Heart information

Cardiovascular wellness
for people living with HIV
Cardiovascular disease (CVD) describes heart, stroke and blood vessel diseases. Most CVD is caused by a build-up of fatty deposits in blood vessels, causing a narrowing or blockage. You may not have any symptoms from CVD, or you may experience chest pain, shortness of breath or other symptoms. Without treatment, CVD can progress to heart attacks, strokes and early death.

Over 20,000 Australians are living with human immunodeficiency virus (HIV). Most are taking combination anti-retroviral therapy (cART). Therapy is now so effective that people who are managing their HIV infection with cART can expect a lifespan that is similar to HIV-negative people of the same age and gender.

Improved survival rates for people living with HIV (PLHIV) mean that conditions related to ageing, including CVD, are emerging as health concerns.

In a recent study, about 10% of PLHIV reported CVD as a current health condition. CVD now causes more than 10% of deaths among HIV-positive people. In general, PLHIV have a higher CVD risk than HIV-negative people.

Making sustainable lifestyle changes to reduce your risk factors is the best way to prevent CVD or avoid worsening an existing condition.

Talk to your doctor or another health professional about establishing a management plan to help you stay on track.

An online version of this resource with links to more information can be found at www.heartfoundation.org.au/hiv
Many new effective treatments for HIV have become available since the mid-1990s, and most of these have fewer side effects than older drugs. However, there are some side effects associated with HIV treatments that may increase your risk of developing heart disease or stroke.

Research data suggests nearly half (42%) of PLHIV experience raised cholesterol or triglyceride levels, which can result from some medications. Two groups of drugs can cause this: nucleoside reverse transcriptase inhibitors (NRTI) and protease inhibitors (PI).

These treatments can also cause high blood sugar levels, which may increase your chance of developing diabetes. However, studies suggest this is much less common, and only affects about 3% of PLHIV. If you develop any of these side effects, your risk of CVD may increase.

It is very important that your doctor uses a combination of medicines to treat your HIV infection effectively. Your doctor will check your cholesterol and blood sugar, and may prescribe other medications for treatment.

Talk to your doctor or pharmacist to find out more about how your HIV medications could affect your CVD risk.

The risk of CVD falls rapidly within one year of quitting smoking. Within two to six years, the risk becomes similar to that of a non-smoker. The risk of having a stroke begins to fall soon after quitting smoking, with most benefit seen within two to five years.

Studies show that around 42% of PLHIV smoke, compared with 17% of the Australian population. Smoking is a major modifiable risk factor for heart disease. Both mainstream tobacco smoke (directly inhaled) and side-stream tobacco smoke (environmental or passively inhaled) can negatively affect cardiovascular health.

Smoking affects the vessels that supply blood to your heart and other parts of your body. It reduces the amount of oxygen in your blood and damages blood vessel walls. Smoking increases your risk of heart attack, stroke and peripheral artery disease (which can lead to gangrene and limb amputation).

There are lots of options available to help you quit smoking and stay a non-smoker. Most state PLHIV organisations offer quit programs.

**Remember**
Any improvement in your risk factors will benefit your health, even if your goals are not fully achieved.
Enjoy healthy eating

Healthy eating and drinking is an important part of looking after your heart and your general health. Most PLHIV (92%) feel that healthy eating is also an important part of managing their HIV infection.

- Include fruit, vegetables, wholegrain breads and cereals, and beans or lentils every day.
- Choose healthy fats, lean meat and poultry, low fat/fat free dairy foods, nuts and seeds, and oily fish.
- Try to limit sugary, fatty and salty take-away meals and snacks.
- Drink mainly water.

Not all fat is bad. It's actually good for you to eat a certain amount of fat. Choose healthy unsaturated fats, such as canola or olive oil, seeds and nuts, instead of saturated and trans fats, to reduce your risk of heart disease and diabetes. Foods containing saturated and trans fats should be limited. They include:

- fatty and processed meats
- full cream dairy products
- butter
- coconut and palm oils
- most fried take-away foods
- commercially baked biscuits, cakes and pastries.

A dietitian with experience in HIV can help you make healthy eating choices, including minimising salt and managing cholesterol.

Minimise salt

Reducing salt in your diet can lower blood pressure, and may reduce your risk of CVD. Most of the salt we eat comes from processed foods. Choose processed foods lower in salt and don’t add salt to your food.

Aim to reduce the amount of salt you eat to no more than 6 g per day (approximately 2,300 mg of sodium per day). Six grams of salt is about one and a half teaspoons.

It’s better not to add salt to your food. If you want to add flavour, try using herbs and spices.

You can find out how much salt is in food by reading the nutrition panel on the packet. Choose the lower salt option, or products labelled reduced, low or no added salt. Foods that carry the Heart Foundation Tick are lower in salt, and are a healthier choice.

Find out more:
Our online version links to Heart Foundation healthy eating advice, Nutrition Australia resources, Diabetes Australia, the Australian Diabetes Council and a guide for calculating your daily nutrition intake.

Quick tip
Enjoying a variety of foods from different food groups is the key to healthy eating.

Important note
These goals are a general guide. Work with your doctor or another health professional to set your personal goals.

Find out more:
Our online version links to Heart Foundation salt facts and the Tick shopping list.
Be physically active

Your body is designed to move. Regular, moderate-intensity physical activity is good for your heart and is a great way to have fun. Being active can also help to control other risk factors, such as having high blood pressure, diabetes, or being overweight.

We recommend physical activity for 30 minutes on most days of the week for good health. Activity should be of moderate intensity – you should be able to talk normally but be unable to sing. Shorter bursts of activity can be accumulated, such as three 10-minute walks.

People with heart disease gain similar benefits from regular exercise and it can assist with your return to normal life. Follow advice from your rehabilitation program or managing doctor about the type and amount of activity that is suitable for you.

Healthy weight

Making a commitment to achieve and maintain a healthy weight is one of the best things you can do for your health and wellbeing.

The key to achieving a healthy weight is to enjoy healthy eating and be physically active every day. Being overweight can seriously impact your health and lifestyle. It increases your risk of high blood pressure, cholesterol, diabetes, and heart disease. Studies suggest nearly half (44%) of PLHIV are overweight or obese, while only a small proportion (9%) are underweight.

Measuring your waist circumference is the best way to estimate risk. Healthy waist measurements are:
- less than 94 cm for men
- less than 80 cm for women.

Body mass index (BMI) can also be used to estimate risk in combination with waist circumference. A healthy BMI is between 18.5 and 25 kg/m².

To maintain your weight, the amount of energy in meals should be the same as the amount of energy your body uses each day through normal body functioning, daily activities and planned physical activity.

How to measure your waist

1. Wrap the measuring tape around your waist, directly against your skin.
2. The tape should be halfway between your lowest rib and the top of your hip bone, roughly in line with your belly button.
3. Breathe out normally.
4. Make sure the tape is snug, without being too tight on your skin.
5. Take the measurement where the end of the tape with the smallest number meets the tape on the other side.

Find out more:
Our online version links to the Heart Foundation’s booklet Losing weight the healthy way and the Measure Up campaign on healthy weight.
Maintaining your blood pressure within a normal, healthy range will reduce your risk of heart attack, stroke, heart failure and kidney disease.

There are often no warning signs of high blood pressure. You can have high blood pressure and feel well. You should have your blood pressure checked regularly if you are taking medications for HIV.

To help to lower your blood pressure, it is important to reduce excess body weight, be physically active, limit your alcohol intake, and eat less salt.

Ask your doctor or another health professional for advice. Long-term medicine may be required to manage high blood pressure.

Some cholesterol is important for health, as every cell in your body needs it to function properly. The body makes cholesterol and we also eat it as part of meals. People treated for HIV have an added risk of high cholesterol due to the side effects of some medications.

A recent study showed that 42% of PLHIV had raised cholesterol levels in the 12 months before the study.

If the amount of cholesterol in the blood increases, it can build up in blood vessels and gradually block the vessels completely. If this happens, you may have a heart attack or stroke.

Changes to your diet can be effective in managing your cholesterol. Replace saturated and trans fat with unsaturated fat. Use canola and olive oil and spreads, instead of butter, coconut oil and palm oil. Talk to your doctor or another health professional about whether your HIV medications affect your cholesterol levels.

Note
Generally, the lower your low-density lipoprotein (LDL) cholesterol and triglycerides, and the higher your high-density lipoprotein (HDL), the better.
Most recreational drugs have an effect on the heart, but they all act in different ways. Drugs like marijuana, amyl, amphetamines and cocaine can cause heart problems.

An Australian study showed that many PLHIV use recreational drugs. In the 12 months before the study, roughly 40% had used marijuana, 32% had used amyl, 25% had used amphetamines of some kind, and 7% had used cocaine.

Marijuana, also known as cannabis or pot, increases blood pressure and heart rate, even at low doses. This may lead to a heart attack or stroke. More powerful forms of marijuana may have prolonged and serious effects.

Amyl nitrate, commonly known as amyl or poppers, can increase heart rate, decrease blood pressure, and can cause irregular heart beats. Nitrate drugs, like amyl, can have disastrous effects when taken with drugs used for erectile dysfunction.

Amphetamines, or methamphetamines, also increase blood pressure and heart rate, and may irritate blood vessels, which limits blood supply to the heart. This can lead to heart attacks, irregular heart beats, heart muscle damage (cardiomyopathy), or sudden death.

Cocaine increases blood pressure and heart rate, and constricts blood vessels, which limits blood supply to the heart. This can result in a heart attack, heart failure, irregular heart beats, stroke, or sudden death. The risk of serious effects, including death, is significantly increased when cocaine is taken with alcohol.
Social and emotional wellbeing

Having the social and emotional support of friends and family is important in everyone’s life.

In Australia, depression is quite common – about one in six people will be depressed during their lifetime. Depression is more common among PLHIV. About 40% of PLHIV experience depression at some stage of their life.

Strong and consistent evidence suggests that people who experience depression, are socially isolated, or do not have quality social support are at greater risk of developing heart disease. These three factors can affect your risk of heart disease as much as better-known risk factors such as smoking, high cholesterol levels or high blood pressure.

Talk regularly with your family and friends. They can offer encouragement and support as you seek help from your doctor or another health professional.

Peer support groups can also be helpful. Most states have their own branches of PLHIV groups. Positive Living Centres may also provide support and advice.

Further information

An online version of this resource with links to more information can be found at www.heartfoundation.org.au/hiv

Useful links

National Association of People Living with HIV/AIDS (NAPWA)
www.napwa.org.au

Australasian Society for HIV Medicine (ASHM)
www.ashm.org.au

Australian Federation of AIDS Organisations (AFAO)
www.afao.org.au

Multicultural HIV and Hepatitis Service
www.multiculturalhivhepc.net.au

HIV, Hepatitis and STI Education and Resource Centre
www.hivhepsti.info

Supporting references are available on request.

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