WHY DO YOU FEEL SLEEPY AFTER TAKING A GLASS OF WARM MILK?

By Able Huten

You might have heard people saying that drinking a glass warm milk help you sleep better. Most people agree to this fact. But how does a glass of warm milk induce sleep? I hope you might want to know the answer. Though the answer to this question is quite debatable, the most accepted and research-proven answer is a tossup between human physiology and psychology.

Tryptophan

Out of the twenty major amino acids, building blocks of proteins, researchers know that large amount of tryptophan amino acid is responsible for sleep. Tryptophan is found in milk and turkey. Thus, tryptophan content in these food products is attributed to the drowsy feeling after a big Thanksgiving party. However, researchers are advocating that the level of tryptophan content in milk and turkey is way below the amount require to release chemical in the body to cause someone sleep.

Theory on How Milk Induces Sleep

Tryptophan is a large branched amino acid. To have any soporific effect, tryptophan has to cross the blood-brain barrier. The blood-brain barrier (BBB) is a highly selective permeability barrier that separates the circulating blood from the brain extracellular fluid (BECF) in the central nervous system (CNS). And in the presence of other amino acids, trytophan ends up fighting with these amino acids present in the brain to cross this barrier-most of the time without success. Moreover, protein-rich food like milk drastically reduces the chances for tryptophan to cross the brain barrier.

According to research, the only way to on purpose let tryptophan cross the barrier is to take food with high content of carbohydrates along with tryptophan rich food. Carbohydrates after digestion stimulate the release of chemical called insulin. Eventually, this insulin makes it easier for tryptophan to cross the brain barrier. Inside the brain, tryptophan is converted into sleep inducing hormones serotonin and melatonin.

HUMAN PHYSIOLOGY

Human Physiology in simple words is the study of the mechanisms on how human body works. For example: a study of the mechanism on how human muscle works. In order to understand how milk induces sleep, one needs to know some of the basic terms used in human physiology.
The only problem with this theory is that the amount of tryptophan content in milk and turkey is very low to induce any sleep-inducing chemicals. Therefore, sleepiness after taking a glass of warm milk or turkey cannot solely be attributed to the presence of tryptophan these food products.

**HUMAN PSYCHOLOGY**

There might not be a strong biochemical link between warm milk and sleep, but there may be a psychological one as well.

In the nature, *milk is associated with mothers and a mother’s love and care.* Most people love to revisit the pleasant memories of their mother’s love and care. Infants go to sleep right after breastfeeding. In connection to a mother’s comfort, it is believed that breastfeeding doesn’t only feed the infant physically, but it also brings psychological comfort on the infant resulting to sleep.

In the same way, it has been strongly supported that even when an adult drinks a glass of warm milk, they may just be taking an unconscious, nostalgic trip back to memories of mother’s love and care. This comforting feelings and remembrance can induce release of chemicals in the brain that actually form a sensation of well-being and relaxation. This brain chemical has been associated to serotonin, sleep-inducing chemical. Scientists believe that the sensation of well-being and relaxation due to serotonin causes sleep.

**SOME OTHER FACTS ABOUT PHYSIOLOGY IN RELATION TO SLEEP**

**Eat well and Sleep Well!**

People sleep better and tight when their body temperature is warm and is at a comfort level. Drinking a glass of warm milk, especially before sleep, raises body temperature. When human body is warm, the muscles relax, and the body slows down its responses. Usually slowing down of body responses is succeeded by a good night sleep. Thus, there is this cascading effect right from the start of drinking milk up to sleep: A glass of warm milk warms up human’s body and result in slowing down of its responses. Ultimately, the relaxation of body muscles brings comfort and ease to cause sleep.
A Well Fed Person Sleeps Well!

You might have experienced that you don’t sleep well with an empty stomach. Warm milk coats and soothes the stomach. When drinking warm milk, a person may actually be a little peptic (acidic digestion) and milk may ease the feeling and create a sense of relief. Another factor is that most people sleep better when the stomach has something in it. Babies sleep after nursing when their stomachs are full. The same is true of children and adults. A stomach with some milk in it is comforting, which helps to induce sleep.

CONCLUSION

Scientists believe that the routine of drinking warm milk every night may be the real reason that it helps sleep. However, the right answer to this question is still debatable. But majority of the scientists believe that psychological association between milk and sleep is stronger than any chemical present in the milk.

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