



**NutriScene**  
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# Overweight, obesity and cancer

You can reduce your risk of cancer by maintaining a healthy body weight.

As a result of years of research into the topic, there is now general consensus among scientists, health professionals, and policy-makers that there is a close association between food, nutrition, physical activity, body composition, and the risk of cancer. It is now clear that cancer is, in large part, a preventable disease.

The World Cancer Research Fund (WCRF) expert report on: *Food, Nutrition, Physical Activity and the Prevention of Cancer*, released in November 2007, presents the evidence for this link and provides detailed recommendations for the prevention of cancers.

In the *NutriScene* write up of September 14, I had summarised all the eight general recommendations and two special recommendations of the WCRF report.

In this instalment, I will look at the first recommendation: be as lean as possible within the normal range of body weight. The report discusses the evidence of being overweight or obese and increased risk to some cancers. Various specific recommendations were made in relation to reducing body fatness.

The report highlights that maintenance of a healthy weight throughout life is one of the most important ways to protect against cancer.

## The evidence

You are aware that cancers can be caused by various toxic chemicals in foods and drinks. You have heard that consuming too much of certain foods increases the risk to certain cancers. It is less well known that overweight and obesity can increase the risk to cancers.

The evidence linking overweight, obesity and cancer is now even stronger than it was in the mid-1990s. There is now convincing evidence that excess body fat increases the risk of the following cancers: colorectal (bowel), oesophagus, pancreas, kidney, endometrium (womb) and breast (in postmenopausal women). Being overweight or obese probably also increases the risk of gallbladder cancer. There is limited evidence suggesting that greater body fatness is a cause of liver cancer.

It is not just the increase in body weight that increases risk to cancers. We also know that where we store extra weight affects cancer risk. Scientists have discovered that carrying excess fat around our waists can be particularly harmful. This is strongly linked to colorectal (bowel) cancer and probably to cancers of the pancreas and endometrium (womb), as well as breast cancer (in postmenopausal women).

There could be several reasons for this link between overweight, obesity and cancer. One example is the relationship between excess fat and the hormonal balance in the body. Research has shown that fat cells release hormones such as oestrogen, which increases the risk of cancers such as breast cancer.

While the exact mechanism for this cause of cancers is unclear, it is however certain that taking steps to avoid becoming overweight or obese is one of the most important things we can do to reduce our can-



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cer risk.

## WCRF recommendations

The recommendation of WCRF is therefore to be as lean as possible within the normal range of body weight.

The public health goals, which are for populations and are therefore principally for health professionals, are:

- Median adult body mass index (BMI) to be between 21 and 23, depending on the normal range for different populations.
- The proportion of the population that is overweight or obese to be no more than the current level, or preferably lower, in 10 years.
- The personal recommendations, for people as communities, families, and individuals are:
  - Ensure that body weight through childhood and adolescent growth projects towards the lower end of the normal BMI range at age 21.
  - Maintain body weight within the normal range from age 21.
  - Avoid weight gain and increases in waist circumference throughout adulthood.

## What is healthy body weight

One of the easiest ways to check if you're in a healthy weight is by measuring your Body Mass Index (BMI), which calculates the range of healthy weights for different heights and is a useful guide for most adults. Follow the simple procedures below:

1. Convert your weight into kilograms (kg) and your height into metres (m).
2. Divide your weight by your height squared. This figure is your BMI.

You might have read from some other guidelines that recommend a different cut-off for overweight and obesity. Indeed, the WCRF guide has indicated that healthy BMI for men and women in Asia is between 18.5-22.9. Hence in the public health goal above, BMI was targeted at

between 21 and 23.

Malaysian dietary guidelines continue to use BMI of between 18.5 to 24.9 as the desirable weight range. This is also the World Health Organisation recommended range. It is not necessary to be overly hung up on cut-offs. What is important is to bear in mind the recommendation of WCRF to be as lean as possible within the normal range of body weight.

For cancer prevention, it is important to remember that we should aim for the lower end of this range.

We have noted earlier that where the extra weight is laid down is important. We know that having excess fat around the waist is especially harmful. It is therefore useful to measure waist circumference as an approximate indicator of abdominal fat mass. It is a convenient and simple measurement that can be done using a tape measure.

As a guide, a healthy waist measurement is less than 80 cm (32 inches) for women and less than 90 cm (35 inches) for men. Remember that the measurement should be taken after breathing out!

## Tips for maintaining healthy body weight

In most cases, overweight or obesity results from excessive intake of calories and lack of physical activity. You can lose weight by increasing your activity and reducing your food intake. In general, aim to lose no more than 0.5 to 1 kg per week.

The WCRF recommendations have provided several useful tips for maintaining ideal body weight. The Malaysian dietary guidelines have also provided several similar tips. I do believe these are doable things; we just have to tune our mind towards believing in them and actually doing them.

- Lead a more active life; sneak in some exercises in your daily routine.
- At work, do desk exercises or walk to your colleague's work station instead of talking on the phone.
- Take the stairs instead of the

elevator or escalator.

- Walk instead of driving for short distances.
- If you drive, park further away from your destination and walk.
- Wash your car yourself, clean your house briskly, do gardening/farming or mow your lawn.
- Exercise at least three times per week for 20-30 minutes each time.
- Go jogging, swimming, cycling or do brisk walking.
- Take up recreational sports.
- Play golf (minus the buggy).
- Eat less high-fat, high-calorie foods and snacks.
- Avoid overeating, nibbling and eating at irregular times.
- Keep an eye on portion sizes as controlling the amount you eat is one of the best ways to maintain a healthy weight.
- Avoid weight-loss diets that severely restrict calories and other nutrients.
- Trying to lose weight with self-induced vomiting and the use of laxatives or diuretics can be dangerous.

## Overweight and obesity in Malaysia

There is sufficient data to show that the overweight and obesity rates in Malaysia have been on the rise. The nationwide Third National Health and Morbidity Survey (NHMS III) conducted in 2006 showed that 29.1% of the 33,055 adult population studied was found to be overweight (BMI 25.0-29.9). The prevalence of obesity (BMI >30) was reported to be 14.0%.

This rate of occurrence of overweight and obesity is much higher than the rates found in the Second National Health and Morbidity Survey (NHMS II) carried out in 1996. Overweight in NHMS II was 16.6% while obesity was 4.4%. In other words, the current prevalence of overweight is at least 1.8 times higher than that 10 years ago. Furthermore, the rate of obesity is now 3.2 times higher than that a decade ago.

NHMS III also included children below 18 years in the survey. The prevalence of overweight among 22,032 children measured was 5.4%. There was a slightly higher prevalence of overweight among boys (6.0%) compared with girls (4.7%). The proportion of overweight children in urban areas (6.3%) was higher than that observed for rural areas (4.0%). NHMS II in 1996 did not include children in that survey.

## Take action today

Recognising the high rate of overweight and obesity in this country, firm public health actions should be continued to arrest this increase. I refer again to the strategies and activities outlined in the National Plan of Action for Nutrition (NPAN) of Malaysia. It is the responsibility of all to take firm action, today.

Obesity is a chronic disease that creeps slowly into individuals, into the community. You should be aware that overweight and obesity increases your risk to coronary heart disease, stroke, diabetes and high blood pressure.

It also aggravates arthritis and breathing problems. It is probably less well known that overweight and obesity also causes certain cancers.

Now, the evidence is clear. Now you know that overweight and obesity can also increase risk to certain cancers. There is no doubt that maintaining a healthy weight is one of the most important things you can do to reduce your risk of cancer.

It is time that every Malaysian should know his body weight. He should monitor this weight regularly and take steps to maintain it within the desirable range. This should be done while he is still young. What is required is determination and discipline.

The full WCRF report can be obtained from the World Cancer Research Fund International website: [www.dietandcancerreport.org/](http://www.dietandcancerreport.org/). The Malaysian dietary guidelines on maintaining healthy body weight is available from the Nutrition Society of Malaysia website: [www.nutri-web.org.my](http://www.nutri-web.org.my).

■ *NutriScene* is a fortnightly column by Dr Tee E Siong, who pens his thoughts as a nutritionist with over 30 years of experience in the research and public health arena. For further information, e-mail [starhealth@thestar.com.my](mailto:starhealth@thestar.com.my). The information provided is for educational and communication purposes only and it should not be construed as personal medical advice. Information published in this article is not intended to replace, supplant or augment a consultation with a health professional regarding the reader's own medical care. The Star does not give any warranty on accuracy, completeness, functionality, usefulness or other assurances as to the content appearing in this column. The Star disclaims all responsibility for any losses, damage to property or personal injury suffered directly or indirectly from reliance on such information.