

## Welcome

Welcome to the Spring edition of *Nutrition News*.

More and more, people are looking to nature for health fixes. Our cover article explores the health benefits of *Herbs and Spices*, and the research behind the hype.

Like it or not, we are all ageing! The good news is that lifestyle interventions can help slow the ageing process. Our feature article looks at physical changes that occur with age, and identifies the best foods to help keep us fit and healthy.

Check out *Nutrition Watch* which discusses the latest on food additives and childhood behaviour.

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## Herbs and Spices

Herbs and spices have long been used as foods, medicines and beauty aids. They contain a complex cocktail of chemicals which can help ward off common illnesses and diseases. Despite having a centuries-old reputation as natural healers, scientists are only just beginning to understand the health benefits of herbs and spices.

### Health benefits

Scientific evidence suggests that herbs and spices may play a role in the prevention and management of conditions such as cardiovascular disease, cancer and diabetes. Although more research is needed to confirm their role, results so far are promising.

### Cardiovascular disease

Aside from warding off vampires, garlic may also be a deterrent for cardiovascular disease! Studies have shown that eating between a clove of garlic a day may reduce cholesterol levels by as much as 9%<sup>(1,2)</sup>. Garlic is also thought to have positive effects on blood pressure and blood flow. Be aware that tablet forms and extracts of garlic have far less cholesterol-reducing power than fresh garlic and garlic oil, probably because of the processing effects.

### Cancer

Animal studies suggest that herbs and spices may also play a role in cancer prevention. It is thought that antioxidants found in herbs such as turmeric, basil, rosemary, mint and lemongrass may provide protection against the development of cancer. However, studies using human subjects are required before these findings can be confirmed.

### Mental health and memory

In Chinese and Indian culture, herbs have long been used to treat psychological conditions such as anxiety, and to increase memory and attention. These practices have become increasingly popular in Western countries, however, very little research has been done to test these beliefs.

Valerian flower extract has been shown to have calming effects, and ginseng and ginkgo bilboa are thought to improve memory. More studies need to be done to determine if these herbs can assist in the treatment of serious conditions such as Alzheimer's disease.

### Type II diabetes

Results from early studies suggest that cinnamon, cloves, bay leaves and turmeric may assist in the control of type II diabetes by boosting insulin activity. Later studies failed to confirm these findings, so more research is needed before we can be sure of their benefits.

### Arthritis and inflammation

Studies have shown that eating ginger reduces inflammation, and that inflammatory diseases such

as arthritis are less common in countries where ginger is eaten regularly. A dose of between 0.5g-1g of ginger extract has been shown to reduce knee pain in people suffering arthritis<sup>(3,4)</sup>, and to reduce the need for anti-inflammatory drugs. Turmeric also has anti-inflammatory properties.

### Using herbs and spices

In addition to their health benefits, herbs and spices also provide fantastic flavour! They can be used to replace less desirable ingredients in meals such as salt, fat and sugar. Be adventurous, and try using herbs in soups, breads, mustards, marinades, sauces, salads, stocks, drinks and desserts, as well as in your main meals.

Keep in mind that it is best to add fresh herbs towards the end of cooking or just before serving, as excess heat destroys their delicate flavours.

Dried herbs are more strongly flavoured than fresh, and can be added at any time during cooking. As a general rule, one teaspoon of dried herbs equals four teaspoons of fresh.

### References:

1. Gore JM, Dalen JE. *JAMA* 1994; 271: 1660-1661.
2. Warshafsky et, al. *Ann Intern Med* 1993; 119: 599-605.
3. Sohail M., et al. *Phytother Res* 2005; 19: 365-368.
4. Grzanna R, et, al.. *J Med Food* 2005; 8: 125-132.





# Healthy Eating - A recipe for Healthy Ageing

Australians are living longer than ever. In fact today a 65 year old male can expect to live to 82 and a female can expect to live to 86! With more people living well past their 80's, it's important that we keep fit and healthy to enjoy our longer lifespan.

## Why do we age?

Ageing is the natural wear and tear of the body's organs, tissues, and cells, leading to an inevitable decrease in the body's ability to respond to external stressors. Unfortunately, this can result in diseases such as arthritis, diabetes, hypertension, heart disease and osteoporosis. Not to mention the wrinkles, grey hair and loss of muscle tone!

The good news is that lifestyle interventions during late middle life (and later) can substantially reduce the impact of disease and even help slow the ageing process.

## What happens to our body as we age?

There are a number of physical changes we experience after middle age that affect our overall health and nutrition requirements. Understanding these changes can help us identify appropriate nutrition and lifestyle interventions.

## Body Composition

People tend to put on weight as they age - this is because the body slowly loses muscle. Muscle uses a lot of kilojoules, so a reduction in muscle causes our metabolism to slow down - which means we burn less energy and store fat more easily. The way we store fat also changes - there is less fat under the skin and more in the abdominal area increasing the risk of diabetes, heart disease and high blood pressure.

To decrease the risk of developing these lifestyle related diseases, it is important to maintain a healthy weight. A reduction in metabolism means that we need to eat less energy (kilojoules), particularly if physical activity is restricted. However, requirements for protein, vitamins and minerals remain the same, so food choices need to be nutritionally dense, supplying a rich supply of nutrients in a small volume. See our *Tips for Maintaining a Healthy Weight*.

## Digestive System

Over time our digestive processes slow down and food takes more time to move through the intestine which can lead to constipation and bowel problems.

This can be corrected by increasing fibre through the consumption of whole-grain cereal foods, fruit and vegetables. Raw bran and excessive amounts of very high-fibre foods are not recommended as they may interfere with

the absorption of certain nutrients. To help food move easily through the intestinal tract it's also important to drink plenty of fluid, approximately eight glasses a day.

## Cardiovascular System

As we age arteries tend to clog due to excessive build up of fat and cholesterol known as plaque. These fatty plaque deposits inside the blood vessels cause it to narrow and can totally block blood vessels. When plaque builds up the heart

has to work harder to push blood through narrowed vessels causing an increase in blood pressure. Over time, the build up of plaque and increase in blood pressure can lead to heart attacks.

Fortunately, many of these changes to the heart and blood vessels are modifiable. For a healthy heart:

- Restrict saturated fat (animal fats) and trans fat intake. These fats have been shown to increase harmful cholesterol levels in your blood.
- Replace these fats with healthy fats, such as omega-3 from fish. Studies show that omega-3 may help to lower blood pressure and stop the buildup of plaque in arteries.
- Eat less salt. Most of us eat too much sodium, which has been shown to increase blood pressure.
- Eat more fibre from whole-grains, legumes, fruit and vegetables. Fibre, particularly soluble fibre, is thought to play a role in lowering cholesterol levels.
- Maintain or improve your weight. Excessive body weight increases the risk of heart disease

## Did you know?

**The world's oldest person, Jeanne Calment, lived to 122. She rode a bicycle to the age of 100!**

## Tips for Maintaining a Healthy Weight

- Eat a wide variety of food from all food groups.
- Have six small, frequent meals and snacks rather than three large meals a day.
- Select high-fibre foods like whole grain breads and cereals, legumes, vegetables and fruits. They can help fill you up and lower your risk for chronic diseases.
- Reduce your intake of foods that are high in fat and sugar. Make soft drinks, lollies and snack foods an occasional 'extra'.
- Try to balance an 'extra' food with extra exercise.
- Choose lean beef, turkey breast, fish or chicken with the skin removed to lower the fat in your meals.
- Choose low-fat or reduced-fat dairy products.
- Drink plenty of water.
- Try to stop eating once you've had enough.
- Include regular physical activity such as walking, swimming or gardening, to help maintain muscle tone.



## Bone Health

After about the age of 30 there is a steady loss of bone, and for women the loss accelerates after menopause. As the mineral content of bones decrease, bones become less dense and more fragile leading to osteoporosis.

It is estimated that osteoporosis affects one in two women and one in three men over the age of 60. In fact, every 8 minutes, someone is admitted to an Australian hospital with an osteoporosis related fracture.

Diet and exercise are the most modifiable lifestyle factors which can impact upon bone health. Foods rich in calcium, including dairy and fish with bones, play an integral role in bone strength. Vitamin D is needed for calcium metabolism and its deficiency in elderly people can lead to bone softening and distortion. There are very small amounts of vitamin D in some foods, however, this is usually not enough to maintain the levels your body needs. This vitamin can be made through the action of sunlight on the skin.

## Joint Health

Arthritis is a general term describing over 100 different conditions that cause pain, stiffness and inflammation in one or more joints. As the population ages, the number of people with arthritis is growing. Whilst there is no cure for arthritis, healthy lifestyle choices in relation to nutrition and exercise can reduce its impact.

Maintaining a healthy weight is most important in the prevention and treatment of arthritis. Being overweight adds stress to weight bearing joints, which become irritated and stressed. Physical activity (especially non-weight-bearing exercise such as swimming) is also important. Exercise improves muscle strength and maintains mobility.

Fish oils that contain omega-3 fatty acids may help reduce the inflammation associated with some sorts of arthritis. Omega-3s have been shown to reduce tenderness in joints, morning stiffness, and reliance on anti-inflammatory drugs in people with rheumatoid arthritis and osteoarthritis.



## Important Vitamin and Minerals for Ageing

Over time, our ability to absorb nutrients reduces. The pH of our stomach reduces which can lead to decreased absorption of vitamin B12, folate, calcium and vitamin D. Use of certain medications can also decrease the absorption of some nutrients such as iron.

### Calcium

The daily recommended amount of calcium for older men and women is 1000mg. This can be obtained from 3-4 serves of dairy foods. A serve is 250ml of low fat milk, 2 slices of cheese, 200g carton of yoghurt or 250ml custard. Soy milk with calcium added or fish with edible bones (eg salmon, sardines) also contain good levels.

### Vitamin D

Our body produces most of the vitamin D we need when direct sunlight hits our skin. Most people have adequate sun exposure by going about their day to day outdoor activities. However, as we age, our ability to produce the vitamin declines. To prevent deficiencies ensure you have about 30mins of sun exposure each day.

### Iron

Iron deficiency can lead to anaemia, which can produce appetite loss, tiredness and heart palpitations. Make sure that iron intakes are met by having red meat. Iron is also found in fortified cereals, dried fruit, pulses and green leafy vegetables, however it is in a form that is not easily absorbed by the body. Absorption is maximised by consuming vitamin C-rich foods at the same time, such as a glass of fruit juice or fresh fruit or vegetables.

### Zinc

Zinc is needed for a healthy immune system and to help with wound healing and maintenance of your taste buds. Rich sources include meat, seafood, poultry, legumes and whole-grain cereals.

### B vitamins

Vitamin B12 is important for the proper function of the nervous system and to assist the formation of red blood cells. In older age, the ability to absorb vitamin B12 decreases, so it is important to eat B12 rich foods. Vitamin B12 is found only in animal foods such as meat, eggs, seafood and dairy. If intake of these foods is low a supplement should be considered.

### Folate

Folate or folic acid is a member of the B group of vitamins and plays a role in making DNA and forming new cells. It is found in abundance in fruit and green, leafy vegetables,

## What's on?

### Prostate Cancer Awareness Month

1-30 September 2007

Prostate cancer is the most common cancer in men. Each year in Australia, over 13,500 cases of prostate cancer are diagnosed and more than 2,800 men die of prostate cancer—which is around the same number of women who die from breast cancer annually.

The chances of developing prostate cancer increases as men get older, rapidly increasing after 50 years of age, or if there is a family history of prostate cancer.

For more information about prostate cancer, please contact **The Cancer Council Helpline** on **13 11 20** (cost of a local call).

#### Useful websites

- ♦ [www.prostatehealth.org.au](http://www.prostatehealth.org.au)
- ♦ [www.prostate.org.au](http://www.prostate.org.au)

### National Nutrition Week

14-20 October 2007

Relax, prepare and enjoy healthy meals - fall in love with food.

It is time to value yourself and your health and start falling in love with food.

- ♥ Discover the pleasures of sharing a meal
- ♥ Enjoy fresh foods, cooked from scratch
- ♥ Explore new tastes - savour the flavours
- ♥ Choose a balance of foods that enhance wellbeing

For more information, visit

[www.nutritionaustralia.org](http://www.nutritionaustralia.org)

### Movember

1-30 November 2007

Movember the month formerly known as November is a charity event held during November each year.

At the start of Movember guys register with a clean shaven face. The Movember participants known as Mo Bros then have the remainder of the month to grow and groom their moustache and along the way raise as much money and awareness about male health issues as possible.

For more information, visit

[www.movember.com.au](http://www.movember.com.au)

## Spring into healthier eating - new food labels kit

A new education package on how to read food labels has been launched by the Parliamentary Secretary to the Minister for Health and Ageing, Senator Brett Mason.

"Food Standards Australia New Zealand (FSANZ) has developed this innovative education package that is ideal for consumers, schools, universities and health professionals to use," he said. "It includes a seminar on FSANZ's web site about how to read food labels. You can view this seminar on your computer any time and over any period as it will even remember where you left off viewing. An [interactive section](#) on the FSANZ web site explains what food labels mean. A [pocket guide](#) to take shopping and a full [colour poster](#) are also available.

"You can learn about the nutritional content of food by reading the nutrition information panel and also how to interpret that for healthier eating. You can also find out the difference between 'best before' and 'use by dates', how food recalls are carried out and how to identify life saving allergen information from ingredients lists."

The understanding food labels educational package is available on the FSANZ web site at [www.foodstandards.gov.au](http://www.foodstandards.gov.au). Hard copies of the posters and shopping pocket guide are available by e-mailing [infor@foodstandards.gov.au](mailto:infor@foodstandards.gov.au)

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## Effects of food additives on children's behaviour

Food Standards Australia New Zealand (FSANZ) is examining new research into the possible effects of artificial food colours and an additive on children's behaviours which was published on 6 September, 2007 in the medical journal *The Lancet* online.

The findings from Southampton University researchers in England suggests that mixtures of food colours and sodium benzoate preservative in the diet are associated with increased hyperactivity (over-activity, inattention and impulsivity) in 3 year-old and 8 to 9 year old children.

The study tested combinations of artificial colours and a preservative most likely to be found in foods popular with children such as soft drinks, confectionery, and ice cream. Sunset yellow (122), Quinoline yellow (104), Carmoisine (122), Allura red (129), Tartrazine (102) and Ponceau 4R (124) were the colours used in the study on children. The preservative sodium benzoate (211) was also included.

It is very important that people do not self-diagnose intolerances to food additives and instead seek advice from their doctor on what they should avoid.

