



Alcohol and Diabetes

Having one or two alcoholic drinks is a relaxing part of socialising for many Australians. A moderate amount of alcohol can even protect against developing heart disease, in some circumstances.

How does alcohol affect the body?

Alcohol remains in your bloodstream until it is broken down by the liver. The amount that is absorbed into the blood can depend on a number of factors, these can include how much alcohol you drink and how quickly, whether it is taken with a carbonated/mixer drink, your sex and weight as well as if you are drinking on an empty or full stomach.

Breaking down alcohol is a priority for the liver. It takes about one hour to break down one standard drink. Drinking alcohol quickly or in large quantities will cause a rise in your blood alcohol level. As the liver breaks down alcohol, blood glucose levels can drop, causing hypoglycaemia. The liver either breaks down alcohol or releases glucose, it can't do both. The liver will always process alcohol first instead of releasing the glucose needed to maintain blood glucose levels.

Excessive alcohol consumption has both long and short term effects on many different parts of the body including the brain, liver and pancreas. Long term excessive alcohol intake can increase the risk of developing heart disease and some cancers.

How does alcohol affect people with diabetes?

Many people with diabetes, particularly those with type 2, struggle to maintain a healthy body weight. Alcohol can contribute to this weight problem because it is high in kilojoules.

As a comparison;

- Alcohol has 29 kilojoules per gram versus carbohydrates, which have 16 kilojoules per gram.
- One stubby of full strength beer or two small (100ml) glasses of wine contain the same amount of kilojoules (600kJ) as a small steak.

Alcohol itself has little nutritional value and therefore the kilojoules found in alcohol are often called 'empty kilojoules'.

Excessive alcohol consumption can increase the risk of developing complications of diabetes by contributing to weight gain, increasing triglycerides (blood fats) and increasing blood pressure.

People with diabetes are more at risk of developing fatty liver/alcoholic liver disease as a result of excessive alcohol consumption. For people who are on insulin or taking certain diabetes tablets (those that stimulate the release of insulin), alcohol can cause hypoglycaemia (hypos, low blood glucose levels).

Avoiding alcohol related hypos

When you drink alcohol ensure it's consumed with food that contains a carbohydrate, either as a meal (the preferred option) or substantial snack. This is extremely important if you are taking **insulin** or certain diabetes tablets (those that stimulate the release of insulin)

It is **very important** to have another substantial snack containing carbohydrate several hours after you have consumed alcohol, especially if it is night time and you are going to bed, this may prevent a hypo while sleeping.

Some examples of a substantial carbohydrate when out and about or at home include: a sandwich, potatoes, kebab, pasta, baked beans, yoghurt, cracker biscuits and worse case scenario (if nothing else available) potato crisps.

Alcohol and hypoglycaemia –

Be aware!

If you are taking **insulin** or certain diabetes tablets (those that stimulate the release of insulin), you are at risk of alcohol related hypoglycaemia (hypos, low blood glucose levels). This occurs because alcohol prevents the liver from making glucose for 12-36 hours after drinking alcohol. This risk is particularly high when your glucose stores are low, which is often during the night, in the morning, during and after exercise and when you have not eaten. As a rule, it takes one hour for your liver to break down one standard drink.

Treating alcohol related hypoglycaemia

If experiencing hypoglycaemia, then the treatment is:

Step 1: 15 grams of quick acting carbohydrate eg jelly beans, soft drink (not diet), and glucose gel

Step 2: Some longer acting carbohydrate e.g. sandwich, glass of milk, tub of yoghurt. If the hypo is severe enough to need Glucagon injection then an ambulance should be called as intravenous glucose will be required.

'Drinksafe Guidelines'

The Drinksafe guidelines recommend drinking in moderation. To minimise risks to your health, the maximum amount recommended is:

- Males: Two standard drinks a day
- Females: Two standard drinks a day
- At least two alcohol free days each week
- For people under 18 years, the safest option is to **not** drink alcohol at all

What drinks are best to choose?

Beers: Low alcohol beer (3.5% or less alcohol content) in preference to so called 'low carb' beers. Some examples are Blue Bitter (2.3%), Cascade Premium Light (2.8%), Emu Draft (3.0%), Fosters Light Ice (2.3%), Swan Gold (3.5%), and Tooheys Blue Ice (2.3%). These beers have reduced alcohol.

Wines: Any type of wine is suitable, try extending drinks by mixing the wine with soda water. Alternate wine with water at dinner.

Spirits: Whisky, brandy, gin, rum, vodka and dry vermouth. Extend drinks by mixing with low-joule soft drinks such as diet coke, low-joule dry ginger ale, low-joule tonic water, soda water or unflavoured mineral water.

Useful websites for general information on alcohol:

www.alcoholguidelines.gov.au









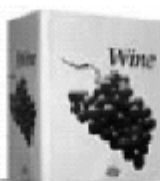


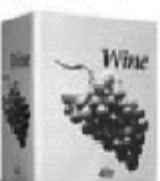


www.nhmrc.gov.au



NUMBER OF STANDARD DRINKS – BEER

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |
| 1.1 235ml Full Strength 4.8% Alc Vol | 0.8 255ml Mid Strength 3.5% Alc Vol | 0.6 285ml Low Strength 2.7% Alc Vol | 1.6 405ml Full Strength 4.8% Alc Vol | 1.2 425ml Mid Strength 3.5% Alc Vol | 0.9 425ml Low Strength 2.7% Alc Vol | 1.4 375ml Full Strength 4.8% Alc Vol | 1 375ml Mid Strength 3.5% Alc Vol | 0.8 375ml Low Strength 2.7% Alc Vol |
|  |  |  |  | | |  | |  |
| 1.4 375ml Full Strength 4.8% Alc Vol | 1 375ml Mid Strength 3.5% Alc Vol | 0.8 375ml Low Strength 2.7% Alc Vol | 34 24 x 375ml Full Strength 4.8% Alc Vol | | | 24 24 x 375ml Mid Strength 3.5% Alc Vol | | 19 24 x 375ml Low Strength 2.7% Alc Vol |

NUMBER OF STANDARD DRINKS – WINE

| | | | | | | |
|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |
| 1.6 150ml Average Restaurant Serving of Red Wine 13.5% Alc Vol | 1 100ml Standard Serve of Red Wine 13.5% Alc Vol | 0.9 60ml Standard Serve of Port 18% Alc Vol | 1.4 150ml Average Restaurant Serving of White Wine 11.5% Alc Vol | 1 100ml Standard Serve of White Wine 11.5% Alc Vol | 1.4 150ml Average Restaurant Serve of Champagne 12% Alc Vol | 7.5 750ml Bottle of Champagne 12.5% Alc Vol |
|  |  |  |  |  |  |  |
| 8 750ml Bottle of Red Wine 13.5% Alc Vol | 43 4 Liters Cask Red Wine 13.5% Alc Vol | 21 2 Liters Cask Red Wine 13.5% Alc Vol | 7.5 750ml Bottle of White Wine 11.5% Alc Vol | 39 4 Liters Cask White Wine 11.5% Alc Vol | 19.5 2 Liters Cask White Wine 11.5% Alc Vol | 28 2 Liters Cask of Port 17.5% Alc Vol |



NUMBER OF STANDARD DRINKS – SPIRITS

| | | | | | | | |
|---|---|---|--|---|--|---|--|
|  |  |  |  |  |  |  |  |
| 1 | 22 | 1.1 | 1.2 | 2.6 | 1.5 | 1.8 | 3.6 |
| 30ml High Strength Spirits Mlp 40% Alc. Vol | 700ml High Strength Bottle of Spirits 40% Alc. Vol | 275ml Full Strength RTD* 5% Alc. Vol | 330ml Full Strength RTD* 5% Alc. Vol | 600ml Full Strength RTD* 5% Alc. Vol | 320ml High Strength RTD* 7% Alc. Vol | 330ml High Strength RTD* 7% Alc. Vol | 660ml High Strength RTD* 7% Alc. Vol |
|  |  |  |  |  |  |  |  |
| 1 | 1.2 | 1.5 | 1.7 | 1.4 – 1.9 | 1.6 | 2.1 | 2.4 |
| 95ml Full strength Pre-mix Spirits 5% Alc. Vol | 100ml Full strength Pre-mix Spirits 5% Alc. Vol | 175ml Full strength Pre-mix Spirits 5% Alc. Vol | 440ml Full strength Pre-mix Spirits 5% Alc. Vol | 95ml High strength Pre-mix Spirits 7% Alc. Vol | 100ml High strength Pre-mix Spirits 7% Alc. Vol | 175ml High strength Pre-mix Spirits 7% Alc. Vol | 440ml High strength Pre-mix Spirits 7% Alc. Vol |

Correct at the time of publication September 2010

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