



## **Caffeine**

Do you need a cup of coffee to get going in the morning, or as a “pick me up” in the afternoon? You will not be alone. Caffeine may be the most popular drug in the world.

Currently the New Zealand Food Safety Authority is investigating the legality of "energy shot" drinks with twice the caffeine of an average cup of coffee. Marketed as food supplements they do have different restrictions about the allowed caffeine content compared to products marketed as a beverage.

As these products can end up beside confectionary items on shop shelves it is worthwhile stopping and considering the effects that caffeine can have on some people. While the packaging does say it is not intended for children it is possible that children could be tempted to buy them if they are placed beside confectionary.

The main dietary sources of caffeine are coffee, tea, cola drinks, energy drinks, and chocolate.

In general energy drinks such as 'Red Bull' have around 80 mg caffeine per serve, coffee has around 100 mg and tea 50 mg. The energy shots have 200 mg per 60 ml shot.

Some people are more caffeine sensitive than others. In some people it can lead to anxiety, nervousness, jittery feelings and altered sleep patterns.

Caffeine is a central nervous system stimulant. It can make you more alert for a short period of time. It tends to stimulate the release of adrenaline into your system giving you a boost. The problem is what happens when this effect wears off – chances are you may go in search of another caffeine shot to combat the feeling of fatigue or flagging mood. In some people this constant topping up of adrenalin can lead to anxiety or nervousness or feeling jittery.

In some people caffeine can also affect sleep patterns. The half-life of caffeine in your body is around six hours – that is it takes six hours for one half of the caffeine to be eliminated from your body. Consuming coffee later in the day can mean that caffeine is still taking effect when you are going to sleep. Caffeine tends to affect the body's ability to go into a deep sleep. So while you may be able to sleep you may not benefit from the deep sleep phases we all need. This can lead us to hit the caffeine again the next morning to help perk us up.

Children can be exposed to high intakes of caffeine through the energy drinks that have become popular. Guarana is often added to energy drinks – the stimulant in guarana is caffeine. In children, behaviour changes such as decreased reaction times and restlessness have been noted at intakes greater than 95mg per day – just

over one 250ml can of energy drink. Children should be discouraged from having energy drinks not just because of the caffeine content but also because of their high sugar levels.

It seems that we are constantly faced with new evidence about the benefits or harmful effects of caffeine. There remains no strong evidence that moderate consumption is associated with any lasting effects to health. It is wise however for pregnant or breast-feeding women, children and caffeine-sensitive people to limit their intakes.

An expert working group to report on The Safety Aspects of Dietary Caffeine was established by the Australian and NZ Food Authority; their report was published in June 2000.

The expert working group describes daily intakes of caffeine for a 70 kg adult as: low (80-250mg/day); moderate (300-400mg/day); high (more than 500mg/day).

Caffeine can be addictive so it is hard for some people to restrict their caffeine intake. If you want to reduce your caffeine intake then reduce your intake slowly so that you do not face the unpleasant side effects of caffeine withdrawal. Signs of caffeine withdrawal include headaches, poor concentration, fatigue, possible lowered mood and irritability.

Fiona Boyle is a registered dietitian and nutritionist. She runs a private practice and gives individual nutrition advice to people to meet their health needs and personal goals. To contact Fiona phone 574 7999 or go to [www.foodsolutions.net.nz](http://www.foodsolutions.net.nz) .