

Blood alcohol content

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The blood alcohol content is measured in per cents or, as in Finland, in per mils. A blood alcohol content of 0.1% (i.e. 1‰) means that there is a gram of pure alcohol in a litre of blood. The alcohol content in other parts of the body, like the muscles and the brain, is the same. The alcohol content of fatty tissue is lower.

The alcohol content of the blood is a practical way of measuring the amount of alcohol in the body. The blood alcohol content is also used as an indirect indicator of the level of intoxication, because the level of intoxication depends on the blood alcohol content.

The alcoholic content of beverages is measured in percentages, either by volume or by weight. Percentage by volume indicates how many millilitres of pure alcohol there are per a decilitre of the beverage. Percentage by weight indicates how many grams of pure alcohol there are in 100 grams of the beverage.

In addition to the amount of alcohol consumed, a person's weight and gender have an effect on the blood alcohol content. A big person will have a lower blood alcohol content than a small person. Women differ from men not only because of their average size, but also in the composition of the body. Women have more fatty tissue and less tissues that contain water than men.

The body gets rid of alcohol by metabolizing it. The liver processes alcohol at an even speed. The metabolic process in the liver is the primary way for the body to get rid of alcohol, and there is little you can do to accelerate it. The rate of the process depends mainly on the size of the body, because the size of the liver is proportional to the size of the body. About a gram per each 10 kilos of body weight is processed in an hour. In per cents this means that, in an hour, the blood alcohol content decreases only by 0.012 - 0.016%. A normally built person who weighs 70 kilos metabolizes about 7 grams of alcohol in an hour, a person weighing 60 kilos only about 6 grams.

In the morning after a night out you seldom stop to think that there may still be a good deal of alcohol in your body. The liver can metabolize a bottle of wine in approximately 12 hours; a bottle of spirits takes almost 24 hours.

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