Whether you exercise casually or competitively it is important to understand the effect alcohol can have on your performance. Taking too much alcohol could prevent you reaping the rewards from all the work you have put in to exercise.

**Effects of alcohol on sport performance**
Alcohol can alter your sports performance because of how it affects the body during exercise.

It does this in several ways:

- Alcohol dehydrates you. This is because it is a diuretic, which means it makes your kidneys produce more urine therefore drinking too much alcohol can lead to dehydration. Exercising soon after drinking alcohol can make dehydration worse because you also sweat during exercise. Dehydration leads to reduced exercise performance. You need to be well hydrated when you exercise to maintain the flow of blood through your body, which is essential for carrying oxygen and nutrients to your muscles, thus maximising performance.

- Alcohol can interfere with the way your body makes energy. Alcohol is broken down in the liver. When you are breaking down alcohol, all other functions of the liver are secondary, one function involves glucose production, we need glucose for energy. If your liver is not producing enough glucose, your body will become tired as it works to expel the alcohol, making it even more of a struggle to keep up the pace.

- Alcohol slows down the nerves that pass messages around the body, causing a relaxed feeling. This effect can take time to wear off and this can result in your reactions, coordination, accuracy and balance being slower than usual during exercise and competition.

**Exercising the day after the night before**

- Drinking alcohol the night before exercise could have a negative influence on your performance the following day. It is not possible to perform at your best if you are feeling any of the effects normally associated with a hangover such as dehydration or headache.

- During exercise, your muscles burn glucose for energy. This produces lactic acid. Too much lactic acid leads to muscle fatigue and cramps. If you exercise after drinking your liver will be working harder to get rid of the toxins from the alcohol so it will be slower to clear out the lactic acid thus, increasing the likelihood of cramps. You will also lack strength or power and are more likely to feel tired quicker.

- For these reasons it is advisable to avoid alcohol the night before exercise, especially if it is due to be moderate or intense activity. However, if you do decide to drink, ideally limit the number of drinks and take alcohol with food.

- Drinking directly after exercise is also not advisable if you have not consumed enough water to replace the fluids you lost through sweating.
Other health effects

- **Weight gain:**
  Alcohol is high in calories, seven calories per gram, almost as many as pure fat. If you exercise to help manage your weight you could be taking in unnecessary ‘empty’ calories through alcohol and preventing weight loss. In addition to this after a few drinks you may be tempted to eat high calorie foods which will further hamper your efforts and progress.

- **Poor muscle growth:**
  Alcohol can disrupt sleep patterns. Growth hormones which we need for muscle growth are released during deep sleep. Therefore disrupted sleep from alcohol can lead to slow muscle gain.

- **Altered heart rate:**
  Most worryingly, drinking can increase the potential for unusual heart rhythms. This is a risk which significantly increases during exercise up to two days after heavy alcohol consumption. This risk varies between individuals. The physical activity itself increases your heart rate and with a lot of alcohol in your system your heart is put under further stress.

- **Slow healing after injury:**
  Alcohol causes the blood vessels to the skin, arms and legs to open up which results in an increased blood supply making an injury bleed and swell even more, slowing down the recovery process.

Does this mean I should not drink?

Enjoying a drink is often a part of socialising that does not have to be totally avoided. The following is a list of practical suggestions that will assist in managing your alcohol intake:

1. **Plan in advance** — Think about where you are going, who you will be with and how much you are going to drink.
2. **Eat before or while you are drinking** — Eating carbohydrate-rich foods following exercise helps replenish muscle fuel stores. Eating slows down your drinking pace and fills you up.
3. **Pace yourself** — Space alcoholic drinks with non-alcoholic. You will drink much faster if you are thirsty, so have a non-alcoholic drink to quench your thirst before you start drinking alcohol, particularly after exercise.
4. **Drink slowly** — Sip your drink, do not down it in gulps. Put your glass down between sips.
5. **Choose drinks wisely** — Choose low-alcoholic beers or use large glasses to mix spirits with plenty juice or soft drink.
6. **Be the designated driver** — If you have made the decision not to drink and are worried that there might be pressure from your friends, let them know that you are the designated driver.
7. **Drink one drink at a time** — Do not let people top up your drink if you have not finished it — it is a lot harder to keep track of how much you have drunk.
8. **Keep yourself busy** — If you are occupied you tend to drink less. Have a dance or play pool, do not just sit and drink.
9. **Avoid rounds** — ‘Rounds’ encourages you to drink at a faster pace. If you do get stuck in this situation, buy a non-alcoholic drink for when it is your turn.

10. **Make sure you rehydrate before you go to bed** — One of the best ways to prevent a hangover is to make sure you drink water before you go to sleep. Drinking water throughout the evening between drinks is also a good option.