

# The New Generation

## Successful Ageing

a **DSM** Product

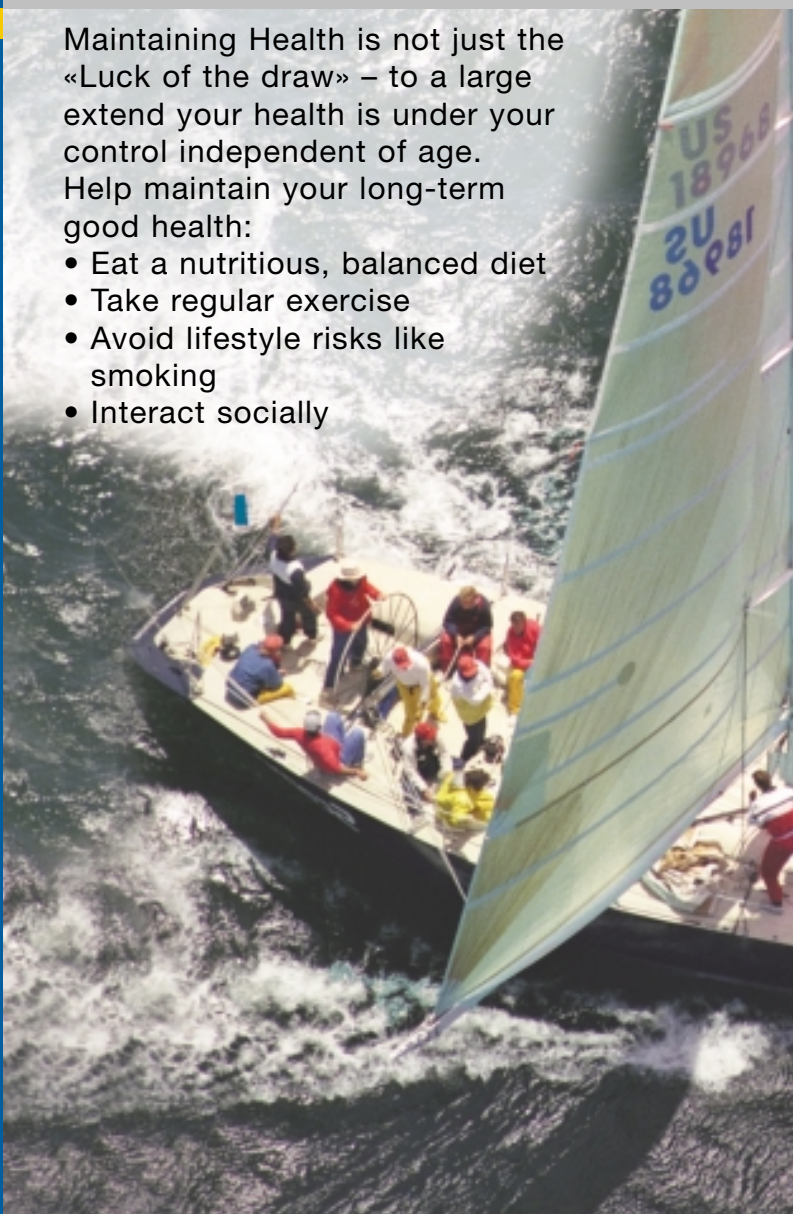


DSM Nutritional Products

Unlimited. **DSM**

Maintaining Health is not just the «Luck of the draw» – to a large extent your health is under your control independent of age. Help maintain your long-term good health:

- Eat a nutritious, balanced diet
- Take regular exercise
- Avoid lifestyle risks like smoking
- Interact socially



## Your vitamin choice guide

VITAMIN	HEALTH FUNCTION	BENEFICIAL LEVEL (according to recent science)
A	Vision, eye health, skin and surface tissues, immune system	800 µg/d
B <sub>1</sub>	Energy release, Nervous system	1.5 – 3.0 mg/d
B <sub>2</sub>		1.5 – 3.0 mg/d
Niacin		18 – 20 mg/d
Biotin		30 – 80 µg/d
Pantothenic Acid		5 – 10 mg/d
B <sub>6</sub>	Synergism in risk reduction for cardiovascular events and for impaired mental function	2 – 4 mg/d
B <sub>12</sub>		2 – 5 µg/d
Folic Acid		400 – 800 µg/d
C	Antioxidant	100 – 500 mg/d
E	Antioxidant	20 – 400 mg/d
Beta-carotene	Oxygen radical scavenger, membrane protection, provitamin A	2 – 4 mg/d
D	Bone health	400 – 600 IU/d
K <sub>1</sub>	Bone health, blood clotting	80 – 250 µg/d
Ca	Bone health	800 – 1200 mg/d
Mg	Bone health	300 – 400 mg/d
Omega-3 PUFA*	Triglyceride lowering effect helps regulate blood clotting, anti-arrhythmic effect	450 – 650 mg/d

\*Omega-3 Polyunsaturated fatty acids

# Good Nutrition and Activity for Life

Maintaining your good health throughout life

## Successful ageing

Getting enough vitamins and other essential nutrients is important for everyone. A healthy, balanced diet can play an important role in maintaining independence and the quality of life.

There are a number of reasons why some older people find it difficult to get the nutrients they need. From a purely functional point of view, our bodies find it more difficult to absorb certain nutrients as we get older. Since older people are less physically active, they require less energy. If they are unwell, have dental problems or difficulty preparing meals, they may also miss out on some vital nutrients.

It is therefore important to maintain an interest in food – perhaps by eating with friends and neighbours, or putting a few tempting treats on the menu. If less food is being eaten it is vital that dishes are chosen carefully to make sure they are rich in essential and beneficial nutrients. Fortified foods and supplements are a useful addition to the diet.

## Positive factors for long term health

- Keeping a healthy heart
- Keeping healthy bones
- Keeping healthy eyes
- Maintaining mental performance





## **Keeping a healthy heart**

A number of nutrients play a part in maintaining heart health. Most prominent are the antioxidants vitamin C and vitamin E, the B group vitamins, folic acid, vitamin B<sub>6</sub> and vitamin B<sub>12</sub> and Omega-3 PUFA.

The evidence for a protective effect is particularly strong for vitamin E. Scientists believe that antioxidants such as vitamin E help to neutralise the harmful effects of free radicals, aggressive molecules, which can overtime damage healthy cells.

Led by folic acid, the B vitamins may help maintain heart health by lowering increased levels of homocysteine in the blood. High homocysteine levels damage the lining of the blood vessels that supply the heart.

Omega-3 PUFA have been found to influence a number of factors that may influence the risk of heart disease. These include blood clotting, maintaining the balance of blood lipids such as reducing the level of triglycerides, blood pressure and irregular heartbeat.

## **Healthy bones**

Bone is a living tissue that is constantly being remodelled throughout life. As you get older, your bones lose minerals that can lead to thinning and sometimes to osteoporosis. Calcium is the nutrient most commonly associated with bone health and a regular supply of calcium is needed. Vitamin D is also essential as it helps the body to absorb the calcium it needs. Other vitamins such as vitamin K<sub>1</sub>, vitamin B<sub>6</sub> and vitamin C play a part in good bone health as do the minerals phosphorous and magnesium.



Vitamin D is found in a few foods but is mostly formed by the action of sunlight on the skin. Therefore, anyone who does not get outdoors regularly should try to eat more foods rich in vitamin D or consider taking a supplement. Along with a good intake of calcium-rich dairy foods, regular exercise is also essential for strong bones.

### **The eyes have it**

Two serious diseases of the eye – cataracts and macular degeneration – are unfortunately common among older adults. Studies have shown that the process of oxidation is involved in the development of both these conditions, which has led experts to investigate the possibility that anti-oxidant nutrients help to prevent or delay their onset.

Vitamin C and vitamin E along with carotenoids such as lutein appear to have protective effects.

### **Maintaining mental performance**

Impaired mental performance in old age has a high personal cost, both for the elderly people who are affected and for those who care for them. In addition, conditions such as Alzheimer's disease, dementia and age related cognitive impairment are emerging as major public health problems.

Many studies link the causes, and possible prevention, of a declining nervous system to the quality of nutrition. The antioxidant vitamins E and C are important and there is some evidence that vitamin E supplements might slow the progression of Alzheimer's disease.

High blood levels of the amino acid homocysteine have also been identified as a possible indicator of Alzheimer's disease risk. Further work is now being carried out to substantiate this link. Adequate intake of the B group vitamins, vitamin B<sub>12</sub>, folic acid and vitamin B<sub>6</sub>, maintain homocysteine levels at normal values.

The old wives' tale that fish was «brain food» may not have been so far from the truth. Scientists now tell us that Omega-3 PUFA, which are found in fish oil – are vital for normal brain function. This has led them to investigate the possibility that a Omega-3 PUFA in the diet may help maintain mental performance throughout life.



# Interested in this Vitality Concept?

Contact us for more information and project support!

We offer:

- Expertise and advice on the latest science
- Marketing data, consumer trends
- Concept development, product launch support
- Technical and product-form excellence
- Comprehensive regulatory support

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