



# ALCOHOL & ENERGY DRINKS

## A DANGEROUS COMBINATION

An increasingly popular trend in nightclubs is that of mixing energy drinks with alcoholic beverages in order to offset the drowsiness usually associated with alcohol consumption. At first glance, it seems like a good idea. After all, these are the kind of energy drinks that you can pick up in any corner store - it's not like people who use them are taking cocaine or ecstasy. But energy drinks are still stimulants, and they can still have dangerous side effects when combined with alcohol.

In order to understand how these two substances interact, it's helpful to know the difference between depressants and stimulants. Alcohol is a depressant, which means that it reduces the activity of the central nervous system. People often report feeling more energetic when they first start drinking alcohol, but this is simply due to the fact that alcohol depresses the inhibitory centres of the brain.

Stimulants, on the other hand, are drugs which excite the central nervous system, increase alertness, and alleviate fatigue. They do this by increasing the body's heart rate and increasing the blood flow to muscles. Some of the common stimulants found in energy drinks include caffeine, ephedrine, taurine, guarana and ginseng.

Fatigue is one of the body's way of telling a person that they've had enough to drink. Most partygoers start to slow down and they don't drink as much once fatigue sets in. But when stimulants from energy drinks are added to the mix, it greatly delays the onset of fatigue. People will keep drinking much later into the night, and as a result will consume significantly more alcohol. The potential for alcohol poisoning is much higher, as are the chances of suffering a severe hangover the next day.



## DEHYDRATION

One of the side-effects associated with alcohol consumption is dehydration. That is part of the reason people suffer hangovers after a night of heavy drinking. The caffeine in energy drinks is also a diuretic which causes people to lose water, so it makes the effects of dehydration that much worse. All of the sugar in energy drinks slows the body's absorption of water, which further contributes to dehydration.

Many of the people who combine energy drinks and alcohol are in a nightclub setting where they are dancing all night. They are in a hot, crowded environment where they sweat a lot. Combining two strong diuretics with strenuous physical activity can leave users seriously dehydrated, and this combination is suspected as the cause of several deaths in nightclubs.



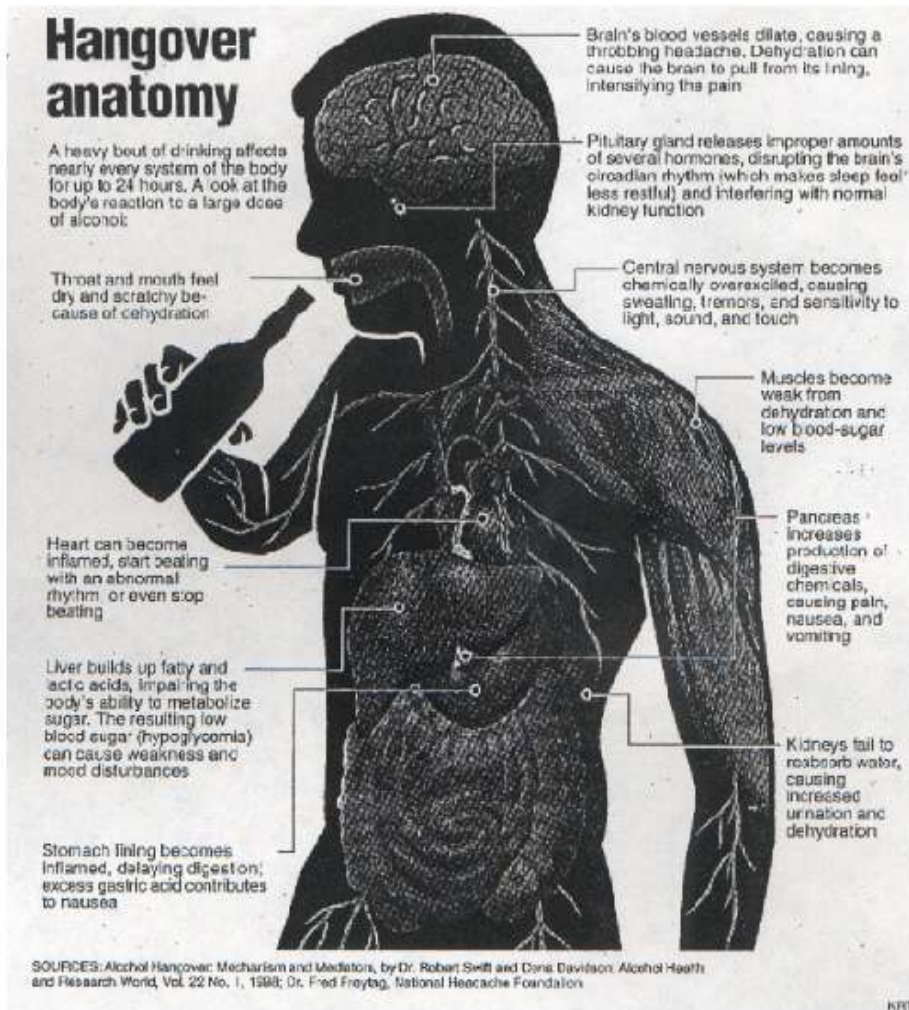
## ERATIC HEART RATES

A lot of people are unusually sensitive to caffeine and other stimulants. High levels of stimulants like caffeine can boost their heart rate and blood pressure to dangerous levels. They may never have tried energy drinks before being exposed to them in nightclubs, so they have no idea how these drinks **alone** will affect them. When you add alcohol to the mix, the combination can be that much more dangerous. Combining strong stimulants with a heavy depressant can lead to serious problems. It sends mixed messages to the central nervous system, and can even lead to cardiopulmonary or cardiovascular failure.

## ALTERED PERCEPTION

A study in Brazil found that consumption of alcohol combined with the energy drink Red Bull significantly reduced the perception of symptoms such as headache, weakness, dry mouth and impairment of motor control. But while the energy drink may have helped block the **perception** of symptoms, it didn't do anything to stop these symptoms. Participants still suffered from reduced motor coordination and visual reaction time. The stimulants simply made them **feel** more alert and awake. To put it bluntly, they were drunk, but they didn't know they were drunk!

Stimulants don't help people to sober up.



Alcohol leaves the body of virtually every drinker at a constant rate of approximately 0.015 percent of blood alcohol content per hour. So a person with a blood alcohol content (BAC) of 0.015 would be sober in an hour, while a person with a BAC that is ten times that high would require ten hours before they are completely sober. There are no stimulants, exercises or magic formulas to speed up the rate at which your organs are able to excrete alcohol.



In addition to the physical effects on the body, alcohol also affects the brain's capacity to make decisions. As we mentioned earlier, it does this by depressing the inhibitory centres of the brain. People who would normally never think of driving while impaired often lose the ability to think rationally when they've had too much to drink. Once stimulants are thrown into the mix, they cloud the decision making process even more. These stimulants mask feelings of intoxication and prevent people from realizing just how much they have had to consume. Partygoers can't tell if they are drunk, and they can't tell if their friends are drunk. They are much more likely to drive themselves, or get in a car with an impaired driver. A study carried out in the United States found that people who consumed alcohol **and** energy drinks were almost twice as likely to end up in an emergency room as people who had consumed only alcohol.



## HIDING THE TASTE

Alcohol can be something of an acquired taste - people aren't necessarily going to like it the first time they try it. This is particularly true of hard liquors like vodka, whisky or gin. Novice drinkers often try to block the taste of alcohol by putting in a lot of mix in order to "*help the medicine go down.*"

The study carried out in Brazil found that many users, particularly women, also reported using energy drinks to reduce the not-so-pleasant taste of alcoholic beverages. These energy drinks contain a great deal of sugar in addition to stimulants like caffeine. This greatly increased the amount of alcohol they were able to consume, as well as the speed at which they were able to consume it. As a result, people who had a relatively low tolerance for alcohol were suffering from alcohol poisoning from drinking too much, and from drinking too fast!

