Avoiding dementia

There are preventive measures you can take to keep dementia at bay.

IN 1957, the average Malaysian could expect to live a few years beyond retirement and reach the average age of 55.8 years for men and 58.2 years for women. Today, life expectancy is 71.1 years and 76.7 years respectively.

Sadly, advancing age is accompanied by the risk of dementia, which is defined as the loss of memory and mental faculties. The two major causes of dementia are Alzheimer's disease and vascular dementia (loss of brain function due to artery blockage).

With increasing life expectancy, it is feared there may be a pandemic of dementia, with predicted increases of 100% in developed countries between 2001 and 2020, and of 300% in China, India, and neighbouring South Asian and Western Pacific countries.

Can we ensure that this decade-plus increment in years is full of life, and not robbed of meaning by dementia? Is dementia an inevitable accompaniment of ageing?

The good news, as stated in a 2010 British Medical Journal (BMJ) report is NO, according to a seven-year prospective study conducted in the south of France (emigrate there, anyone?).

From the research model constructed, taking action in just four domains could result in almost 40% reduction in cases of dementia.

These measures are realistic goals to target: eradicating diabetes and depression, prolonging education, and eating more fruit and vegetables.

The following are risk factors for dementia, which you can take steps to control:

1. Head injury

   Loss of brain cells through injury reduces brain reserve and hastens dementia. This occurs to boxers, who are at risk of the punch-drunk syndrome.

2. Alcohol consumption

   Moderate amounts of alcohol (one drink a day for women and two for men) especially red wine, have a protective effect. However, excessive amounts of alcohol increase the risk of dementia. Furthermore, bouts of inebriation could lead to head injury through falls and accidents.

3. Atherosclerosis

   Clogging of the arteries interferes with blood flow to the brain. Repeated small strokes is believed to be the cause of vascular dementia. It is also speculated that there is a possible link between atherosclerosis and Alzheimer's disease.

4. High blood pressure

   Uncontrolled blood pressure can lead to Binswanger's disease, a subcortical form of vascular dementia.

5. Cholesterol

   Elevated low-density lipoprotein (LDL) cholesterol, the bad cholesterol, is implicated in vascular dementia.

6. Depression

   Some studies have found a link between late-life depression, especially in men, and Alzheimer's disease.

7. Diabetes

   Type 2 diabetes is associated with the risk of developing both Alzheimer's disease and vascular dementia.

8. High oestrogen levels

   The Women's Health Initiative Memory Study found that use of oestrogen plus progestin doubled the risk of developing dementia among post-menopausal women.

9. Homocysteine

   Elevated blood levels of homocysteine, an amino acid involved in the vitamin B pathway, may increase risk of developing Alzheimer's disease and vascular dementia. Treatment is the appropriate vitamin supplements.
10. Smoking
Smoking leads to atherosclerosis, and hence, affects blood flow to the brain.

11. Substance abuse
All drugs of abuse have the potential to harm the brain and cause permanent loss of mental function.

12. Environmental toxins
Chemicals in our environment, both organic and metallic toxins, are potential causes of brain damage. Quite a few dementing illnesses begin with loss of smell, leading to speculation that some environmental toxin(s) might be making its way up the nose passages to the brain.

What positive steps can you take to avoid dementia?

Do consume more of these foods:

1. Fruits and vegetables
In the BMJ study mentioned earlier, these are good for warding off dementia. The benefits are derived from fibre, vitamins, and antioxidants such as resveratrol. Resveratrol is found in grapes, various berries, peanuts and Japanese knotweed (in the form of extracts in supplements), and of course, red wine.

2. Fish
Omega-3 fatty acids are essential fatty acids, which are abundant in oily fish, game and vegetables. In our modern diet, they have been largely replaced by the omega-6 fatty acids of cereal oils. Primitive peoples probably had a favourable ratio of omega-6 to omega-3 fatty acids of 1:1. This changed to 15:1 in the typical Western diet, contributing to diseases of ageing.

Higher omega-3 fatty acid consumption (omega-6 to omega-3 ratio of 3:1) would lower the risk of degenerative diseases.

3. Tea both green and black varieties
Flavonoids have aroused considerable interest for their antioxidant properties. There is a high content of flavonoids in beverages such as tea, coffee, beer, and wine. It is also found in fruits and vegetables.

Other ways to ward off dementia:

1. Stay lean, avoid processed food
The Okinawa Centenarian Study found that the long and healthy lives of these people (#1 world ranking in longevity) is attributable to a diet, which is low in calories, almost sugar-free, and practically devoid of processed or canned food.

Second, studies of primitive cultures with high longevity showed their diets to be low in fat and devoid of animal fats, processed foods, sugar, preservatives, artificial flavours, and other chemicals.

2. A healthy mind in a healthy body
In addition to enhancing heart and lung function, physical activity can help prevent dementia. Exercise induces the release of brain-derived neurotrophic factor (BDNF) which is involved in nerve survival, as well as learning and memory.

In addition, it results in reduced accumulation of harmful proteins such as beta-amyloid, which forms the destructive plaques in the brains of people with Alzheimer’s disease.

3. Be stress-free
Stress induces the release of stress hormones, which elevate blood sugar and blood pressure, and promote accumulation of fats. Not to mention, anxiety and depression are not far off.

4. Lifelong education
Similar to muscle, as far as the brain is concerned, it is use it or lose it. We can continue to learn right up to advanced old age, especially if it has been a lifelong practice. Take up a hobby, sign up for classes; indeed, take up a study course!

5. Stay engaged with life
Rewarding emotional relationships and meaningful contributions to family and society will prevent feelings of isolation, low esteem and loss of significance, as well as ward off depression.

Finally, should you take any supplements? The jury is out as to whether any of the currently available drugs or supplements have the ability to prevent or delay dementia.
Nonetheless, this condition is at the top of the research agenda for health agencies worldwide. There is hope that such concerted efforts will shed light on prevention and treatment in the not-too-distant future.

In conclusion, while the incidence of dementia does increase with age, there are certainly things we can do to decrease the risk. These include leading an active life, making the right lifestyle choices and avoiding the risk factors stated above.

This article is contributed by The Star Health & Ageing Panel, which comprises a group of panellists who are not just opinion leaders in their respective fields of medical expertise, but have wide experience in medical health education for the public. The members of the panel include: Datuk Prof Dr Tan Hui Meng, consultant urologist; Dr Yap Piang Kian, consultant endocrinologist; Datuk Dr Achari Rosman, consultant cardiologist; A/Prof Dr Philip Poi, consultant geriatrician; Dr Hew Fen Lee, consultant endocrinologist; Prof Dr Low Wah Yen, psychologist; Datuk Dr Nor Ashikin Mokhtar, consultant obstetrician and gynaecologist; Dr Lee Moon Keen, consultant neurologist; Dr Ting Hoon Chin, consultant dermatologist; Prof Khoo Ee Ming, primary care physician; Dr Ng Sook Chin, consultant haematologist. For more information, e-mail starhealth@thestar.com.my. The Star Health & Ageing Advisory Panel provides this information 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 Health & Ageing Advisory Panel disclaims any and all liability for injury or other damages that could result from use of the information obtained from this article.