

Alcohol

- Diabetics can use alcohol in moderation, as long as they remember their diabetes treatment and how alcohol affects your glucose levels. Alcohol contains a significant amount of energy.
- Drinking alcohol a diabetic increases the risk of hypoglycemia. The symptoms of hypoglycemia are similar to a hangover.
- Diabetic should only use alcohol if the diabetes treatment balance is good (HbA1c below 8%).
- Regular, excessive use of alcohol can worsen the treatment balance of a diabetic.
- Regular and heavy alcohol consumption causes serious harm, e.g. raise blood pressure.
- In connection with the use of alcohol, one must be aware of hypoglycemia that appears late (low blood sugar).
- Diabetic should avoid drinking alcohol completely if:
 - ❖ Blood sugar levels are repeatedly too low
 - ❖ After heavy physical exercise
 - ❖ Fat values and/or blood pressure are high
 - ❖ Infections, abdominal symptoms, pancreatitis, convulsions, peripheral nerve damage, impotence occur
 - ❖ There are signs of developing alcohol dependence

Alcohol prevents the regeneration of sugar in the liver, which is why the body's own corrective measures fall short in the event of low blood sugar. Detection of low blood sugar can be delayed because the related symptoms can be masked by the effects of alcohol. Diabetes does not affect the burning of alcohol.

In diabetes, a threat for blood sugar that is too low in connection with the use of alcohol is when insulin or tablets belonging to the sulfonylurea group are used.

In connection with heavy alcohol consumption (more than 4 alcohol doses), actions are needed to prevent low blood sugar (hypoglycemia). Smaller amounts of alcohol do not usually lead to low blood sugar. When using alcohol, the sugar content of alcohol products must also be taken into account. E.g:

Note!

- Medium beer contains carbohydrates 3 g/dl, calories 40 kcal/dl and alcohol 3.7-4.7%
- Red wine contains carbohydrates < 1 g/dl, calories 70-90 kcal/dl and alcohol 11-13.5%
- Liquor (vodka, gin) less than 1 g/dl, calories 200-260 kcal/dl, alcohol 38-47%
- See the table at the end of the text.

A woman should consume no more than one and a man no more than two restaurant portions* per day. One restaurant portion burns for approx. 2 hours. (e.g. after drinking 5 medium bottles of beer, alcohol is in the blood for 10 hours).

Alcoholic drinks containing a lot of sugar must be avoided.

You should check your blood sugar more often than usual - especially if you drink more than what is suggested above

Diabetes & intoxicants

*Alcohol dose = A dose with about 14 grams of pure alcohol, i.e. ethanol. Examples of such portions: 0.33 liter bottle of medium beer, 12 cl of wine or 4 cl of spirits.

Heavy use of alcohol:

- **worsens the body's sugar balance**
- **also increases the possibility of various complications** (e.g. impotence, macular damage and peripheral neuritis)
- **lowers treatment motivation** (forgetting insulin injections, eating irregularly)
 - **the result may be a life-threatening change in blood sugar (too low or high), life-threatening hypoglycemia, a drop in blood sugar level, or ketoacidosis.**

Long-term alcohol consumption prevents the production of sugar in the liver and its use in the muscles. Risky use of alcohol can lead to overweight and metabolic syndrome (middle body obesity + high blood pressure + elevated blood sugar + elevated fat values).

If you drink alcohol, note the following points:

- Carbohydrate-rich food should be consumed while drinking alcohol.
- The carbohydrate contained in an alcoholic drink is not counted when assessing the need for insulin.
- After the party, a decent extra snack is enjoyed, especially if there has been a lot of exercise (e.g. dancing) along with drinking. Do not take extra insulin with the extra snack.
- Blood sugar is measured before going to bed. If it is below 10 mmol/l, more carbohydrates is recommended for consumption, so that the blood sugar does not drop too low at night.
- Blood sugar is measured the next morning, as low blood sugar after alcohol often occurs in the early hours of the morning or in the morning. If the blood sugar is below 5 mmol/l, increase the amount of carbohydrates in the breakfast or reduce the meal insulin in the breakfast.
- If the treatment is e.g. diabetes drugs from the sulfonylurea group, a lot of alcohol can cause low blood sugar. In this case, medicines are used as usual before alcohol and proper eating is taken care of. If the food doesn't taste good in the morning, the medicine tablets are not needed.

Smoking

Do not smoke or stop smoking!

Because if you smoke:

- The risk of developing cardiovascular diseases (e.g. myocardial infarction, cerebrovascular disorder or leg circulatory disorders) multiplies
- The risk of falling ill with e.g. kidney damage also increases
- Increases vascular damage to kidneys, fundus and nerves
- Doubles the risk of lower limb amputation

Diabetes & intoxicants

- Nicotine increases blood pressure and heart rate
- Constricts blood vessels, worsens their narrowing and increases the adhesion of blood platelets to each other
- Blood pressure may increase and wound healing may slow down.
- Exposure to tooth and gum damage, infections and impotence.

Drugs

Diabetics should not use drugs.

Poisoning caused by drugs can be life-threatening!

Alcohol, carbohydrate and calorie contents of alcoholic beverages

Drink	Alcoholicity (%)	Carbohydrates(g/dl)	Calories (kcal/dl)
Beer	3,7-4,7	3	40
Strong beer	4,7-5,8	3,5	50
Ciders	4,5-8	1-11	40-90
Long drink	5,5	5	50
White wine(dry)	8,5-13,9	alle 1	65-80
White wine (sweet)	8,5-13,9	5-10	80-90
Red wine	11-13,5	alle 1	70-90
Rose wine	11-12,5	alle 1	70-80
Cognacs	40	alle 1	220-250
Whiskies	43	alle 1	230-250
Spirits(vodka tms.)	38-47	alle 1	200-260
Gin	38-47	alle 1	200-260
Liquor	15-55	25-40	260-350
Sherry (dry)	16-20	2-3	110-120
Sherry (sweet)	16-20	14-15	150-160