

We guzzle energy drinks with the very gusto they claim to give us - along with North Americans, Aussies have the highest energy drink consumption, at 4.2L per person per year. And now with shots, larger cans and new brands like Wicked and Synergy joining mainstays Red Bull and V, we were horrified to learn that energy drink sales in convenience stores soared by 19.9 per cent in the first quarter of this year - more than any other beverage, according to food and drink consultancy Zenith International.

But are they safe? A few years ago, a 28-year-old NSW man died of a cardiac arrest after consuming seven to eight cans of energy drink within seven hours at a motocross race. It was proposed in the Medical Journal of Australia that the combo of strenuous activity and excessive ingestion of drinks containing caffeine and taurine killed him. (Taurine is an amino acid involved with metabolism.) But he drank an

extreme amount. What about regular consumers, who might only chug the occasional can?

'Key ingredients of these drinks are caffeine, amino acids, B vitamins, sugar and herbal extracts such as ginseng," says WH nutrition expert Kristen Beck. "None of these - other than the caffeine and sugar – are potentially harmful on their own, and they're usually included in small amounts. Basically the energy is coming from the caffeine and sugar."

The Australia New Zealand Food Standards Code puts a limit on caffeine levels the drinks can contain - 320mg per litre (equivalent to about a litre of instant coffee). But, late last year, a test by the NSW Food Authority found that, of

70 energy drinks on the market, only 16 complied with the code. Eight had caffeine levels more than 30 per cent over the legal limit and more than five were removed from NSW shelves.

But it's caffeine's grouping with other ingredients that makes these drinks potentially dangerous. Research by the University of Adelaide and Royal Adelaide Hospital found a single energy drink may significantly up blood pressure in healthy adults. The study found that one hour after a 250ml sugar-free energy drink, subjects (in their early 20s) experienced an increase in blood clotting potential and a reduction in blood vessel function - both of which up heart attack risk. Yikes.



Is it true we shouldn't drink during meals?

JESSIE, NARRABEEN, NSW

It's been thought that by drinking while we eat we may be diluting digestive enzymes that break down foods, reducing nutrient absorption. But it's an extensively researched topic and there's no evidence to suggest that drinking fluids (within reason) with or straight after meals will reduce your nutrient intake.

Another bummer: the word "energy" is misleading, says Dr Leslie Bonci, a dietitian specialising in sports nutrition. 'These drinks are a stimulant,' she says. You're not running on real fuel (actual food), which is what your body needs to power up. Adds Beck, "Caffeine boosts energy for a few hours max by stimulating adrenaline release; so, if you're already under longterm stress, this can make your

overall stress levels far worse." The WH verdict? "For most people, there should be no immediate dangers consuming energy drinks, if they stick to no more than one a day," says Beck. "But people with high blood pressure, those prone to anxiety or sensitive to caffeine should steer well clear."

Stop a shaken can foaming over

If you've dropped a fizzy drink can, tap the top of it with your finger about six times. It works - we tested it in the WH lab (aka office kitchen). For the science behind why it works, we asked nanochemist Tom Ellis: "Shaking it up will cause small bubbles to stick to the inside of the can. When you open it, the bubbles grow rapidly and spray as the drink is pushed to the lid. The tapping must free the bubbles from the sides of the can so when you open it, they don't push the drink through the hole."

