



Oct 01, 2018

Hidden Risks by High Intake of Caffeine

Written by [Mosab Arafat, Ph.D](#)

The US Food and Drug Administration (FDA) classifies **caffeine** as a food additive and a drug, which is used in both prescription and over-the-counter (OTC) medications for treatment of tiredness, drowsiness, fatigue and to enhance the activity of some painkillers.

The most common side effects of excessive **caffeine intake** are;

- Insomnia
- Nervousness
- Restlessness

- Irritability
- Stomach upset
- Fast heartbeat
- Muscle tremors.

Long-term consumption may cause cardiovascular diseases including;

- Hypertension
- Coronary heart disease
- Heart failure and stroke.

A study was carried on to compare the **caffeine** content in various drinks and to find out the effects of its consumption when it's above the normal therapeutic dose. Various beverages which contain **caffeine** were selected and tested for their **caffeine** contents, drinks such as:

- **Coffee**
- Tea
- Fizzy drinks.
- Energy drinks.

Each one of these drinks' **caffeine** content was then compared with the therapeutic dose (the maximum concentration that causes no observable side effects) and the most deviated ones were selected for the final list of beverages that cause **caffeine** side effects and addiction. Before any assumptions were made, it should be known that the therapeutic dose might differ between different people due to certain physical characteristics like their size, gender, sensitivity to **caffeine's** effects, and any medications or supplements they may be taking.

Many studies suggested that moderate amounts of **caffeine** are not harmful, which is approximately 100 - 200 milligrams (mg) (one to two cups of **coffee**). However, according to Mayo Clinic, up to 400 mg of **caffeine** consumption per day is safe for healthy adults. That's equal to 4 cups of **coffee**, 10 cans of Cola or 2 "energy shot" drinks. There are a handful of well-known drinks consumed by adults on a daily basis with an adequate amount of **caffeine** like **coffee**, tea, fizzy drinks, and energy drinks. For example, an average 240 mL cup of **coffee** contains approximately 200 mg of **caffeine**, as for a similar cup of black tea contains around 70 mg of **caffeine**. Common soft drinks including Coca-Cola and Pepsi contain around 35 mg of **caffeine** per each 355 mL can. On the other hand, we also have energy drinks and beverages other than **coffee** which contain a **high** amount of **caffeine** like Red Bull, the most common energy drink, with a moderate concentration of 80 mg per a 248 mL can.

Each one of these drinks has a recommended dose according to each person's weight and physical characteristics, so one should be well aware of how much **caffeine** they consume per day, to avoid the side effects and common cardiovascular diseases caused by a **high caffeine**

intake on a daily basis which exceeds the normal therapeutic dose.

Dr. Mosab Arafat

College of Pharmacy

Al Ain University of Science and Technology

[Blog Link](#)