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Taurine – an amino acid frequently used by bodybuilders and added to energy or sports drinks, can be an “elixir of life”, according to the author of a new study. But, meanwhile, hardly when it comes to worms, rats and macaques.

Would it be useful or potentially harmful to humans? As there are still not enough studies to verify the effectiveness of the compost, it is better to save money, say the specialists.

A study [published in quinta-feira \(8\)](#) The magazine “Science” reports that middle-aged female wanderers fed with high levels of taurine will live 12% longer, on average, than wanderers who do not receive the substance.

Male wanderers will live about 10% more, said lead study author Vijay Yadav, assistant professor of developmental genetics at Columbia University, in New York.

“The study suggests that taurine may be an elixir of life within us,” said Yadav in a

statement about the study.

## Soon for the manchetes?

Considered a non-essential amino acid, [to taurine](#) there is no brain, in the retina and in almost all [muscle tissues](#) and organs of the body. [studies](#) We will discover that she can have an effect [anti-inflammatory](#) and [neuroprotective](#) in older brains, but it is potentially harmful to [The brain in adolescent development](#). Taurine deficiencies are linked to [heart damage](#), [Renais e retinal](#).

Absorbed by foods such as shellfish and meat and distributed by the liver, the levels of taurine decrease with age, “but, if you are going to return to the youngest levels, this effect has been done among the times that live more healthily for longer”, says the co-author Henning Wackerhage, professor of exercise biology at the Technical University of Munich, in Germany.

Tests in macaques found that those who took taurine supplements were leaner, had better blood sugar levels, less liver damage, increased bone density, younger immune systems, and gained less weight, according to the study.

“Studies in various species show that the abundance of taurine decreases with age and the reversal of decline as you encourage yourself to live longer and healthier lives,” Yadav said. “In conclusion, the discoveries must be relevant to human beings.”

But worms, rats and macaques are not people, and science is years away from proving the anti-aging value of taurine in human beings –if it exists, alert specialists.

“I don’t think it’s too early to go to the manchetes and it could be harmful if people start to eat more foods of animal origin to increase taurine intake,” said nutrition researcher Walter Willett, professor of epidemiology and nutrition at Harvard TH Chan School of Public Health and Medicine at Harvard Medical School. He did not do part of the study.

“In our cohorts with more than 130,000 men and women followed for up to 30 years (with more than 30,000 deaths), a higher intake of animal protein was related to higher overall mortality and mortality for the majority of the main doenças,” Willett said. “Some additional studies in humans using taurine supplements would be interesting, but we are long to suggest their use.”

The only experience in humans I have not discovered that the exercise – which is often called the key to longevity – improves the levels of taurine in people. However, it may not be a direct relationship, since exercise also reduces cholesterol; melhora or blood flow; lowers blood pressure; strengthens muscles, including the heart; increases to energy; The best thing is to fight chronic diseases.

“I don’t like the claims of extreme longevity in humans because we just don’t know,” said Gordon Lithgow, professor and vice president for academic affairs at the Buck Institute in Novato, Calif., an independent biomedical research institute focused just on aging. .

“I’m not saying that it’s not possible, but we need to have adequate double-blind clinical trials in people to see what happens,” continued Lithgow, whose laboratory [made a research](#) on worms included in the new study.

Unfortunately, many drugs, supplements, herbs and vitamins that seem to be beneficial can fail spectacularly once the science ends all research.

“See the case of vitamin E. People have been taking vitamin E for decades and later we discovered that it certainly does not do anything good and can even be harmful,” Lithgow exemplified. “It is necessary to wait until the days of the clinical trial, which is the only real measure in biomedicine”.

Despite these reservations, “it is difficult not to be animated with this study,” he says. “We have something like 400 million years of separation between worms and people, and still we discovered beneficial effects with the same restoration of the natural metabolite (taurine) in worms and primates.”

## An extensive investigation

The research took years and involved more than 50 laboratory scientists from all over the world who investigated the impacts of taurine on various species: yeasts, worms, rats and macaques.

Worms fed with taurine would live longer and seemed healthier, but taurine “has no effect on yeasts”, says Yadav.

Rats supplemented with taurine, however, “were leaner, had an increase in energy

expenditure, increased bone density, improved muscle strength, reduced depressive and anxious behaviors, improved memory, reduced insulin resistance and an immune system more young”.

As a taurine face isso? The answer is still not clear, according to the German researcher Wackerhage, “but it is my subjective opinion that taurine somehow seems to end up in the engine room of aging.”

For Yadav, at a metabolic level, taurine seems to improve the health of the mitochondria, the cellular power of the body that creates “90% of the energy necessary to sustain life and support the function of two organs”, according to [United Mitochondrial Disease Foundation](#).

An analysis of tissues in humans supplemented with taurine also showed that the amino acid suppresses the so-called “zombi” or senescent cells – older and damaged cells that refuse to die and begin to excrete inflammatory factors that trigger diseases such as Alzheimer’s and early aging.

Taurine also increased the stem cells present in some tissues, reduced non-DNA damage, and improved the ability of a cell to detect nutrients, discover, or study.

“The bullfighting step does not freio de envelhecimento. She does not put the vehicle in march-ré”, compared Yadav. “It slows down the aging process [desses animais]and it is for this reason that they are living more and in a healthier way.

## Wait for the tests

The first results on other potential anti-aging compounds – such as the diabetes drug metformin; or rapamycin antifungal antibiotic; or resveratrol, an antioxidant found in grapes; The precursors of NAD, which help not to age healthily – have been sold on a large scale to a young public, despite the lack of scientific proof.

“We do not recommend a purchase without a medical recommendation,” advised Yadav. “Our opinion is that people need to wait for the human clinical trials to be concluded. The benefits in opposition to risk factors will depend on the age of the studied population”.

Furthermore, as Yadav grows, users need to be certain that any taurine supplement

purchased off the market is “not adulterated”.

This is an important question because supplements are not regulated by the US Food and Drug Administration, says Dr. Pieter Cohen, associate professor of medicine who administers or [Supplementary Research Center](#) da Cambridge Health Alliance in Somerville, Massachusetts.

Many supplements contain less or more than what is listed on the label, while some may have unknown additives. A recent study [by doctor Cohen](#) about melatonin gummies, for example, I discovered that a brand continues [347% gives amount of melatonin](#) Listed on the label, while others contain only cannabidiol, or CBD, which is not mentioned on the label.

“Being stuck with a medication is good, because it has to go through a rigorous FDA approval process before you can access it,” Cohen said. “But supplements are not regulated, or they end up misleading consumers. They read about the study and we can go online and buy taurine and be ingesting-or in a few days”.

So there is a risk that people, including teenagers, use energy and sports drinks that are sugar-free and do not release caffeine, together with taurine. [you researchers](#) discovered between 750 and 1,000 milligrams per serving of taurine in energy and sports drinks [regular diet](#) I usually count 40 to 400 milligrams per day.

High levels of taurine, especially in combination with caffeine in sports and energy drinks, can be toxic to developing adolescent brain and body, [According to a 2017 review](#).

“The cardiac effects are exacerbated when taurine and caffeine are ingested together, which may be a concern, since caffeine in it can increase blood pressure and heart rate,” the review observed.

“Even if the brain is aged or the patient may benefit from taurine or caffeine supplementation, it seems that adolescents are not likely to benefit from supplementation and may, in fact, suffer harmful effects from chronic ingestion of high doses,” he concluded.

## multiple solution

The field of anti-aging is full of novelties and bullfighting barely two many paths potentiate for the Holy Grail gives life longer. Clinical trials are underway to see if the diabetes drug metformin can reverse aging “because people using metformin seem to have a lower risk of other diseases, such as cardiovascular diseases and neurodegenerative diseases,” Lithgow says.

In the end, science will need “with different types of taurine”. “Aging is highly complex, with many biochemical processes interacting with one another. There will not be a single solution to retard aging”, Lithgow continued.

“It is likely that we need a combination of things that we already have in our body, together with some development of drugs and well-known solutions, as exercise and nutrition practice”.

Source: CNN Espanol



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