

Alcohol facts and effects infosheet

Energy (kilojoules/Calories) in alcoholic drinks

At a glance

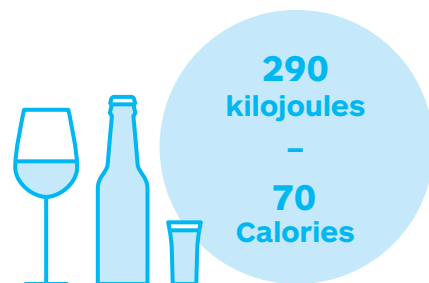
- Alcohol is a source of energy (kilojoules or Calories). Each gram of alcohol has 29 kilojoules or 7 Calories. It is the main source of energy in most alcoholic drinks.
- Alcoholic drinks can add a lot more kilojoules to our diet than we realise.
- The higher the alcohol percentage of a drink, the more kilojoules there are. Sweetened mixers or cream in drinks also increase the kilojoules.
- Alcoholic drinks have very few nutrients so are not a substitute for food.
- Alcohol can also increase our appetite, making us want to eat more.
- Our bodies can't store alcohol, so the liver breaks most of it down for the body to use for energy.
- Keeping alcohol intake low or choosing not to drink alcohol can help prevent or reduce extra weight.
- Drinking at low levels and having alcohol-free days also reduces short and long-term harms from alcohol use, such as injuries, liver disease and some cancers.

Alcohol as a source of kilojoules/Calories

Alcohol is created through the fermentation of sugars from foods like grapes, other fruit, vegetables, and grains. Most of the sugars/carbohydrates change into alcohol during fermentation, turning alcohol into a concentrated form of energy (measured as kilojoules or Calories¹).

Many people are unaware of the kilojoules in alcoholic drinks, or that many of the kilojoules come from the alcohol. Each gram of alcohol has 29 kilojoules or 7 Calories. This is more than protein and carbohydrates/sugars which both have 17 kilojoules or 4 Calories per gram but less than a gram of fat which has 37 kilojoules or 9 Calories. The number of kilojoules in alcoholic drinks varies depending on the size of the drink, the percentage of alcohol and the amount of other ingredients.

Each 'standard drink'²
has at least



just from the alcohol.

1 One Calorie is equal to 4.2 kilojoules. Food and beverage labels in New Zealand use kilojoules (kJ).

2 One 'standard drink' contains 10g of pure alcohol and is approximately a bottle of regular beer, a small glass of wine or a shot of spirits.

What is in an alcoholic drink?

Alcoholic drinks are labelled with the alcohol percentage and the number of standard drinks. Energy content information is not usually on labels, so it can be hard to find out how many kilojoules in a drink, or to compare drinks. Unlike non-alcoholic drinks and packaged foods, alcoholic drinks are not required to be labelled with kilojoules or nutrient content information, unless a nutrient claim is made, such as '99% sugar free'.

In addition to the kilojoules from the alcohol, alcoholic drinks often have kilojoules from the small amounts of sugars left over from the fermentation process or from added sugar, such as in ready-to-drink spirits (RTDs) that contain sweetened mixers. Drinks that include cream, such as cocktails, will also have kilojoules from fat.

Other than providing kilojoules, alcoholic drinks have very few nutrients, such as protein or vitamins and minerals, so are not a substitute for food.

Alcohol in our bodies

Alcoholic drinks can add a significant amount of kilojoules in our diets. The latest New Zealand Adult Nutrition Survey reported that alcohol was consumed by almost 1 in 3 people (34%) aged 15 years and over, and among alcohol consumers, alcoholic drinks contributed to on average 11% of daily energy intake³.

Our bodies can't store alcohol, so the liver breaks most of it down for the body to use for energy. Energy from alcohol is used first, which means any extra energy from food or drink that our bodies don't use is stored as fat. Alcohol is also an appetite stimulant, making us want to eat more. Keeping alcohol intake low or choosing to not drink alcohol can help prevent or reduce unwanted weight gain.

Alcohol is also a drug that can affect our bodies in many ways. It can have short-term effects, such as affecting how we think, including influencing our food choices, and how we move, leading to injuries. Depending on how much we drink, alcohol can have long-term health effects, including causing liver disease and some cancers. These are all reasons to keep alcohol intake at low levels and to have alcohol-free days⁴.

Why does it matter?

It's very easy to consume more kilojoules from alcoholic drinks than we realise, especially if we have a few drinks at a time. As illustrated in the graphic on kilojoules in drinks and foods, the alcoholic drinks that have the most kilojoules are those with higher percentages of alcohol, sweeter drinks, or drinks that include sweetened mixers. What we eat and drink alongside alcoholic drinks also contributes kilojoules.

As a reference point, an estimated average adult daily intake is 8,700 kilojoules⁵, although this amount will vary depending on gender, age, body size, and activity level.

3 Ministry of Health. New Zealand Adult Nutrition Survey 2008-2009. Data set. Unpublished data.

4 Health Promotion Agency. (2015). *Alcohol – The body and health effects: A brief overview*. Wellington: Health Promotion Agency. Retrieved from: alcohol.org.nz

5 Australian Government. (2018). *Australia New Zealand Food Standards – Code 1.2.8 – Nutrition Information Requirements*. Retrieved from: legislation.gov.au.

Kilojoules (kJ)¹ in alcoholic and non-alcoholic drinks and foods*

Alcoholic drinks

Other drinks and foods

217 kJ



330ml bottle of low-strength beer

0.7 standard drinks
2.5% alc

295 kJ



30ml shot of whiskey

1.0 standard drink
42% alc

373 kJ



1 glass of orange juice

250ml

385 kJ



330ml bottle of beer

1.2 standard drinks
5% alc

399 kJ



1 coffee (regular cappuccino)

190ml

412 kJ



1 chocolate biscuit

19g

432 kJ



1 glass of lemonade

250ml

468 kJ



150ml glass of white wine

1.5 standard drinks
13% alc

502 kJ



150ml glass of red wine

1.7 standard drinks
14% alc

512 kJ



1 snack pack of peanuts

20g

546 kJ



60ml double shot of vodka

1.9 standard drinks
38% alc

647 kJ



1 small bag of potato crisps

30g

724 kJ



330ml bottle of cider

1.3 standard drinks
5% alc

765 kJ



330ml can of RTD vodka and lemonade

1.2 standard drinks
5% alc

904 kJ



1 large can of energy drink

500ml

979 kJ



330ml can of RTD whiskey and cola

1.8 standard drinks
7% alc

1,120 kJ



1 chocolate bar

50g

1,307 kJ



440ml can of RTD whiskey and cola

2.4 standard drinks
7% alc

1. Source: Plant & Food Research Limited and Ministry of Health. (2018). New Zealand Food Composition Database and Alcoholic Beverage Supplement. foodcomposition.co.nz.
* Kilojoules provided are average values. Individual products will vary depending on their composition.