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Australians spend more than \$500 million a year on energy drinks promising increased alertness, reduced fatigue and enhanced reaction time. But what are you really pouring into your body?

Do you know what your blood pressure is?

Many transport drivers have high blood pressure (B/P), but are unaware of their condition or even what it should be.

Normal blood pressure reading is 120/80. Your heart is a pump. When they take your blood pressure the first number is when the heart is pumping, the second is when the heart is at rest. Like a hose with the end blocked, even though it isn't running, the water is still under pressure until you open the end. The importance is that if your blood pressure is too high you could blow an artery somewhere.

Our Health & Support Unit has identified through their routine preventative health checks that energy drinks increase your blood pressure reading.

One truck driver was checked and his B/P was 198/110, he admitted to drinking an energy drink prior to the test. He was checked the following night and it had dropped to 172/98. He has now been to his G.P, ceased drinking energy drinks and is now on medication.

If you have high blood pressure and consume an energy drink it has the potential to cause a stroke or heart attack.

Energy Drink Side Effects

Recent research in Australia has highlighted the risks with over-consumption of energy drinks. This data was gathered from 7 years of calls to the Australian Poisons Center. Listed in order of most common to least common.

- Palpitations / tachycardia
- Tremor / shaking
- Agitation / restlessness
- Gastrointestinal upset
- Chest pain / ischaemia
- Dizziness / syncope
- Paraesthesia (tingling or numbing of the skin)
- Insomnia
- Respiratory distress
- Headache

Blood Pressure Category	Systolic mm Hg (upper #)	Diastolic mm Hg (lower #)
Normal	less than 120	and less than 80
Prehypertension	120 – 139	or 80 – 89
High Blood Pressure (Hypertension) Stage 1	140 – 159	or 90 – 99
High Blood Pressure (Hypertension) Stage 2	160 or higher	or 100 or higher
Hypertensive Crisis (Emergency care needed)	Higher than 180	or Higher than 110

The Aftermath!

What is even more frightful is that Trans-Help liaise with Heavy Vehicle Tow Truck Operators and have firsthand reports of empty energy drink cans in truck cabins following crashes, raising unofficial concerns.

The Warnings!

There are a number of reports of potentially deadly side effects on the heart from high-energy drinks in the general population as well as people who have an underlying genetic heart condition.

Even if you are of generally good health with no obvious health problems you should avoid energy drinks or, at the very least, limit energy drinks consumption each day.

Anyone with a family history of sudden cardiac (or unexplained) death or unexplained fainting/passing out (known as syncope), should avoid energy drinks altogether.

Caffeine in energy drinks

Energy drinks typically contain high levels of caffeine along with a combination of other supposed energy-boosting ingredients like gura, taurine and sugar with various other amino acids thrown into the mix.

When you add up the effects of all these ingredients, researchers have found that a single can of energy drink has nearly 500mg of caffeine. The combined levels of caffeine in these energy drinks are much higher than a standard cup of coffee (50-100mg) or a can of cola (40-60mg). It is also higher than the 400mg **daily** dose recommended for adults.

Dangerous health outcomes largely arise from their caffeine content. Plus energy drinks are generally downed quickly (usually in one hit), not sipped slowly like a hot cup of coffee. More recently, the energy drink formula has

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even been condensed to be sold as a concentrated "energy shot" in petrol stations and convenience stores.

Truck Drivers also drink Energy Drinks with No-Doz. One No-Doz tablet, popular among truck drivers for staying awake for unnaturally long periods, contains 100mg of caffeine.



Dangerous side effects

Adverse effects associated with caffeine consumption in amounts greater than 400 mg include nervousness, irritability, sleeplessness, increased urination, abnormal heart rhythms (arrhythmia), and dyspepsia.

Consumption also has been known to cause pupil dilation when taken with certain antidepressants.

Most mainstream energy drinks do not provide electrolytes, and have a higher likelihood of an energy "crash-and-burn" effect.

Caffeine in energy drinks can cause the excretion of water from the body to dilute high concentrations of sugar entering the blood stream, leading to dehydration. If the body is dehydrated by 1%, performance is decreased by up to 10%

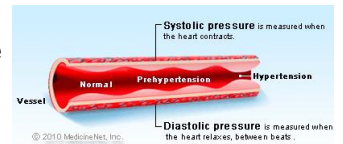
The drinks may cause seizures due to the "crash" following the energy high that occurs after consumption

Caffeine is a potent stimulant, particularly at high doses. "Caffeine toxicity" can be seen even in doses less than 1g but doses of 5-10g are considered potentially lethal. At these higher doses numerous side effects can occur including increased heart rate, palpitations, increased blood pressure, improved exercise endurance, anxiety, insomnia, vomiting, nervousness and irritability.

One can of energy drink typically contains up to 500mg of caffeine. The dangerous effects of this level of caffeine is exacerbated by the common use of energy drinks that involves drinking more than one can a day or when it is combined with alcohol or physical activity.

Energy drinks and heart disorders

There are three main effects energy drinks can have on the heart: increased heart rate, increased blood pressure and evidence of increasing blood thickening that can lead to clots forming in the heart and other parts of the body.



However, there have also been recent reports that suggest energy drinks not only trigger cardiac events but can also unmask an underlying heart disorder.

Increased awareness urgently needed

Given the potentially dangerous effects of energy drinks and the mounting evidence against energy drinks, it is critical that we increase awareness in the transport industry. Your welfare and health is our priority—but only you can decide.

Education and awareness will make our industry safer.



This is another awareness brochure by the Trans-Help Foundation for the health and wellbeing of the Transport Industry,

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