

- Make fitness a priority... COMMIT TO IT.

INTAKE
Calories From Foods

OUTPUT
Calories Used During
Physical Activity

THE ENERGY BALANCE



* Consult with your health care provider before starting a vigorous exercise program if you have ever had heart trouble or high blood pressure or suffer from chest pains, dizziness or fainting, arthritis, or if you are over age 40 (men) or 50 (women).

- To maintain your weight, your intake of calories must equal your energy output.
- To lose weight, you must use more energy than you take in.
- A difference of one 12-oz. soda (150 calories) or 30 minutes of brisk walking most days can add or subtract approximately 10 pounds to your weight each year.

TILT THE BALANCE WITH PHYSICAL ACTIVITY

- Adding moderate amounts of physical activity five or more times a week to your routine uses 150 calories of energy on each day of activity, which can be equivalent to approximately 5 pounds in 6 months or 10 pounds in 1 year.
- You can choose any combination of type of activity at the length of time specified from the following table to burn approximately 150 calories:

| Examples of moderate amounts of physical activity | | |
|---|---|-------------------------------------|
| Common Chores | Sporting Activities | Less Vigorous, More Time |
| Washing and waxing a car for 45-60 minutes | Playing volleyball for 45-60 minutes | |
| Washing windows or floors for 45-60 minutes | Playing touch football for 45 minutes | |
| Gardening for 30-45 minutes | Walking 1¼ miles in 35 minutes (20min/mile) | |
| Wheeling self in wheelchair 30-40 minutes | Basketball (shooting baskets) 30 minutes | |
| Pushing a stroller 1½ miles in 30 minutes | Bicycling 5 miles in 30 minutes | |
| Raking leaves for 30 minutes | Dancing fast (social) for 30 minutes | |
| Walking 2 miles in 30 minutes (15min/mile) | Water aerobics for 30 minutes | |
| Shoveling snow for 15 minutes | Swimming laps for 20 minutes | |
| Stairwalking for 15 minutes | Basketball (playing game) for 15-20 minutes | |
| | Bicycling 4 miles in 15 minutes | |
| | Jumping rope for 15 minutes | |

not available for these risk factors, but their presence heightens the need for weight reduction in obese persons.

- Patient Motivation.** When assessing the patient's motivation to enter weight loss therapy, the following factors should be evaluated: reasons and motivation for weight reduction; previous history of successful and unsuccessful weight loss attempts; family, friends, and work-site support; the patient's understanding of the causes of obesity and how obesity contributes to several diseases; attitude toward physical activity; capacity to engage in physical activity; time availability for weight loss intervention; and financial considerations. In addition to considering these issues, the health care practitioner needs to heighten a patient's motivation for weight loss and prepare the patient for treatment. This can be done by enumerating the dangers accompany-

ing persistent obesity and by describing the strategy for clinically assisted weight reduction. Reviewing the patients' past attempts at weight loss and explaining how the new treatment plan will be different can encourage patients and provide hope for successful weight loss.

Evaluation and Treatment: The general goals of weight loss and management are: (1) at a minimum, to prevent further weight gain; (2) to reduce body weight; and (3) to maintain a lower body weight over the long term. The overall strategy for the evaluation and treatment of overweight and obese patients is presented in the Treatment Algorithm on the next page. This algorithm applies only to the assessment for overweight and obesity and subsequent decisions based on that assessment. It does not include any initial overall assessment for cardiovascular risk factors or diseases that are indicated.

| CLASSIFICATION OF OVERWEIGHT AND OBESITY BY BMI, WAIST CIRCUMFERENCE AND ASSOCIATED DISEASE RISKS | | | | |
|---|--------------------------|---------------|---|---|
| | BMI (kg/m ²) | Obesity Class | Disease Risk* Relative to Normal Weight and Waist Circumference | |
| | | | Men ≤ 102 cm (≤ 40 in) Women ≤ 88 cm (≤ 35 in) | > 102 cm (> 40 in) > 88 cm (> 35 in) |
| Underweight | <18.5 | | — | — |
| Normal [†] | 18.5 - 24.9 | | — | — |
| Overweight | 25.0 - 29.9 | | Increased | High |
| Obesity | 30.0 - 34.9 | I | High | Very High |
| | 35.0 - 39.9 | II | Very High | Very High |
| Extreme Obesity | ≥40 | III | Extremely High | Extremely High |

* Disease risk for type 2 diabetes, hypertension, and CVD.

† Increased waist circumference can also be a marker for increased risk even in persons of normal weight.

Table ES-4

Obesity and overweight matters in primary care

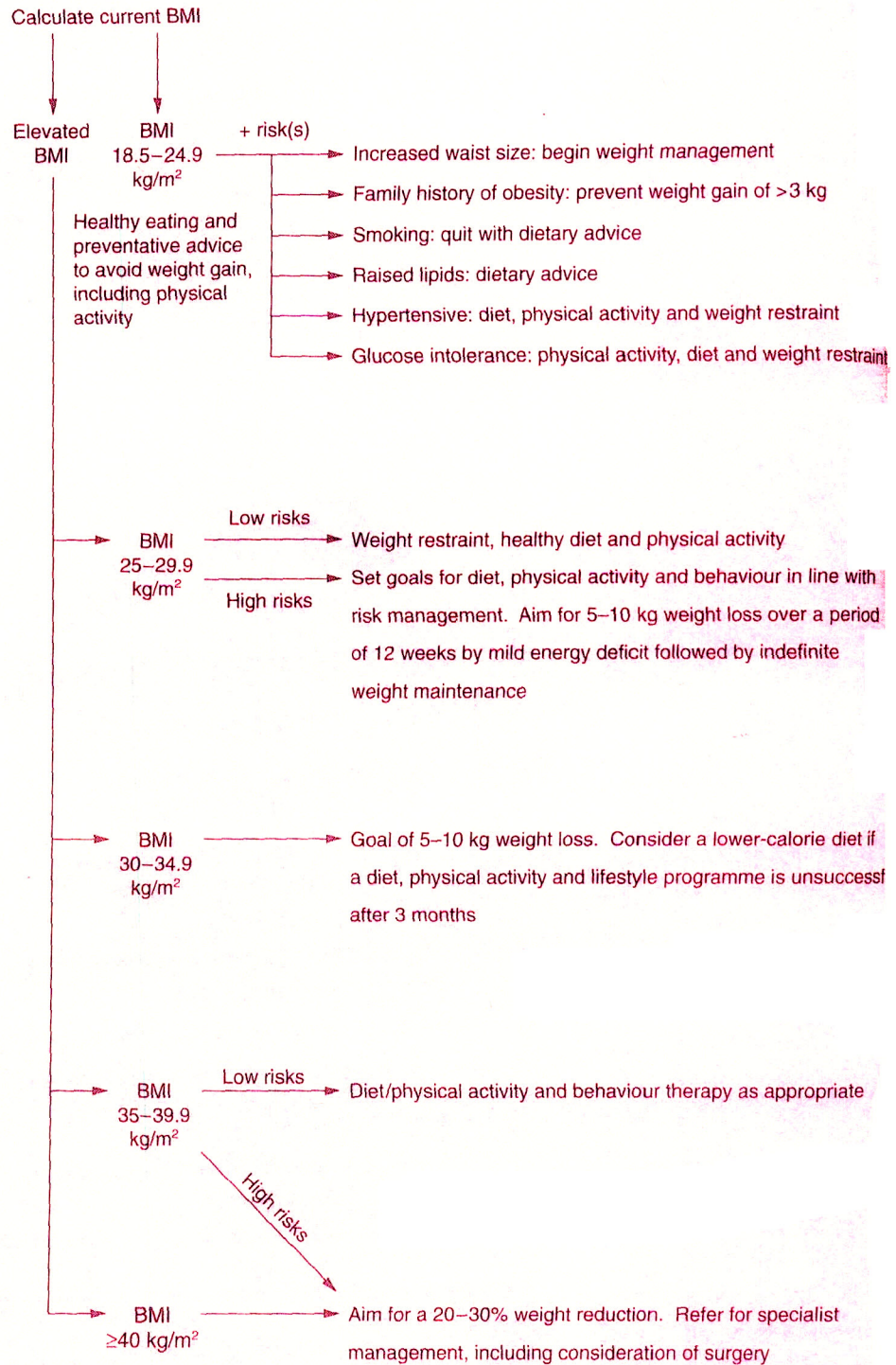


Figure 4.2: Example 1: weight management in adults (adapted from SIGN³).



SIGN



Integrating Prevention and Management of Overweight and Obesity

A Quick Reference Guide

Derived from the National Clinical Guideline recommended for use in Scotland by the Scottish Intercollegiate Guidelines Network

A B C refers to grade of recommendation

OVERWEIGHT/OBESITY

A major unrecognised health problem affecting 40% of adults in Scotland

Risk Factors

- ❖ Family history with genetic propensity
- ❖ Age-related sedentary lifestyle
- ❖ High fat, energy dense diet
- ❖ Excess alcohol

Primary Health Care/Community/Commercial Management **C**

- ❖ Establish routine assessment based on BMI and waist measurement for **B**
- ❖ Assess risk factors **B**
- ❖ Establish system to evaluate success in both prevention and management **C**

Consequences of Weight Gain

Morbidity:

- ❖ Diabetes and glucose intolerance
- ❖ Hypertension, stroke
- ❖ Hyperlipidaemia, low HDL cholesterol
- ❖ Coronary heart disease
- ❖ Hernia, gallbladder disease
- ❖ Cancers: postmenopausal breast, endometrial, ovarian, large bowel
- ❖ Breathlessness, sleep apnoea
- ❖ Menstrual disturbances/hirsutism
- ❖ Pregnancy complications
- ❖ Back/arthritis pain
- ❖ Skin disorders, varicose veins

Social:

- ❖ Psychological stress
- ❖ Enhanced risk of disability
- ❖ Employment handicap

Drugs and other Factors Promoting Weight Gain

- ❖ Tricyclic antidepressants
- ❖ Sulphonylureas for diabetes
- ❖ Corticosteroids
- ❖ Contraceptives
- ❖ Pregnancy
- ❖ Smoking cessation
- ❖ Immobility from injury
- ❖ Endocrine factors (rare)

WEIGHT MANAGEMENT **C**

A concept for reducing the incidence and/or complications of weight gain (>5 kg) in adult life

Benefits of 10kg weight loss

Mortality:

- ❖ Fall of >20% total mortality
- ❖ Fall of >30% diabetes-related deaths
- ❖ Fall of >40% obesity-related cancer deaths

Blood pressure:

- ❖ Fall of 10mmHg systolic
- ❖ Fall of 20mmHg diastolic

Diabetes:

- ❖ Fall of 50% in fasting glucose

Lipids:

- ❖ Fall of 10% total cholesterol
- ❖ Fall of 15% LDL
- ❖ Fall of 30% triglycerides
- ❖ Rise of 8% HDL

The goal is long term weight maintenance **C**

Additional copies of this Quick Reference Guide and the full guideline are available from

SIGN Secretariat, 9 Queen Street, Edinburgh, EH2 1JQ

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Scottish Intercollegiate Guidelines Network (SIGN)