

Skinny **SCIENCE**®

Skinny Science® **NUTRITION NEWS**

Newsletter No. 12008

January 2008

TOPICS

Ingredient in Energy Drinks Deemed Dangerous
Taurine: Culprit in Heart Function & Blood Pressure
Are Energy Drinks Safe for the Heart?

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SKINNY SCIENCE® TELESEMINARS



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Ingredient in Energy Drinks Deemed Dangerous **Taurine: Culprit in Heart Function & Blood Pressure** **Are Energy Drinks Safe for the Heart?**

The AMERICAN HEART ASSOCIATION (AHA) recently announced that energy drinks can dangerously affect heart function and blood pressure.

This announcement was made at the American Heart Association's Scientific Sessions and came as quite a surprise to researchers.

The AHA report was based on clinical studies that demonstrated "Blood pressure and heart rate levels increased in *healthy adults* who drank two cans a day of a popular energy drink containing Taurine and caffeine."

DANGEROUS COCKTAIL

Clinical trials involving energy drinks have shown that caffeine/Taurine beverages can be dangerous to patients with heart disease, and that drinking more than two cans a day can lead to higher risk increases, even in healthy people (1).

The researchers advised people with high blood pressure and heart rate to "avoid these drinks".

The dangerous cocktail of Taurine and caffeine was proven to cause pressure-induced bradycardia which induced changes in heart rate and mean arterial blood pressure.

SAFETY OF CAFFEINE

Caffeine is safely consumed in high doses on a daily basis, by most Americans, in the form of coffee, rendering Starbucks ® one of the most popular beverage-destinations. Globally, coffee is one of the top-3 *most consumed beverages* in the world.

Consumption of caffeine is known to cause fat-storage, but does not cause the serious health effects as evidenced in the *combination* of caffeine and Taurine.

In *double-blind placebo trials*, the strictest and most accurate form of clinical trials, Red Bull was proven to cause “*significant decline in heart rate and an increase in mean arterial blood pressure (2).*” Red Bull contains both Taurine (an amino acid) and caffeine.

Caffeine has been safely consumed in both high and low doses for decades, and only recently has the combination of caffeine and Taurine been introduced in functional beverages.

It is clear, from the scientific evidence, that combinations of caffeine and Taurine can cause serious potential health effects.

ENERGY DRINKS JOLT BLOOD PRESSURE

MEDSCAPE, Diabetes & Endocrinology; Energy Drinks Jolt Blood Pressure (3), reported that energy drinks containing caffeine and the amino acid Taurine, “*can adversely affect heart function and blood pressure.*”

The results prompted researchers to advise people with hypertension or heart disease to avoid energy drinks containing caffeine and Taurine, as they could impact the effectiveness of medication, as well as their blood pressure.

Top Neurologists have additionally confirmed that the combination of caffeine and Taurine could cause seizures in humans. Researchers stated that large consumption of energy drinks that contain both caffeine and Taurine can provoke seizures (4). The Neurologists reported that “*Once the patients were abstinent from the energy drinks, no recurrent seizures were reported.*”

EUROPEAN COMMISSION ON FOOD SAFETY

The *European Commission on Food Safety (ECFS)* concluded that reasonable levels of caffeine ingestion are safe in humans, and that levels of 300 mg/day caffeine, even in pregnant women, show no evidence of health problems. The ECFS stated, “*Most of the available epidemiological data [on caffeine] suggest there is no problem if total intake is below 300 mg caffeine/day.*”

Regarding Taurine ingestion in humans, the *European Commission on Food Safety (ECFS)* reported that:

- At present, there is insufficient information on which to set an upper safe level for daily intake of Taurine.
- It may also be necessary to take into consideration, that absorption of Taurine from beverages may be more rapid than from a food matrix.
- Against this background, the Committee is unable to conclude that the safety-in-use of Taurine in the concentration range reported for Taurine in "energy" drinks has been adequately established.
- Further studies would be required to establish an upper safe level for daily intake of Taurine.

DRINKS CONTAINING CAFFEINE & TAURINE

According to *Wikipedia.org* January 2008, energy drinks that contain both caffeine and Taurine include *Red Bull, Full Throttle, NOS, Rockstar, Monster, Rip It and SoBe.*

Many other energy drinks contain caffeine and Taurine, so consumers are encouraged to read the labels to ascertain if the product contains Taurine combined with caffeine. If in doubt, contact the manufacturer.

IN CONCLUSION

Alarmed by current research regarding the combination of caffeine and Taurine, the news media alerted the public as to the potential dangers of energy drinks.

MSNBC and *Medical News Today* warned people to avoid consuming beverages that contain caffeine and Taurine.

Though some of the energy drinks are targeted at athletes, researchers have also warned *against* the use of energy drinks during sports events and/or intense exercise.

As a result, some countries advise *against* using energy drinks to quench thirst while playing sports. Researchers explain that “*Blood pressure and heart rate naturally go up during physical activity, and that this could be further augmented by energy drinks* (Kalus et al)(1).

The bottom line is that *caution is recommended* in selecting energy beverages that contain both caffeine and Taurine, particularly in persons with specific health profiles, such as cardiovascular, hypertension (blood pressure), pregnancy, lactating women, children under age 18, and during sports events.



Skinny Science ® Researcher
Interviewed by Woman's World

Skinny Science ® researcher, Dr. Ann de Wees Allen was recently interviewed by *Woman's World* magazine, one of the most popular magazines in the country.

Woman's World magazine has 1.6 million readers, and is a National staple at major grocery store check-out lines. It has held the title of *Most Popular Newsstand Magazine*, and continues to be the best-selling women's publication, with sales of over 77 million copies per year.

Woman's World interviewed Dr. Allen on a variety of topics, with a primary focus on the benefits of L-Arginine. Dr. Allen holds Patents on L-Arginine, and with over 20 years of research in the field of L-Arginine, is considered the leading expert on L-Arginine.

Dr. Ann de Wees Allen was recently honored by *Who's Who* for her long-term research on the Glycemic Index. As *Chief of Biomedical Research* at the *Glycemic Research Institute*, Dr. Allen received the first worldwide Glycemic patent ever awarded, and is also named in the *Who's Who of American Inventors*.

The February 4, 2008 edition of *Woman's World* contains Dr. Allen's statement on L-arginine (pg 16).

Dr. Ann de Wees Allen and her research team provide education on L-Arginine, as well as other scientific topics, at SkinnyScienceEDU.com

Skinny Science ® Teleseminars are available to physicians, researchers, and the public at SkinnyScienceEDU.com

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An Introduction to

SKINNY SCIENCE ® TELESEMINARS

DR. CLAIR FRANCOMANO, M.D.
Chief of Medical Advisory Board
Chief of Genetics

As a physician, I am confronted every day by the terrible health consequences of poor nutritional choices.

As a human being, I struggle with the gross inequities between the nutritional problems of the industrialized world, where obesity is rampant, and the developing world, where malnutrition is a devastating problem.

As a geneticist and scientist, I believe that science has the means to address these problems and inequities.

In 2003, I had the privilege of meeting Dr. Ann de Wees Allen, a pioneering scientist in the field of nutrition and health. She and I have become partners, with the intent of finding solutions to the worldwide obesity and diabetes epidemic.

As a Clinical Researcher, Dr. Allen has spent the last 20 years delving into applications in Nutritional Science for the achievement of optimal health, including the concepts of the glycemic index and cephalic response (the responses of the body to sugars and sweet

tastes), and the concept of diet-induced fat-burning (thermogenesis), for which she won the “*Breakthrough Product of the Year*” award from *Success Magazine*.

Dr. Allen’s received the *first Glycemic Patent ever awarded globally*, and her research on the Glycemic Index is considered groundbreaking. A quick search of Google will lead to a plethora of Dr. Allen’s research.

Dr. Allen and I firmly believe that diets are *not* the answer to controlling obesity and diabetes, and hold genetic-hard-wiring responsible for the ongoing battle against these diseases of humanity. Evolutionary Discordance has provided humans with the ability to create fat-cells at an alarming rate, thus increasing overall body weight, as well as obesity and its ultimate end – diabetes.

How is it possible to lose weight or to control obesity and diabetes if, in fact, *we don’t know what’s making us fat* ?

The Key Code to obesity and diabetes is the Glycemic Index and Cephalic Response. In humans, these are the two primary causes for weight gain, obesity and diabetes.

Dr. Allen and I, along with our research team at SKINNY SCIENCE ®, strive to discover, quantify, and solve the causes of the growing obesity and diabetes epidemic.

Our research encompasses Human In Vivo Clinical Trials, Research & Development in Nutraceuticals, Pharmaceuticals, and foods, Anti-Aging Mechanisms, Growth Hormone, and Genetic Polymorphisms, such as Sickle Cell Disease and Thalassemia.

Though we lecture worldwide on these topics to scientists, the public typically does not have access to the research. To that end, we wish to share our ongoing research with the public and with other researchers.

SKINNY SCIENCE ® TELESEMINARS

We have come to believe that nutritional education is crucial for all people who seek to optimize their health, as well as for those in the nutritional science fields.

The best format for sharing current scientific information is the teleseminar format.

The SKINNY SCIENCE ® TELESEMINARS that Dr. Allen and I are conducting are designed to introduce our listeners to the important health benefits that can result from the applications of our life-long research and body of work.

We firmly believe that SKINNY SCIENCE ® TELESEMINARS provide a medium that enables us to reach scientists and the public with important research in our respective areas of expertise.

Further, we are convinced that the SKINNY SCIENCE ® TELESEMINAR is a crucial educational tool for people who seek to optimize their health, as well as for those in the nutritional science fields. The teleseminar format is an ideal way to communicate this information to the greatest number of people.

L-ARGININE RESEARCH

Dr. Allen is pioneer in the area of L-arginine research, and began her study of the amino acid L-Arginine in 1983, years ahead of any other scientists. Dr. Allen is solely credited with the discovery that L-Arginine is a Blind Amino Acid ® and that without a Blind Amino Acid Rider ®, L-Arginine can be quite dangerous in humans. Dr. Allen's research was validated by the Journal of the American Medical Association (JAMA) and the Johns Hopkins Trial on L-Arginine. For this research, Dr. Allen received a Federal Patent.

Dr. Allen's research on L-Arginine covers Growth Hormone, Testosterone, Anti-Aging, IGF, and nitric oxide (NO). Arginine is one of the twenty amino acids that are the building blocks of protein, and serves as the precursor to the production of nitric oxide (NO) in the body. NO circulates in the bloodstream and plays an important role in relaxation of the blood vessels, contributing to reducing blood pressure and the risk of heart disease.

Considered the leading L-Arginine researcher in the world, Dr. Allen's L-Arginine discoveries and Patents revolutionized the safe long-term use of arginine in humans. As a genetic researcher, I have been working with Dr. Allen and Dr. Randall Maxey, MD, PhD, in the development of L-Arginine formulas for genetic polymorphisms.

These Patents will forever change the face of genetic polymorphisms, such as Sickle Cell in Africa and African/Americans and Thalassemia, the most widespread genetic problem in Asia.

GLOBAL PHILANTHROPIC EFFORTS

The SKINNY SCIENCE ® team has been developing inexpensive solutions that address the scourge of genetic polymorphisms and malnutrition, particularly in children. We intend to announce those developments to the world in the near future.

It is our fervent hope, and our intent, that through the application of these State-of-the-Art nutritional principles in the industrialized world, and the development of Edible Computer Chips ® developed through our research, we will be able to support a philanthropic drive to address genetic issues and help eradicate malnutrition in our own country and the world.

The Coordinating Director of the Encode ® Foundation, Debbie Krushell, will be a guest speaker at upcoming SKINNY SCIENCE ® TELESEMINARS.

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