

Effects of Cigarette Smoking on Sports Performance

How often do you see elite athletes, football or basketball players smoking on the sidelines? Most probably never. This is because sportspeople care a lot about their health and fitness, and most sportspeople know cigarette smoking damages their sports performance.

People who smoke are less likely to participate in sports and physical activity. When smokers do play sports, poisons from cigarettes reduce their ability to perform. The poisons which really hurt sports performance are carbon monoxide, nicotine and tar.



Carbon monoxide causes:

- Swelling of the respiratory tract lining, which restricts the air moving into and out of the lungs. This results in less air being drawn into the lungs, and less oxygen being available for working cells
- Reduced availability of haemoglobin (the substance in our blood which brings oxygen to all body cells) for oxygen to bind to. This happens because carbon monoxide attaches to haemoglobin much more easily than oxygen. This makes the heart work harder
- Reduced ability of muscle cells to take up oxygen. This means muscles don't function as well and reduces sports performance
- Damaged vision.

Nicotine causes:

- Increased heart rate, which means the smoker's heart has to work much harder to produce the same effect as a non-smoker's heart
- Constriction of blood vessels, leading to reduced blood flow and increased blood pressure.

Tar causes:

- Reduced elasticity of the lungs, resulting in less air being breathed in and out.

During exercise, smokers:

- Are more easily exhausted
- Suffer shortness of breath
- Have reduced endurance
- Are slower to react
- Have poorer visual judgement.

Benefits of quitting smoking:

- Within one to two days, carbon monoxide and nicotine will be cleared from the body
- After one month, blood pressure returns to normal and lung function improves
- After three months, the lungs are able to clean themselves and blood flow improves.

Source

Winstanley, Woodward and Walker, Tobacco in Australia: facts and issues 1995, Melbourne, Victorian Smoking and Health Program, 1995.



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