option that I find soothing is mint-flavoured green tea. At the end of the day, this helps me unwind and eventually fall asleep. Perhaps like this, the effect of other specific food on sleep varies from person to person as well.

The issue with these conclusions is how the data is reliant on the statistical significance of epidemiology studies. Such studies largely focus on numbers which does not provide information on details such as a theorised mechanism. The data largely relies on people, and is not very conclusive. Nonetheless, the fact that food affects your sleep is more established as a theory.

References:

1. The New York Times, (December 10, 2020), *How Foods May Affect Our Sleep.*
2. Time4Sleep, (November 29, 2019), *Does Eating Before Bed Give You Nightmares?*

Bushra Zaman likes books, art, and only being contacted by email. Contact her at bushrazaman31@yahoo.com

The Curious Case of Dreams and Nightmares

MASHIYAT NAYEEM

When was the last time you had an incomprehensibly strange dream? Did you ever have any recurring dreams that always played out like a script? Why do we even have nightmares?

Dreams have been the subject of mystery for thousands of years. Rulers and warriors relied on them for wisdom, creatives looked upon them for inspiration, and scientists and philosophers have long debated their origin and significance. The fascination with dreams also led to the development of theories about their origin, much of which is still inconclusive.

Dream theorists

The most widely explored works in the world of dreams are by Sigmund Freud and Carl Jung, two of the most influential people in psychology. Freud's theory that dreams are "disguised fulfilments of repressed wishes" popularised the practice of dream interpretation. While Freud's theory mostly concerned itself with past experiences, Jung believed that dreams also have a "prospective function," offering glimpses into our future growth.

Since then, different theories have been proposed, including the idea that dreams are for emotion processing. But newer theorists look at it differently.

A recent study by Erik Hoel, a research assistant professor at Tufts University's Allen Discovery Center, suggest that the brain is like a machine learning model – it gains proficiency from repetitive tasks but cannot apply said knowledge to other areas. Therefore, random variables or "noise" (in this case, dreams) have to be introduced to keep it fit. So, unusual dreams are the brain's way of adding noise to the thinking system. Hoel uses this theory to explain how sleeping on a problem can help to come up with a different solution in the morning!

Dreaming in different stages of the sleep cycle

In the mid-20th century, findings about Rapid Eye Movement (REM) sleep and non-REM (NREM) sleep shed new light on the science behind dreams.

Most dreams occur during the REM stage and are characterised by vivid imagery, intense emotions, and the feeling that they're real. On the other hand, NREM dreams involve friendlier emotions and are more conceptual.

A fascinating way of distinguishing the dreams of each sleep cycle stages is the representation of the self. Are you a passive observer of the story or an active participant? Do you find yourself being both? Are you even yourself or a different entity?

Nightmares and their link to trauma

Most theories suggest that nightmares are often result from waking psychological distress. This was exemplified during the lockdown of 2020, when people around the world reported vivid nightmares about the pandemic.

It is even more common to experience nightmares following trauma, and in the case of Post-Traumatic Stress Disorder (PTSD), the nightmare may be terrifyingly similar to the original event.

Some studies show that the purpose of nightmares is to let us test out various reactions because according to research, we are more inclined to facing frightening situations than to avoid them in our dreams. Reliving dangerous experiences while soundly asleep can lessen our fears and open up other brain regions crucial for creativity and decision-making.

Reference:

TuftsNow (February 18, 2021). *A New Theory for Why We Dream.*

The author spends hours deciphering her dreams and finds more insight in them than what horoscopes can offer. Make the case for astrology at mashiyat.nayeem@gmail.com

PHOTO: **ORCHID CHAKMA**