

Turkey feast causes drowsiness

RYAN GULA
science editor

The sound of plates clanging as they are loaded with our favorite foods.

After we have finished the fourth helping of Thanksgiving dinner, we sit down to watch our favorite football team on TV.

After consuming all that turkey, why are we so tired? Why do we struggle to make it through the fourth quarter or to eleven?

According to many doctors, we tend to eat more when we are surrounded by food. This is especially true during the holiday season, particularly Thanksgiving when much of the day is planned around a meal.

Additionally, we instinctively eat or feel a need to eat when we see others doing the same.

Think about the last time you saw someone eating a Snickers and wishing you had one as well.

We often accept food when offered it by others, simply because we have room for it, not because our body needs the energy it provides.

Doctors argue that snacking may actually be a better way of eating when compared to eating a large amount two or three times a day.

Naturally, this is only true



when the foods we consume as a snack are healthy and not just a candy bar.

This is because the body isn't overwhelmed by having to digest a huge meal all at once.

When we eat small

amounts frequently, the body can absorb what it needs slowly and we tend to

not get tired afterward. So why exactly do we find it hard to stay awake when finishing the football game?

When we eat, a large amount of food, blood moves toward our digestive tract to

help it function and begin carrying the nutrients to parts of the body.

This results in our slowing down and feeling tired simply because our muscles lack their normal blood supply. This isn't a bad function however.

When the body is tired, we are less likely to exert ourselves by running or working out, which can interfere with the digestive process, making us sick.

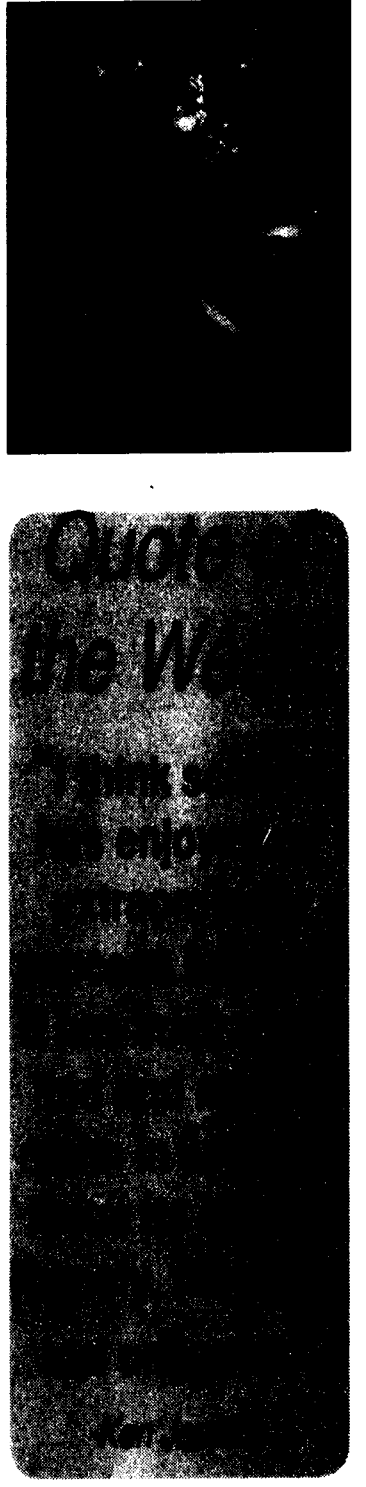
So the body is simply telling us to wait a little until our food has been processed.

This is why Mom was right telling us to stay out of the pool for a little after we ate.

It is much easier for us to get cramps since our muscles do not have access to as much blood as usual.

As if all this was not enough, turkey has L-tryptophan, an amino acid that has documented sleep inducing effects. Tryptophan is also used in many different medicines such as those treating depression, bipolar disorder, and those treating mood disorders.

So go ahead and eat all you want this Thanksgiving, but make sure you have a place to sleep afterwards.



UP Professor studies birds

ELIZABETH MASTELLER
science writer

Ever wake up in the morning to the incessant chirping of birds and wonder what they could possibly be talking about that is keeping you from falling back asleep?

Dezhe Jin, an associate professor at Penn State in physics, studied the connections made between the nerve cells of a songbird's brain.

Jin studied the bird while it chirps, and is working to relate the connection to humans, and how they learn languages. He especially focuses on the impact this has on young children.

The research study was conducted using the zebra finch which performs only a single song of notes through its' lifetime.

Scientists, with the use of advanced electrodes determined that a group of neurons in the bird's brain was responsible for the singing, and if this group was not present, then the bird would be unable to sing.

"Unlike dogs and cats, whose vocalizations are innate and unlearned," said Jin on the Penn State Eberly College of Science website, "songbirds learn a song in much the same way as humans learn a language — through cultural transmission."

These transmissions were



recorded along with the brain activity to find that when certain neurons were triggered in the brain, a certain tone was produced by the bird.

This confirmed that the birds think about their chirps and use them as a means of communication.

"The sequential bursts of brain-cell activity represent the sequential notes on the same piece of music," Jin said on the website.

The next step in the project is to look at different species, especially those that know more songs and study how their brain activity is similar or different to that of the finch.

Jin hopes that this will lead

to a better understanding of how humans learn language, but on a more basic level.

"The zebra finch is a simple model because the bird perfects just one song during its lifetime," Jin said.

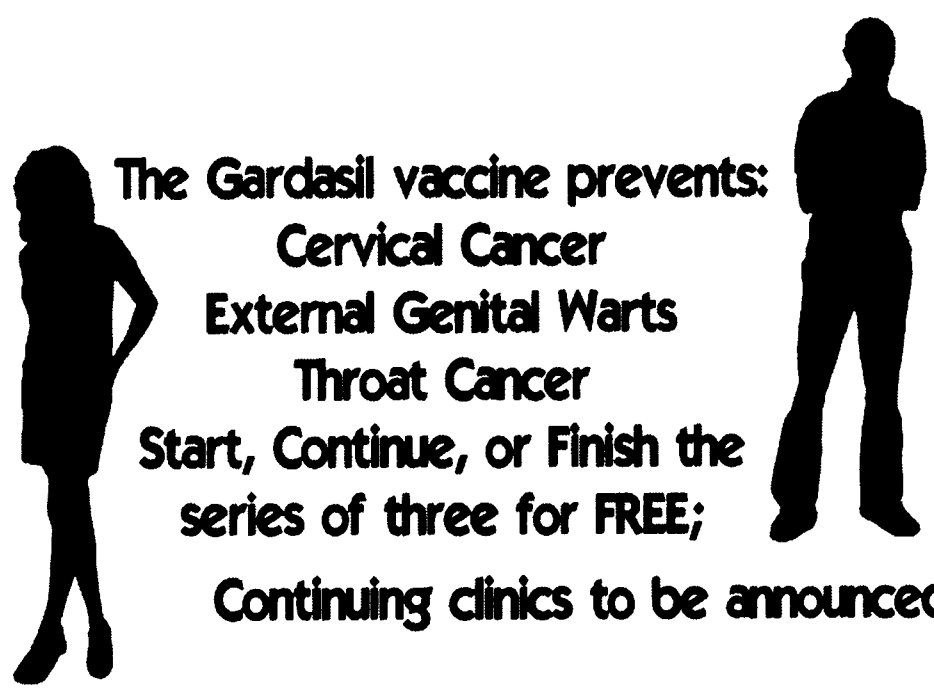
"However, other species learn several distinct songs. They have a larger repertoire."

Along with Jin, the research was conducted by Michael A. Long and Michael S. Fee of the Massachusetts Institute of Technology's McGovern Institute for Brain Research.

The publication is in the science journal *Nature*, and can be viewed at their website, nature.com

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