# Helping patients quit smoking

## Ask

**Identify all smokers in your practice***

- Waiting room checklist
- Waiting room poster
- Patient record prompts: check smoking habit at least every 2 years
- Prompts by practice staff

→ **Ex-smokers**
Affirm successful quitting and recheck regularly

## Assess

**Assess current smoking and interest in quitting**

- Use smoking assessment tool
- Assess interest and confidence in quitting
- Use motivational interviewing techniques to explore motivation and confidence
- Take quitting history: what caused past relapses? What situations tempt the person to smoke?
- Identify barriers to quitting
- Identify nicotine dependence (first cigarette <30 minutes after waking, >15 cigarettes per day, history of withdrawal symptoms)
- Assess mental health status

**Is the person ready to attempt quitting?**

→ **No**
Advise to quit
Offer help and Quit book

**Yes**

## Advise

**Provide tailored advice**

- Provide brief, non-judgemental advice to quit
- Discuss benefits to individual
- Set quit date
- Assess (1) dependence, (2) habit, (3) psychological triggers
- Jointly devise strategies for support

## Assist

**Write smoking cessation prescription**

- Make an individual plan to deal with withdrawal, habit, mood, weight gain, stress, high-risk situations
- Prescribe nicotine replacement therapy or bupropion for dependency**
- Give Quitline number 13 QUIT (13 7848) and Quit book

## Arrange

**Arrange referral and follow-up**

- Refer to a Quitline program (use fax referral)
- Recruit support (e.g. partner or family)
- Organise follow-up in 7 days
- Negotiate a separate consultation to discuss quitting

* See national guidelines (reference 9)
** Note contraindications, adverse effects and drug interactions

# Evidence for the benefits of quitting

## Why quit?

Smoking causes more deaths and disease in Australia than any other preventable risk factor, and is responsible for an estimated 19,000 deaths and 142,500 hospital admissions per year.[1] Life-long smokers have a 50–60% chance of dying from a tobacco-related disease, and half of these deaths will occur in middle age (25–54 years).[2,3]

Quitting achieves immediate and long-term benefits. Everyone who smokes can benefit from quitting – the sooner the better. Even when illness is present, quitting smoking is still very worthwhile.

## Have you identified all the smokers among your patients?

Approximately 21% of men and 18% of women smoke daily.[4]

At any time:

- just over half of these are seriously thinking about quitting within the next 6 months[5]
- nearly half have tried to quit during the past 12 months.[6]

Many smokers are pessimistic about their ability to quit and are often reluctant to ask for help. However, the trend towards a smoke-free lifestyle is gaining momentum: the number of Australians who have quit smoking now exceeds the number of smokers.[7]

## Smoking facts

- Tobacco smoke contains about 4000 chemicals, including known carcinogens (e.g. nitrosamines, toluidine, nickel, benzopyrene, cadmium, polonium 210), carbon monoxide, hydrogen cyanide, various nitrogen oxides and tar.
- In developed countries, smoking is estimated to cause: [1,2]
  - 87% of all deaths due to lung cancer
  - 82% of all deaths due to emphysema
  - 40% of all deaths due to heart disease in people under 65
  - 21% of all deaths due to heart attack
  - 33% of all cancers
  - 10% of all infant deaths
  - more deaths, hospital admissions and primary care visits than any other single factor.
- In Australia, smoking costs the community an estimated $21 billion per year (1998–1999 figures),[8] offset by only $5.2 billion in tobacco excise.

## Benefits according to time since quitting[7]

| | |
|---|---|
| 12 hours | Almost all nicotine has been metabolised |
| 24 hours | Carbon monoxide levels drop markedly |
| 2 days | Cleaner breath and hair |
| 5 days | Sense of taste and smell improve |
| 3 months | Cilia begin to recover and lung function improves |
| 1 year | Risk of coronary heart disease halved, compared with smoker |
| 10 years | Risk of lung cancer less than half of risk for continuing smoker, and continues to fall |
| 15 years | Risk of coronary heart disease same as for non-smoker |

## Can GPs make a difference?

Compared with smokers who attempt to quit without assistance, the chance of successfully quitting is 4–6 times higher in people who receive:

- brief advice on quitting AND
- help dealing with withdrawal and stress AND
- referral to Quitline structured call back program (available in most states)

There is good evidence that GPs can assist smokers to quit.[9] The key components of a primary care-based intervention include:

- brief and clear advice
- assistance in identifying individual barriers to quitting, and strategies to overcome barriers
- help withdrawing from nicotine
- helping patients to understand and strengthen their motivation and confidence to quit
- working in partnership with Quitline.

### Recommended reading

Litt J. *Smoking and GPs: time to cough up. Successful interventions in general practice*. Aust Fam Physician 2005;34:425-9.

Zwar N, Richmond R, Borland R, Stillman S, Cunningham M, Litt J. *Smoking cessation guidelines for Australian general practice*. Canberra; Commonwealth Department of Health and Ageing, 2004.


References

1. English D, Holman C, Milne E, et al. *The quantification of drug caused morbidity and mortality in Australia.* Canberra; Commonwealth Department of Human Services and Health, 1995.
2. Fiore MC. Bailey WC, Cohen SJ, *et al. Treating tobacco use and dependence.* US Department of Health and Human Services, Public Health Service, 2000.
3. Doll R, Peto R, Boreham J, Sutherland I. Mortality in relation to smoking: 50 years' observations on male British doctors. *BMJ* 2004; 328: 1519.
4. White V, Hill D, Siahpush M, Bobevski I. How has the prevalence of cigarette smoking changed among Australian adults? Trends in smoking prevalence between 1980 and 2001. *Tob Control* 2003; 12(Suppl 2): 156–163.
5. Richmond R, Kehoe L, Heather N, *et al.* General practitioners' promotion of healthy life styles: what patients think. *Aust N Z J Public Health* 1996; 20(2):195–200.
6. Hill D, White V, Scollo M. Smoking behaviours of Australian adults in 1995: trends and concerns. *Med J Aust* 1998; 168: 209–213.
7. National Tobacco Campaign. *Quit because you can.* Canberra; Commonwealth Department of Health and Aged Care, 2002.
8. Collins D, Lapsley H. *Counting the cost: estimates of the social costs of drug abuse in Australia in 1998–9.* In National Drug Strategy Monograph number 49, Canberra; National Drug Strategy, 2002.
9. Zwar N, Richmond R, Borland R, Stillman S, Cunningham M, Litt J. *Smoking cessation guidelines for Australian general practice*. Canberra; Commonwealth Department of Health and Ageing, 2004.



Lifescripts
Advice for Healthy Living

Australian Government
Department of Health and Ageing

# Helping patients eat well for health

## Ask

**Identify patients who can benefit from brief advice on nutrition**

- Waiting room checklist
- Waiting room poster
- Patient record prompts
- Prompts by practice staff

## Assess

**Assess current nutrition status**

- Nutrition assessment tool
- Assess motivation to improve diet
- Assess barriers to healthy eating

→ **Identify those who would benefit from a full dietary assessment and nutrition counselling***

## Advise

**Provide tailored advice**

- Give feedback on current diet:
  - Fruit and vegetable intake
  - Saturated fat intake
  - Fluid intake
- Discuss potential benefits of a healthy diet
- Discuss barriers to change
- Provide written information**

→ Does patient need other lifestyle prescriptions e.g. physical activity, alcohol?

## Assist

**Write healthy eating prescription**

- Record individual details
- Negotiate and set realistic goals
- Individualise the prescription
- Consider referral
- Set review dates

## Arrange

**Arrange referral and follow up**

- Refer to an accredited practising dietitian
- Refer to Heartline 1300 36 27 87
- Organise follow-up in 2–4 weeks for review

***Important:** A full dietary assessment and nutrition counselling by an accredited practising dietitian may be beneficial for:

- people who have lost weight unintentionally
- pregnant or lactating women
- children
- patients with diabetes mellitus who require insulin
- patients with specific nutrition related diseases.
- people who cannot shop and cook for themselves (e.g. frail elderly, disabled), who may be at risk for malnutrition.

**Quality information for consumers is available from the following sources:

- The Dietitians Association of Australia (www.daa.asn.au)
- Find an Accredited Practising Dietitian 1800 812 942
- Nutrition Australia (www.nutritionaustralia.org).

# Evidence for the benefits of healthy eating

Good nutrition contributes to quality of life and well-being. Both under- and over-nutrition must be managed effectively to prevent nutrition-related disease. Poor nutrition contributes significantly to the burden of chronic disease in Australia; the direct costs of nutrition-related disease have been estimated at $1.5 billion per year, and indirect costs at $2.3 billion per year.[1]

## Eat plenty of fruit and vegetables

**Aim to include 5 serves of vegetables and 2 serves of fruit every day.** Epidemiological evidence from around the world indicates that diets rich in vegetables and fruit are associated with lower risk for coronary heart disease, stroke, and several cancers. High vegetable and fruit intake may also be associated with reduced risk of developing type 2 diabetes, hypertension, cataracts and macular degeneration.[2]

## Reduce saturated fat intake

Diets high in saturated fats contribute to insulin resistance and increase the risk for coronary heart disease, type 2 diabetes and several cancers.

Australian dietary guidelines recommend a saturated fat intake of no more than 15–25 g per day (equivalent to 6–8 teaspoons of saturated fat). The average Australian currently consumes more than this recommended intake, mostly from dairy foods, meats and 'hidden' saturated fats in commercially baked cakes, pastries and biscuits.[2,3]

## Drink plenty of water

Health authorities generally recommend that adults drink 6–8 glasses of fluid (1.5–2 L) each day.[2] Adequate water consumption is essential for digestion, absorption and transportation of nutrients, and for efficient waste elimination. Low fluid intake has been reported to increase risk for kidney stones, colon and urinary tract cancers, childhood obesity, mitral valve prolapse, and to impair physical and mental performance.[2]

Patients should be advised that sugary drinks (soft drinks, cordials, sports drinks, juice and flavoured mineral waters) may contribute to overweight and poor oral hygiene,[2] and should be replaced with water whenever possible.

## Do GPs make a difference?

Dietary advice given in the primary care setting is effective to reduce saturated fat intake, and increase vegetable and fruit intake. The elements of the dietary advice include tailoring the message for the patient, and reinforcing the message.[4,5]

### Further recommended reading

Gray, D. Dietary advice in British general practice. *Eur J Clin Nutr* 1999; 53 (Suppl 2); S3–8.

Steptoe A, Perkins-Porras L, McKay C, *et al*. Behavioural counselling to increase consumption of fruits and vegetables in low income adults: randomised trial. *BMJ* 2003; 326; 855.

The Dietitians Association of Australia (www.daa.asn.au)


References

1. Strategic Inter-Governmental Nutrition Alliance (SIGNAL). *Eat well Australia: an agenda for action for public health nutrition.* National Public Health partnership, Australia, 2001 (www.nphp.gov.au/publications/signal/eatwell1.pdf).
2. National Health and Medical Research Council. *Clinical practice guidelines for the management of overweight and obesity in adults.* Canberra; Commonwealth of Australia, 2003 (www.nhmrc.gov.au).
3. Australian Bureau of Statistics. *NNS: Nutrient intakes and physical measurements Australia 1995.* Canberra; AGPS, 1998.
4. Ockene IS, Herbert JR, Okene JK, *et al*. Effect of physician-delivered nutrition counselling training and an office-support program on saturated fat intake, weight and serum lipid measurements in a hyperlipidemic population: Worcester area Trial for Counselling in Hyperlipidemia (WATCH). *Arch Intern Med* 1999; 159: 725–731.
5. Delichatsios HK, Hunt MK, Lobb R, Emmons K, Gillman M. Eatsmart: efficacy of a multifaceted preventive nutrition intervention in clinical practice. *Prev Med* 2001; 33: 91–98.



Lifescripts
Advice for Healthy Living

Australian Government
Department of Health and Ageing

# Helping patients reduce alcohol-related harm

## Ask

**Identify patients who can benefit from alcohol assessment and advice on low-risk drinking**

- Waiting room checklist
- Waiting room poster
- Patient record prompts
- Prompts by practice staff

## Assess

**Assess risk level and readiness to reduce drinking**

- Alcohol use assessment tool
- Drinking history (frequency and quantity) or short screening questionnaire (e.g. AUDIT-C)*
- Is the patient's drinking risky?

→ **No**
Reinforce benefits of low-risk drinking

**Yes**

- Interested in cutting down?
- Confident about succeeding?
- Want some help?

→ Identify dependency*

## Advise

**Provide tailored advice**

- Give feedback on current drinking and explain low-risk levels
- Discuss benefits of low-risk drinking
- Give written information**
- Suggest drink diary and review in 2 weeks
- Discuss barriers to reducing alcohol
- Negotiate and set realistic goals

## Assist

**Write prescription for low-risk alcohol use**

- Individualise the prescription
- Consider referral
- Consider drug treatment for cravings (naltrexone, acamprosate)
- Set review dates

## Arrange

**Arrange referral and follow-up**

- Refer to addiction medicine specialist, psychiatrist, drug and alcohol counsellor
- Prescribe drug treatments if needed
- Organise follow-up in 2–4 weeks for review

*Use full AUDIT if you suspect alcohol dependency (see reference 1).
**See reference 2.

# Evidence for the benefits of low-risk alcohol use:

Although moderate alcohol consumption has some health benefits for older adults, excessive drinking harms health and social life.

## Drinking problems in Australia

- About 6% have an alcohol use disorder or are alcohol-dependent
- One in 10 engage in risky drinking or binge drinking
- Risky drinking is most prevalent among under 25-year-olds

## Australian recommended levels of alcohol consumption[3]

For men:

- No more than 6 standard drinks on any one day (60 g), for risk of harm in the short term, and
- No more than 4 standard drinks of alcohol per day (40 g), or 28 standard drinks (280 g) per week for risk of harm in the long term.

For women:

- No more than 4 standard drinks on any one day, for risk of harm in the short term, and
- No more than 2 standard drinks of alcohol per day (20 g) or 14 standard drinks (140 g) per week for risk in the long-term.

## Risky drinking – early intervention is effective

The most effective strategy to reduce alcohol-related harm is early intervention for people who engage in risky drinking, to prevent them becoming heavy regular or dependent drinkers. Once a person is dependent on alcohol, withdrawal may be difficult or complicated.

Brief advice from a GP can be very effective in correcting risky drinking in non-dependent drinkers, as demonstrated by a substantial body of evidence. Brief intervention achieved a 17% mean reduction in alcohol consumption, and resulted in significant health benefits, in a large international study conducted by the World Health Organization.

**Including routine questions about alcohol use in your history will provide opportunities to prevent further harm.**

## Alcohol dependence – more help needed

It is important for GPs to identify patients who meet criteria for alcohol dependence. If you suspect dependence, use the Alcohol Use Disorders Identification Test (AUDIT).[1]

GPs can help people who are alcohol dependent, but effective interventions take more time and the prognosis is worse than for non-dependent risky drinkers. Detoxification in the community, supervised by a GP, can be a safe option. Alcohol abstinence – rather than moderate drinking – is usually the most appropriate goal, as these patients are unable to control their alcohol consumption. You may wish to refer these patients to a clinician with expertise in addiction medicine.

## Drug therapies for alcohol problems

Pharmacotherapies can be helpful in reducing alcohol consumption in people who are alcohol dependent. Emerging evidence suggests they may also be effective in people with alcohol problems who are not alcohol dependent, including binge drinking.

- Naltrexone (Revia) and acamprosate (Campral) are generally well tolerated and can be used even if the person continues to drink.
- Disulfiram (Antabuse) causes an unpleasant reaction when alcohol is ingested and is not used as a first-line therapy.

## GPs can help problem drinkers

- Most patients who drink too much appreciate a chance to discuss this issue with their doctor.
- If more serious alcohol or other drug problems emerge from the discussion, GPs in most parts of Australia can access expert clinical advice or refer the patient for specialised treatment.

### Recommended reading

Holmwood C. Alcohol-related problems in Australia: is there a role for general practice? *Med J Aust* 2002; 177: 102–103.
Roche A, Freeman T. Brief intervention: good in theory but weak in practice. *Drug Alcohol Rev* 2004; 23: 11–18.

References

1. Shand F, Gates J. *Treating alcohol problems. Guidelines for general practitioners.* Canberra; Commonwealth Department of Health and Ageing: 2003. (www.health.gov.au).
2. NHMRC. *Alcohol and your health. Australian alcohol guidelines*. (Consumer brochure available from www.alcoholguidelines.gov.au/pdf/consbrox.pdf).
3. National Health and Research Medical Council. *Australian alcohol guidelines. Health risks and benefits.* Canberra; NHMRC: 2003 (www.alcoholguidelines.gov.au/resources.htm).

Lifescripts Advice for Healthy Living
Australian Government Department of Health and Ageing

# Helping patients become more active

## Ask

**Identify patients who can benefit from an activity script**

- Waiting room checklist
- Waiting room poster
- Patient record prompts
- Prompts by practice staff

## Assess

**Assess current physical activity level**

- Physical activity assessment tool
- Is the patient active enough for health benefits?

**Yes**

Reinforce benefits and advise to maintain current levels

**No**

Exclude contraindications*

## Advise

**Provide tailored advice**

- Give feedback on current activity level
- Discuss individual benefits
- Discuss individual barriers
- Negotiate and set realistic goals

## Assist

**Write activity prescription**

- Record individual details
- Individualise the prescription
- Consider referral
- Set review dates

## Arrange

**Arrange referral and follow-up**

- Refer to local physical activity provider
- Consider referral to tertiary services (e.g. exercise physiologist) for patients at higher risk**
- Organise follow-up in 2–4 months for review

*Contraindications to moderate-intensity physical activity

- Unstable angina
- Chest discomfort or shortness of breath on low-intensity activity
- Uncontrolled heart failure
- Severe aortic stenosis
- Uncontrolled hypertension
- Acute infection or fever
- Resting tachycardia (>100 beats per minute)
- Recent complicated acute myocardial infarction (<3 months)
- Uncontrolled diabetes

**People with multiple risk factors, pre-existing disease, long-standing disabilities and the frail elderly may require referral for supervision or other tertiary services to ensure their activity is safe and provides maximal benefit.

# Evidence for the benefits of physical activity

Physical inactivity is a major modifiable risk factor affecting the health of Australians. It accounts for 7% of the total disease burden† and is estimated to cost the community at least $400 million per year in direct health costs.[1] In women, insufficient physical activity is responsible for more premature death and illness than any other modifiable behavioural risk factor, while in men it is second only to tobacco smoking.

## Summary of health benefits of physical activity†

- All-cause mortality risk reduced by 50%
- Cardiovascular disease risk reduced by up to 50%
- Hypertension prevention and management
- Stroke risk reduced by up to 30%
- Cancer risk (colon, breast) reduced
- Type 2 diabetes prevention (risk reduced by 30–50%) and management
- Osteoarthritis management (pain control, maintenance of muscle strength, joint structure and function)
- Osteoporosis risk reduction
- Falls risk in the elderly reduced by resistance exercises
- Weight management and reduction (when combined with dietary changes)
- Mental illness (anxiety, depression and subjective feelings of stress) prevention and management

† Comparisons between low activity and moderate activity

## Australian physical activity guidelines

Just 30 minutes per day of moderate-intensity physical activity (either continuous or accumulated in bouts of 10 minutes or more) provides health benefits and reduces risk for a range of conditions in all population groups. The preventative benefits of physical activity are best documented for cardiovascular disease, diabetes, stroke, mental illness, prevention of falls and obesity.[2]

## Inactivity in Australia

More than half of the Australian population is not active enough to achieve these documented health benefits. About 54% of adults aged 18-75 could benefit by increasing time and number of sessions involved involved in physical activity. [3]

## Can GPs make a difference?

A growing body of evidence – including over 30 primary care studies – demonstrates that GPs and practice nurses can effectively increase patients' physical activity levels through brief clinical interventions that include:[4]

- brief advice
- provision of written information, such as an individualised prescription
- follow-up over subsequent consultations.

## Who can benefit from this advice?

All sectors of the population can benefit from regular, moderate-intensity physical activity. There is evidence that the greatest benefit can be derived by people who are currently inactive, those with cardiovascular disease, hypertension, depression, anxiety or obesity, and those who are at higher risk of diabetes and osteoporosis.

## What has been shown to work?

The '5 As' approach (Ask, Assess, Advise, Assist, Arrange) has proved a powerful tool to assist GPs in structuring advice to patients on physical activity, and has been used successfully by thousands of general practices in Victoria and New South Wales since 1999. Having identified a patient who can benefit from increased physical activity levels and excluded major contraindications to exercise, the GP assesses individual barriers to positive behaviour change and identifies specific activities that are suitable. The patient and GP negotiate realistic goals, and the advice is reinforced by an individually tailored physical activity prescription. GPs can also arrange referral to suitable activity providers within the community, and arrange appropriate follow up to review the patient's progress.

†Disease burden is a measure of years of healthy life lost to illness, injury or death, and takes into account the prevalence and amount of disability associated with a disease or risk factor. Source: Australian Institute of Health and Welfare 2004. Australia's Health. Canberra: AIHW.

### Recommended reading


US Department of Health and Human Services. *Physical activity and health. A report of the Surgeon General.* Atlanta, USA. Department of Health and Human Services, Centre for Disease Control and Prevention, National Centre for Chronic Disease Prevention and Health Promotion, 1996.

Royal Australian College of General Practitioners. *Smoking, Nutrition, Alcohol and Physical Activity (SNAP): A population health guide to behavioural risk factors in general practice.* South Melbourne; RACGP, 2004.

Bauman A, Bellow B, *et al*. *Getting Australia active: Towards better practice for the promotion of physical activity.* Melbourne; National Public Health Partnership, 2002.

Huang N. *Motivating patients to move*. Aust Fam Physician 2005;34:413-7.


References


1. Mathers C, Vos T, *et al*. The Australia burden of disease study: measuring the loss of health from disease, injury and risk factors. *Med J Aust* 2000; 172: 592–596.
2. Bull F, *et al*.Getting Australia Active. II. An update of evidence on physical activity for health. National Public Health Partnership, Australia; 2004 (www.nphp.gov.au)
3. Armstrong T, *et al*. *Physical activity patterns of Australian adults* (AIHW Cat. CVD 10). Canberra; Australian Institute of Health and Welfare, 2000.
4. Smith B. Promotion of physical activity in primary health care: an update of the evidence on interventions. *J Sci Med Sport* 2004; 7(Suppl): 67–73.



Lifescripts
Advice for Healthy Living

Australian Government
Department of Health and Ageing

# Helping patients achieve and maintain a healthy weight

## Ask

**Identify patients who can benefit from brief advice on weight management**

- Waiting room checklist
- Waiting room poster
- Patient record prompts

## Assess

**Assess weight status**

- Is the patient gaining weight?
- Is the patient motivated to achieve long-term weight management?
- Calculate BMI and waist circumference
- Assess risk for chronic disease*

**Assess other lifestyle factors, if relevant**

- Activity assessment tool
- Smoking assessment tool
- Alcohol assessment tool

## Advise

**Provide tailored advice**

- Give feedback on current weight
- Discuss potential benefits of achieving a reduction in weight
- Give practical tips on a healthier diet and increasing physical activity
- Provide written information**
- Discuss barriers to change
- Negotiate and set realistic goals (10% weight reduction over 6 months)

Does patient need other lifestyle prescriptions?

## Assist

**Write weight management prescription**

- Record individual details
- Individualise the prescription
- Consider referral
- Set review dates

## Arrange

**Arrange referral and follow-up**

- Tailor to patient motivation and risk
- Refer to local community services
- Refer to health professionals e.g. accredited practising dietitian, psychologist, surgeon
- Organise follow-up in 2–6 weeks for review

***Chronic disease risk**

| | |
|---|---|
| **Moderate** | BMI >25 kg/m$^2$ OR waist circumference >102 cm (men) or >88 cm (women) |
| **High** | BMI 25–35 kg/m$^2$ + 2 risk factors |
| **Very high** | BMI ≥ 40 kg/m$^2$ OR BMI >35 kg/m$^2$ + 2 risk factors |

**Risk factors**

- Lipid abnormality (high total cholesterol, high LDL or low HDL)
- Hypertension
- Impaired glucose tolerance
- Type 2 diabetes

******Quality information for consumers is available from:
Dietitians Association of Australia (www.daa.asn.au)
Find an Accredited Practising Dietitian 1800 812 942
Nutrition Australia (www.nutritionaustralia.org)

# The evidence: achieving and maintaining healthy weight

Approximately 67% of Australian males and 52% of females are overweight or obese (1999–2000 statistics). Obesity contributes to approximately 4.3% of the overall burden of disease in Australia. Over 50% of people visiting a GP will have, or be at risk for, medical conditions directly caused by excess body fat.[1,2]

Development of obesity is influenced by genetics, environmental factors, cultural factors and lifestyle behaviours. Treatment must be multifactorial and long term. It involves changes in diet, physical activity levels and behaviours, and must be tailored to the individual and reviewed regularly. High failure rates are partly due to unrealistic goals and impractical approaches to diet and physical activity that cannot be sustained long term. Moderate weight loss (5–7% of initial weight) that is maintained long term is a successful outcome, and is associated with significant improvements in the risk for chronic disease including type 2 diabetes. Support for weight maintenance is required throughout life.[2]

## Aim to reduce weight by 5–10%

There is high-quality evidence that weight loss of between 5% and 10% of original body weight achieves significant metabolic and cardiovascular health benefits in overweight people, including:

- blood pressure reduction
- improvements in dyslipidaemia and hypertriglyceridaemia
- reduced risk for type 2 diabetes and improved control in those with existing type 2 diabetes
- improvement or resolution of sleep apnoea.

Weight loss of greater than 10% of initial body weight provides further health benefits, but this is a less achievable goal. Current evidence suggests that the short-term goal should be loss of 1–4 kg per month, aiming for 10% of initial weight in the medium term,[2,3] but in real-world settings, a slower rate of 0.5–1 kg per month (6–12 kg/year) is more likely to be achieved.

## Reduce energy intake (2000–4000 kJ/day)

The main aim of diet therapy in reducing body weight is the establishment of lifelong healthy eating patterns. In the short term, the main requirement is to reduce energy intake. There is good evidence that a reduced-energy diet will be more effective in maintaining weight loss than other more prescriptive diets. Strategies for reducing energy intake include eating smaller servings overall, altering particular components of the diet (reducing fat intake or increasing lean protein) or changing food patterns such as increasing vegetable and fruit consumption.

Reducing energy intake involves behavioural change and may require planning ahead and avoiding high-risk situations for overeating e.g. eating at the dinner table instead of in front of television, using a food journal.[3]

## Reduce fat intake

Weight loss of 0.5–1 kg per week can be achieved by a reduced-fat diet (fat provides 25–30% of total energy intake) or a low-fat diet (fat provides 20–25% of total energy) as part of a reduced-energy diet.[3] **Important!** Weight loss will not be achieved by a reduction in dietary fat intake alone, without reducing total energy intake. This means replacing high-fat foods with less energy-dense foods such as vegetables and fruit and reducing serving sizes.[3]

| Current choice | Replace with | Energy reduction |
|---|---|---|
| **Main Meal** | | |
| • Large steak | Small piece of lean red meat | 1500 kJ |
| • Hot chips (10) | Boiled potato (no added fat) | 1000 kJ |
| **Snacks** | | |
| • Potato crisps (1 pkt) | Piece of fruit | 700–1000 kJ |
| • Chocolate biscuits (2) | Piece of fruit | 1000 kJ |
| **Other** | | |
| • Full-cream milk (250 mL) | Low-fat milk (250 mL) | 300 kJ |
| • Regular fruit yoghurt (1 tub) | Low-fat yoghurt (1 tub) | 600 kJ |
| • Soft drink (600 mL) | Diet soft drink or water (600 mL) | >1000 kJ |

## The role of physical activity

Physical activity is a necessary component of weight management. It helps reduce abdominal fat and can help to reduce total body fat (see Lifescripts physical activity materials).

## Can the GP make a difference?

Ongoing care is needed for successful weight management. Long term follow-up is vital to monitor the patient's dietary, physical activity and lifestyle behaviours. Supportive follow-up will help the patient resolve set-backs and reinforce any positive changes that have been achieved.

### Recommended reading

National Health and Medical Research Council. *Dietary guidelines for Australian adults*. Canberra; NHMRC, 2003 (www.nhmrc.gov.au).

Orzano AG, Scott JG. Diagnosis and treatment of obesity in adults: an applied evidence-based review. *J Am Board Fam Pract* 2004; 17: 359-369.


References

1. Australian Institute of Health and Welfare. *Australia's health 2004*. Canberra; AIHW, 2004.
2. National Health and Medical Research Council *Clinical practice guidelines for the management of overweight and obesity in adults*. Canberra; Commonwealth of Australia, 2003 (www.nhmrc.gov.au).
3. The Dietitians Association of Australia. *Draft DAA best practice guidelines for treatment of overweight and obesity in adults*. Canberra; DAA, 2004.



Lifescripts Advice for Healthy Living

Australian Government Department of Health and Ageing