

## **Energy Drinks: Good or Bad?**

Concerns over the effects of energy drinks have been growing in recent years.

Promises of immediate energy and better performance can be very appealing.

Many experts question the safety of energy drinks as new studies emerge.

Despite containing common ingredients said to boost energy and stamina, there are major health concerns regarding energy drink consumption.

This article takes a detailed look at energy drinks and its health effects.

### **What are Energy Drinks?**

Energy drinks are beverages that contain caffeine, sugars and sweeteners, and a combination of other ingredients.

These products claim to increase alertness, and enhance both physical and mental performance.

They should not be confused with sports drinks. Sports drinks are for used for replenishing rather than energizing.

Bottom Line: Energy drinks contain caffeine and other ingredients which claim to energize and enhance performance. They shouldn't be confused with sports drinks.

### **Common Ingredients Found in Energy Drinks**

Every energy drink has its own special "energy blend" of ingredients.

There are several common ingredients of energy drinks. Manufacturers are not required to tell how much of each ingredient is added to their product.

#### Caffeine

Caffeine is the world's most widely consumed drug.

It is a bitter substance that is commonly found in coffee, tea, chocolate and certain medicines.

In small quantities, it may help increase alertness, boost energy and improve athletic performance.

Because it is a stimulant, large quantities can raise blood pressure and heart rate (1, 2).

Caffeine affects people in different ways.

### Ginseng

Ginseng is one of the most popular herbal supplements in the world.

It is used for the prevention and treatment of many conditions.

This herbal product is said to relieve stress, and increase memory and energy. It is also thought to enhance athletic performance (3, 4).

It has also been linked to undesirable side effects such as increased heart rate, headaches and insomnia (5).

Ginseng can interact with blood thinners (6).

### B vitamins

B vitamins are water soluble vitamins.

They help your body make energy from the foods you eat.

It is thought these vitamins are needed to release the energy contained in the energy drinks.

There is little danger in consuming too much of these vitamins. Any excess is quickly flushed out of the body (7).

They are considered safe.

### Taurine

Taurine is a type of amino acid found in the body.

It helps control the amount of water and minerals in the blood.

Some studies suggest it may help improve athletic performance. Other studies suggest when combined with caffeine it may improve mental performance (8, 9).

Little is known about the effects of long term use.

### Guarana

Guarana is from the seeds of the South American guarana plant.

It contains more caffeine than any other plant in the world.

Guarana is used for weight loss, to improve athletic performance, and decrease fatigue. Studies show guarana supplementation can also improve cognition (10, 11).

It's unclear how much guarana energy drinks contain and how much is considered safe.

### Ginkgo Biloba

Ginkgo biloba is an herb made from the leaves of the Chinese ginkgo tree.

It is one of the bestselling herbal supplements in Europe and the United States.

Some studies have shown that ginkgo biloba improves blood circulation and memory. Other research linked consumption of this herb increased risk of liver and thyroid cancer (12),

Studies have not consistently proved taking ginkgo biloba improves health outcomes.

### Carnitine

Carnitine is an amino acid found in all cells in the body.

It was thought to help improve athletic performance. However, there is no consistent research to support this idea (13)

The body only needs carnitine supplementation if there is a deficiency.

### Sugar

Sugar is a substance obtained from plants.

It is used as a sweetener in food and beverages. It is also used for energy in the body.

Most energy drinks contain excessive amounts of sugar.

Over time excess calories from sugar can contribute to obesity and diabetes (14)

Bottom line: There are many ingredients added to energy drinks. There is little or conflicting research to support their health benefits.

### **Energy Drinks & Obesity**

Obesity is a growing health problem.

The consumption of sugar-sweetened beverages may be a contributor to this problem (15)

Energy drinks contain about as much sugar as other sugar-sweetened drinks. This amount may equal about a quarter of a cup of sugar or more per can.

Almost all the calories in energy drinks come from sugar.

Studies have shown that people who consume calories from sugar-sweetened drinks do not reduce their caloric intake from food. This results in an overall increase of calorie consumption.

If more calories are consumed than the body burns off, the result could be weight gain.

The risk of weight gain increases with the daily amount of energy drinks consumed. It also increases with a sedentary lifestyle.

To avoid weight gain, moderation is key.

If you must consume energy drinks, limit to one can per day and consume them alongside a healthy diet while maintaining an active lifestyle.

Bottom line: Energy drinks are high in sugar and can lead to weight gain if consumed in excess. To avoid weight gain, limit the amount of calories consumed from energy drinks.

### **Energy Drinks & Heart Health**

### **Energy Drinks & Diabetes**

### **Energy Drinks & Athletic Performance**

### **Energy Drinks & Adolescent Health**

### **Energy Drinks & Alcohol**

### **Can Energy Drinks Actually Boost a Person's Energy?**

### **Symptoms of Too Many Energy Drinks**

### **Long Term Side Effects of Energy Drinks**

### **Regulation of Energy Drinks**

### **Take Home Message**