



## Smoking and Diabetes

Diabetes is an ongoing management of the 3 “B’s”; **B**lood glucose levels, **B**lood pressure levels and **B**lood cholesterol (blood fats) levels. Smoking increases the difficulty in managing the 3 “B’s”. Not only does smoking make managing blood glucose levels, blood pressure and blood cholesterol (blood fats) more difficult, it also greatly increases the risk of complications of diabetes

### Smoking and your body

Smoking harms nearly every part of your body, including the organs and systems that make it function. Tobacco smoke is highly toxic and contains a mixture of over 4000 chemicals, many of which are known to cause many health problems including cancer. Tobacco also contains the addictive substance nicotine.

Tobacco chemicals are able to travel and infiltrate anywhere in the body that the blood flows, causing damage to many of the cells along the way. Tobacco restricts the oxygen flow to the cells and organs of the body.

### HEAD

- Smoking affects the brain causing addiction and dependency.
- A stroke can occur when blood vessels in the brain become narrowed and/or blocked.
- Smoking causes irreversible damage to the eyes, known as macular degeneration, resulting in blindness.

The mouth is affected in many ways, including cancer of the lip, mouth and throat. Smoking causes gum disease, stained teeth as well as bad breath.

### HEART

Cigarette Smoking is a major cause of heart disease. Smoking causes atherosclerosis, the narrowing and clogging of the arteries, which reduces the blood supply and available oxygen

to the body. When atherosclerosis affects the arteries of the heart and they become blocked, a heart attack occurs. Cigarette smoking also damages the cells that line the blood vessels and contributes to the build up of fat deposits.

### CIRCULATION AND FEET

Cigarette smoke damages all blood vessels, including the vessels that lead to the feet. This leads to poor blood circulation which can affect the feet and legs by causing nerve damage, blood clots, infection, and gangrene and in some cases leading to amputation.

### LUNGS AND REPRODUCTIVE ORGANS

As cigarette smoke is inhaled into the lungs it can cause lung cancer. Cigarette smoking gradually destroys the air sacs of the lungs causing emphysema. Smoking also affects the reproductive organs of both males and females, leading to erectile dysfunction, cancer and infertility.

### Smoking increases diabetes complications

Smoking greatly increases the complications of diabetes. Complications of diabetes that are **the same** as smoking include: stroke, heart disease, eye disease, kidney disease, erectile dysfunction and peripheral vascular disease (problems with circulation, to the feet in particular). Cigarette smoking significantly increases the risk of developing these complications.

Smoking makes managing your diabetes more difficult. It not only contributes to developing complications but also increases blood glucose levels, the bad cholesterol (blood fats) and blood pressure, the three “B’s”. Research demonstrates that by achieving as near

normal levels of the three “B” as possible the risk of complications can be greatly decreased.

There has been one study that suggests that smoking can significantly increase the risk of hypoglycaemia (hypos) in people with type 1 diabetes.

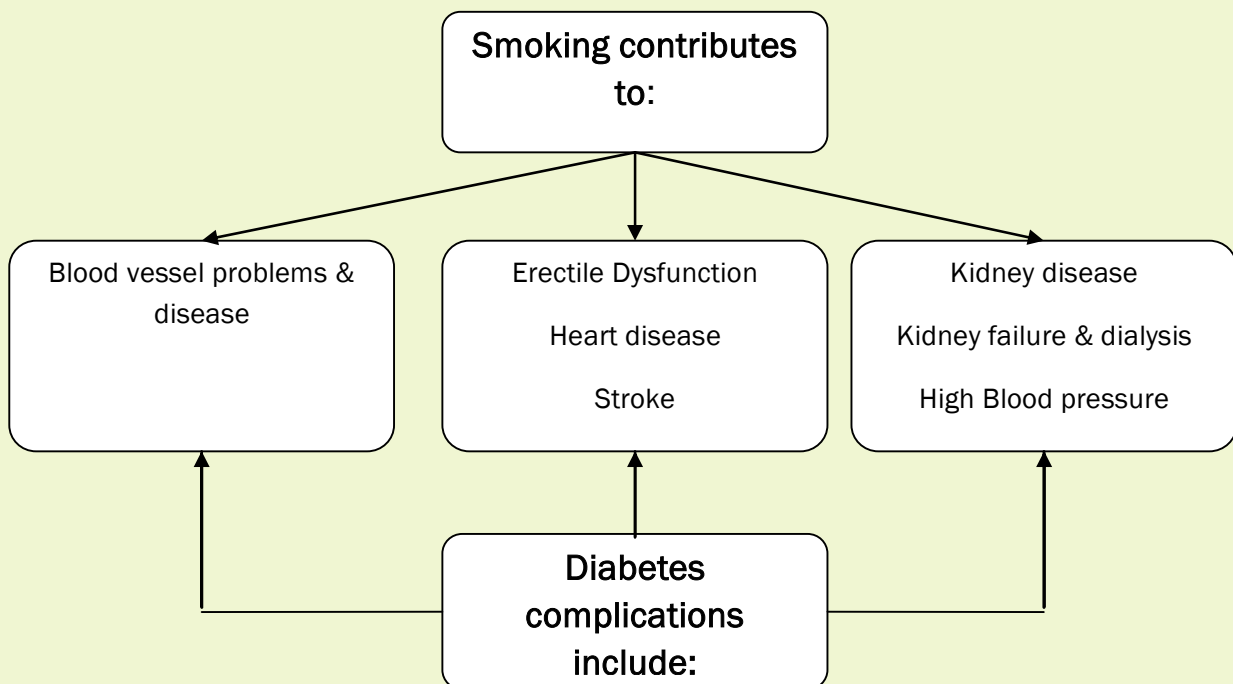
Smoking and diabetes both cause damage to blood vessels. People with diabetes who smoke are more likely to die of a heart attack or stroke than those who don't smoke. They are also more likely to have an increased level of the low density lipids (LDL) or bad cholesterol (blood fats), that increases the risk of heart attack and stroke. High blood pressure occurs as cigarette smoking narrows the blood vessels and atherosclerosis (narrowing of the arteries) develops. LDLs can cause narrowing of the arteries by laying fatty deposits on the artery wall, a bit like a water pipe that becomes clogged with rust. At the same time smoking has been shown to lower the high density lipids (HDL), the good cholesterol. HDL actually helps unblock the arteries so the blood can flow freely and reduce the risk of stroke and

heart disease.

Damaged blood vessels from either smoking, diabetes or the combination of both also make it harder for the body to heal. This increases the risk of infections and amputations. Combining smoking and diabetes greatly increases the risk of developing kidney disease, amputation and nerve problems.

Erectile dysfunction can become a problem for men. As the small blood vessels and nerves become damaged the ability to obtain and maintain an erection diminishes. Erectile dysfunction (from blood vessel damage) is now a recognised early warning sign of heart disease. Don't ignore erectile dysfunction, you can have a better quality of life and prevent heart disease.

Sexual dysfunction can also be a problem for women, but we have little research available at this time, therefore more research needs to be done.



### The risk to you, family & friends

Individuals with diabetes, who smoke, increase the risk of death and the burden of developing poor health. Currently in Australia, 24% of females and 16% of males have diabetes and smoke. Smoking is associated with poor control of blood glucose levels and can impair glucose tolerance and insulin sensitivity.

Tobacco smoking increases the risk of developing type 2 diabetes and the exposure to environmental smoke or passive smoking has been found to increase the risk of coronary heart disease in non-smokers. Research has shown that quitting cigarette smoking can reduce the risk of developing type 2 diabetes and in fact,

evidence suggests people who stop smoking may actually reduce the risk of developing type 2 diabetes to that of people who had never smoked. If you have family or friends who smoke invite them to join you in Quitting.

## Quit!

There are many benefits to your health if you Quit smoking. You will greatly reduce the risk of developing complications and improve your diabetes management. If you want to reduce your risk of cardiovascular disease and cancer, save money, have more energy and be back in control and no longer addicted to cigarettes then make the decision to **Quit now!**

## ARE YOU READY?

It is important that you start your **Quit** program when **you** are ready. Think about it before you start. Make a list of the pros and cons to quitting, which is longer? If the pros are longer, you may not be ready; if the cons are longer you may be ready. If the pros are longer, think about what needs to be done to turn it around. Discuss with you family and friends, consult with your diabetes team, and contact the Quitline phone 13 78 48/13 18 48.

If you know someone who has successfully Quit talk to them, find out what worked for them, will it work for you, if so use it, if not plan another strategy. Ask them, how many times did they try before they succeeded? Many people do not succeed the first time, this is normal it is not a failure. Every attempt will gain more knowledge of the pitfalls, empowering you to succeed.

Developing an action plan may be a useful tool when deciding how you will actually Quit. Write things down step by step, so you can refer back to them at any stage. Write a commitment to Quitting, sign it and you may even get a family member to witness it. Just by writing your commitment increases your chances of succeeding. Rate your confidence in succeeding on a scale from 1-10.

0 \_\_\_\_\_ 7 \_\_\_\_\_ 10

If your confidence is greater than 7 congratulations you are well on the way to success. If your confidence is less than 7 then your plan is too big and needs to be broken down into to smaller steps. Your GP, diabetes team or the Quitline (13 78 48/ 13 18 48) can help you with this.

Next rate how much do you believe this will benefit you on a scale from 1-10

0 \_\_\_\_\_ 7 \_\_\_\_\_ 10

If the benefit to you is greater than 7 congratulations you are well on the way to success. If the benefits to you are less than 7 then you may not be ready to Quit. Have a think about it and discuss further with your family, GP or diabetes team, when you are ready.

If you are now thinking about quitting or need help to cope with cravings and withdrawal, please seek help. There are many ways to overcome and cope with the cravings; they can range from 'cold turkey', meditation, acupuncture, hypnosis and nicotine replacement therapy. Having diabetes, if you are considering nicotine replacement or medications as part of your strategy to Quit, then this **must** be done under medical supervision. Your GP or specialists are able to provide that medical supervision.

For more information, please visit:

