

MAIL TODAY

By MANU MOUDGIL

Alcohol makes us feel good and most of us drink to relax without actually understanding the impact of booze on the mind and body

IT'S THE most exciting part of your weekend, the drinking. You just can't wait to head to the bar, elbow your way through the mob waiting expectantly for their glass of whisky, or beer. A couple of drinks later your perspective of life is rosier, the conversation with your friends more stimulating, and the feeling that you can accomplish almost anything you want to is buzzing in your head. You know this is the right time to stop, get up and leave. Instead you order more. And more.

Two hours later you have lost all sense of time and place. Your lips move on their own volition and you are functioning on auto-pilot. At some point you make your way through the haze of people and music to your car, and into your bed. When you wake, your temples are throbbing and a feeling of nausea wells in your throat. You have very little recollection of the events of the previous night.

If all this sounds familiar to you, and your idea of fun revolves around drinking with your friends, you may want to read this to understand how this seemingly innocuous pastime is impacting your body.

HOW IT ALL BEGAN

WE'RE not blaming you for enjoying your drink - after all alcohol has been enjoyed for centuries, and the potent impact of this tonic is well known. The earliest alcoholic beverages were derived from berries or honey. Alcohol was used medicinally as early as 2,000 B.C. It also found its way into early religions and became rather important in various ceremonies and forms of worship. Christians tend to use wine when taking the Lord's Supper as it signifies their saviour's blood; Ancient Greeks had the wine God Dionysus while Egyptians had Osiris. Beer and wine were everyday products to these peoples and actually aided them with survival especially in areas where clean water was hard to find.

BOOZE IS ABSORBED BY EVERY CELL

THE main component of all alcoholic beverages is ethanol. This colourless and nearly tasteless liquid does not need to be digested after being consumed. The liver breaks down ethanol to enable it to pass out of your body, and can do this effectively for about one drink per hour. If more alcohol than this is imbibed, the liver can't handle this and it continues to circulate in the blood. It moves with tremendous speed through the body, affecting every single tissue and organ from your muscles to your brain. The only tissue unaffected is fat. Blood alcohol levels increase significantly within 20 minutes. At this point the tipsy feeling kicks in. Obviously, lots of factors affect the rate of alcohol absorption, including whether you have eaten and the concentration of alcohol in the drink.

WOMEN HIT HARDER

PHYSIOLOGICAL reasons can explain why a woman experiences the effects of alcohol more than a man, even if they are the same size. There is also increasing evidence that women are more susceptible to alcohol's damaging effects than men. Women have less water in their bodies than men, which means that a man's body will automatically dilute the alcohol more than a woman's, even if both people weigh the same amount. A person's weight determines the total volume of body water and consequently the blood alcohol level attained while drinking. Generally, the more a person weighs, the larger the volume of body water and the lower the alcohol content.

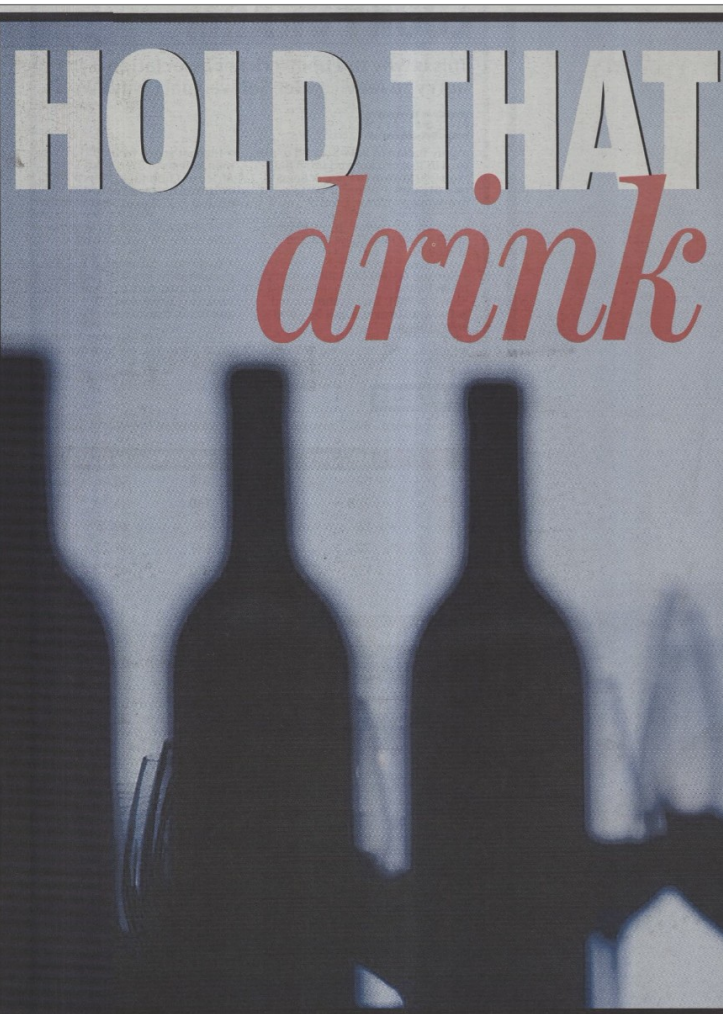
Women also have fewer of the liver enzymes needed to break down alcohol. So a woman's body will break down alcohol more slowly than a man's. Premenstrual hormonal changes cause intoxication to set in faster during the time before a woman gets her period. Birth control pills or other medications with estrogen will slow down the rate at which alcohol is eliminated from the body.

Women who are heavy drinkers are also at greater risk of liver disease, damage to the pancreas and high blood pressure than male heavy drinkers. Proportionately more alcoholic women die from liver cirrhosis than alcoholic men. A study by the *Journal of the American Medical Association* says that a woman's risk of breast cancer rises with the amount of alcohol regularly consumed. The study showed that women who drink two to five alcoholic drinks each day were 41 per cent more likely to develop breast cancer than non-drinkers.

In the late stages of alcoholism, women also develop hypertension, anaemia, and malnutrition quicker than men. Menstrual disorders have also been associated with chronic heavy drinking, which can lead to fertility problems. If a woman does get pregnant and continues to drink, it is not her health only that can be affected. The alcohol in the blood is carried into the baby's bloodstream. Because the baby is still developing, consuming alcohol can lead to a miscarriage. It can also lead to birth defects, which are irreversible. Fortunately, 90 per cent of women in India don't drink, says the alcohol atlas.

EAT THIS

EAT WHILE you drink, as having food in your stomach has a powerful influence on the absorption of alcohol. This will keep you from getting drunk too quickly. The peak alcohol level in the blood of someone with a full stomach can be three times lower than that of someone with an empty stomach.



ALL ABOUT THAT DRINK



GIN

- One shot of Gin (30ml) has about 72 calories and an alcoholic content of 37.5 per cent
- Unlike other forms of alcohol, gin is devoid of anti oxidants, vitamins or minerals, making it less healthy.



VODKA

- A single shot of Vodka (30ml) contains about 75 calories, and alcoholic content of 35-50 per cent.
- It is almost devoid of vitamins and minerals.
- This is the best drink to have if you want to avoid a hang-over.

THE LIVER BEARS THE BRUNT

BECAUSE the liver ends up doing most of the work of metabolising alcohol, it bears the brunt of its effects. "Liver cells have the ability to regenerate but if you drink regularly, they don't get enough time for that. The commonest and mildest form of liver damage is a 'fatty' liver. This can be identified by blood tests, and is reversible with abstinence from alcohol," says Dr M P Sharma, head of internal medicine, Rockland Hospital.

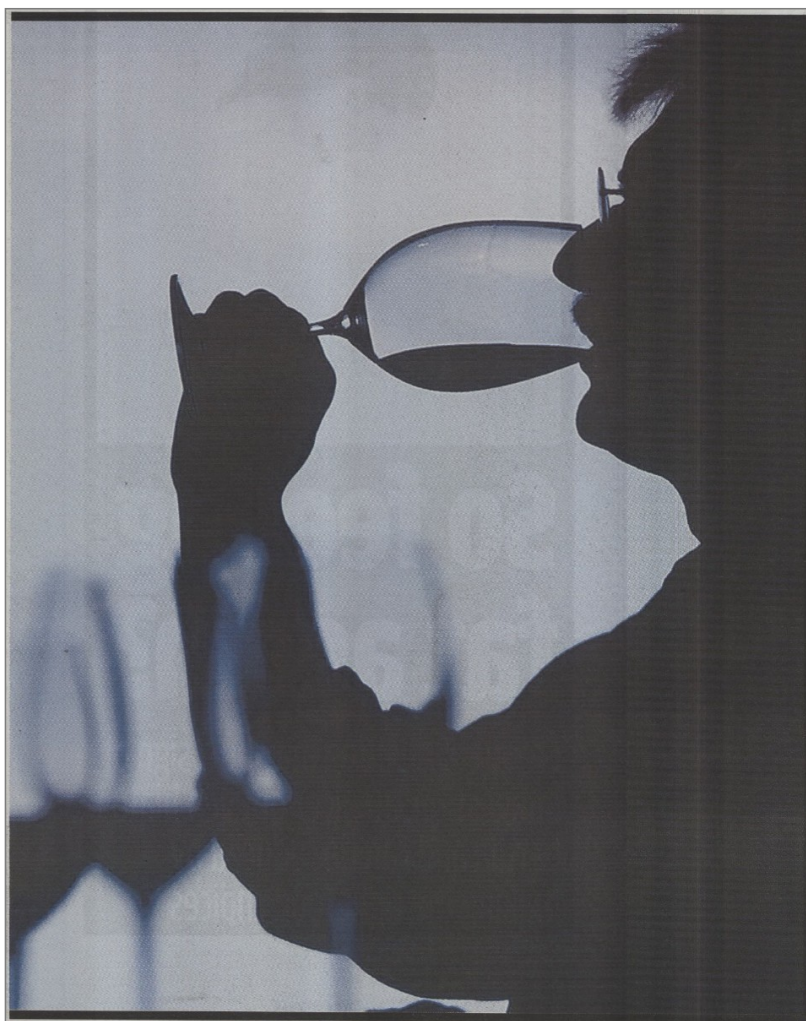
Once this happens, continued drinking can cause jaundice of the liver. At this stage, there is a 50 per cent chance that the liver will revert to its healthy state if you stop drinking. But if you don't, scarring of tissues develops. "This generally leads to liver cirrhosis. It's estimated that if you take 180 gm of alcohol daily, you

would have cirrhosis in 10 years. Swelling in the feet and blood vomit are common symptoms. It's a progressive disease in which all your body organs are affected. A liver transplant is the only option possible by this time," says Dr Sharma.

THE HEART ALSO SUFFERS

ALCOHOL can progressively destroy heart muscles, preventing the heart from pumping blood efficiently. "Alcohol also starves the heart by decreasing the blood flow in the coronary arteries, causing hypertension. Being calorie laden, alcohol can raise the fat levels in the blood, causing obesity and increasing the chances of heart disease," says Dr Rajnish Kapoor, consultant cardiologist, Indraprastha Apollo Hospital. Alcohol has absolutely no nutritive value other

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WHISKEY

- A single shot of Whiskey contains around 72 calories, and has an alcoholic content of 40-75 per cent.
- This is the worst drink for the liver due to its high alcohol content, and can induce acute gastrointestinal bleeding.



WINE

- A glass of Wine (100 ml) contains around 70-90 calories and also has low alcoholic content of 7-20 per cent.
- Wine is often a trigger for people who suffer from migraine headaches.



BEER

- The drink packs 121 calories per 330 ml bottle. The alcoholic content is the lowest, around 3-4 per cent.
- It contains antioxidants, such as polyphenols and ferulic acid which are considered healthy.



RUM

- One shot of 30ml has about 72 calories and an alcoholic content of 37.5-57 per cent.
- It is the sweetest drink made from molasses, a byproduct of sugarcane.

than calories, called empty calories because of the body's inability to store them. It is absorbed so quickly that its energy is available almost immediately. "This energy is burned first, so the body fuel which is normally used for energy is instead stored as fat. The gastrointestinal system is irritated and damaged by alcohol," says Geetika Ahluwalia, chief dietician, Delhi Heart and Lung Institute.

MODERATION IS THE KEY

ALCOHOLIC drinks have started getting some good press lately with researchers claiming that moderate drinking is good for the health.

It would be safe to say that alcohol can be tonic or poison depending upon its dosage. Moderate drinking seems to be

good for the heart and circulatory system, and is believed to protect against type 2 diabetes and gallstones.

While moderate drinking can increase the risk of colon and breast cancer, these risks are countered by the boost in cardiovascular health especially in middle age, when heart disease begins to account for an increasingly large share of disease and deaths. The larger question that arises from this is: What is considered moderate drinking? US experts say that for women, it's up to one drink or one unit per day while for men, two drinks or units per day taken with a gap of one hour is recommended. A drink constitutes 12 ounces of beer, five ounces of wine, or one and a half ounces of hard liquor, such as vodka or whiskey. Drinking over 8 units in a day for men, or 6 units for women is known as 'binge drinking'.

Wine with its powerful antioxidants is

being hailed as the best alcoholic drink. "It prevents your arteries from clogging, and helps regulate the cholesterol level. However, this is for people who do not have heart disease," says Honey Khanna, consultant dietician, Max Healthcare. However, having seven drinks on a Saturday night and then not drinking the rest of the week isn't at all the equivalent of having one drink a day.

If all drinkers limit themselves to a single drink a day, we probably wouldn't need as many cardiologists, liver specialists, mental health professionals, and substance abuse counselors. However, doctors say it's not really possible. "Most of the people who like to drink alcohol don't stop at just one or two. So, we recommend that you don't drink at all. If you start on booze, you won't stop," says Dr M P Sharma.

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