

# Energy Drinks Are they a health risk?

The well-known energy drinks have become very popular, especially among young people as performance enhancing non alcoholic drinks. Does the consumption of such drinks pose risks? What risks does their irrational use embrace?

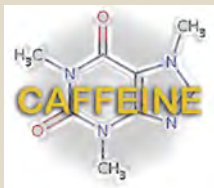
## What do the energy drinks contain?

Energy drinks are drinks with high percentage of caffeine which, according to their manufacturers they give consumers more energy than any common beverage.

The energy drinks typically contain, besides caffeine, carbohydrate / amino acids, such as glucuronolactone, taurine, vitamins and inorganic or herbal ingredients.

## What is the action of these ingredients?

**Caffeine:** It is a "stimulant" which accelerates the functions of the body and the brain. It increases the heartbeat, the blood pressure and the body temperature. It also acts as a diuretic.



**Sugars:** They are an energy source for the body.

**Proteins:** They are the basic substances, which are needed for the structure of the cells and their renewal. The proteins are essential elements for the development and the reconstruction of the tissue, the good function and structure of all living cells.

**Amino acids:** They are substances which the proteins are consisted from.

**Herbal ingredients:** They are various herbs that contain caffeine, ephedrine and other substances.

**Vitamins:** They play an important role on the development of the human body as well as on the performance of several of its basic functions.



## What are the consequences on human health from the consumption of energy drinks?

Data that prove the effects on health and wellness are scarce. The companies that produce these kinds of drinks declare the positive effects of their products. They declare that they are tonics, they improve the physical condition, the ability to concentrate, they increase the person's energy, the mental strength etc.

**However, some evidence suggests that their consumption includes risks and that they should be consumed with caution by certain groups of the population.**

## Who should avoid energy drinks?

- Children.
- Pregnant women.
- Individuals that consume excessive quantities of alcohol.
- Individuals that exercise.
- Individuals with health problems such as hypertension, heart problems and hypersensitivity to caffeine

**Children** that consume energy drinks have a high probability to suffer from insomnia, urine incontinence during their sleep, anxiety and can become irritable.

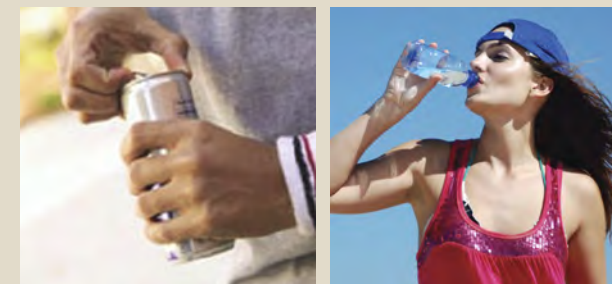
Consumption of Energy Drinks should be avoided by children of pre-teen age.

It is recommended also for **pregnant women** to avoid excessive consumption of drinks with high caffeine content such as coffee and energy drinks.

The use of energy drinks by **individuals that consume alcohol** could possibly create problems. There are studies that show that caffeine masks superficially the symptoms of alcohol consumption and as a result the individual overestimates his/her capabilities, since he/she does not feel affected by drinking.

To the **individuals that exercise excessively**, the energy drinks, may provoke dehydration, as caffeine is a diuretic, and cardiac arrhythmias.

**Individuals with hypertension and with heart problems**, due to the fact that caffeine increases their blood pressure and provokes rapid pulse, may run a risk if they consume uncontrollable amounts of energy drinks.



## THE CONTENT OF CAFFEINE IN DIFFERENT DRINKS AND COFFEES

	<b>ICED GREEN TEA</b> 74 -75,5 mg / bottle
	<b>COLA REFRESHMENTS</b> 29 – 42,2 mg / tin
	<b>CYPRUS COFFEE</b> 38,9 – 41,6 mg / cup
	<b>TINNED COFFEES</b> 51,2 – 141,2 mg / tin
	<b>INSTANT COFFEES</b> 77,2 – 89,8 mg / cup
	<b>ENERGY DRINKS</b> 40,6 – 93,7 mg / tin

The data seen on Table are based on analytical results produced by the SGL

## ADVICE TO THE PUBLIC

**Not Recommended:**

- ▶ Consumption of energy drinks by children (Parents should not allow it).
- ▶ By pregnant women and / or during breastfeeding.
- ▶ For thirst relief.
- ▶ In combination with alcohol, nutritional supplements and medication.
- ▶ During intensive physical activity, which could provoke cardiac arrhythmia.
- ▶ To be promoted in areas where teenagers and children attend.
- ▶ To be bought from sources of unknown origin and traceability such as the internet. Such sources could pose risks.

## GET THE CORRECT INFORMATION REGARDING THE ENERGY DRINKS



*Think wisely before consuming them!*

Forensic Chemistry and Toxicology Lab  
and  
Food Additives & Special Analysis  
of Food Lab

**State General Laboratory**  
Website: [www.moh.gov.cy/sgl](http://www.moh.gov.cy/sgl)  
Email: [info@sgl.moh.gov.cy](mailto:info@sgl.moh.gov.cy)  
Tel: 22809112



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