



## Test

### How good is your vitamin intake?

The following test focuses exclusively on whether you consume micronutrients in the quantities recommended by nutrition experts.

If your response to all the questions is “yes” your intake is good. Answering one or more questions with “no” indicates possible weak spots in your diet with regard to micronutrients.

#### 1. Do you consume at least 5 portions of vegetables and fruit, equivalent to 400–800 g, per day?

Yes  No

The “5-a-day” campaign supported by numerous national nutrition organizations aims to reduce the risk of cancer by promoting consumption of vegetables and fruit. The campaign started on the initiative of the American Institute of Cancer Research in the USA and is based on the results of scientific research that found that the risk of developing various types of cancer is probably or possibly reduced by greater consumption of vegetables and fruit (1,2).

1. Steinmetz KA, Potter JD. Vegetables, Fruit, and Cancer. I. Epidemiology. Cancer Causes and Control. 1991; 2:325357.

2. World Cancer Research Fund/American Institute of Cancer Research: Food, nutrition and the prevention of cancer: a global perspective. Washington, DC, 1997.

#### 2. Do you eat fish once or twice a week to obtain adequate supplies of vitamin A, vitamin D, long-chain omega-3 fatty acids, iodine and selenium?

Yes  No

Whereas eel, tuna and mackerel are considered to be especially rich in vitamin A, herring, salmon and sardines are good suppliers of vitamin D. Tuna, mackerel and herring also contain plenty of iodine and selenium. Salmon, sardine, tuna and crustaceans are particularly rich in omega-3 fatty acids.

Worldwide, three quarters of commercially exploited stocks are already overfished or are in danger of becoming overfished. Only sustainable management of fish stocks can preserve this resource for the future. The World Wide Fund for Nature (WWF) therefore recommends not consuming seriously threatened species (e.g. wild-caught cod, halibut and monkfish (1).

1. www.wwf.org

### 3. Do you consume 300–600 g of meat and meat products per week to obtain sufficient B-vitamins and minerals?

Yes  No

Meat is the most important source of vitamins from the B-complex (vitamin B1, B6 and B12). It also contains minerals such as iron and zinc. However, fatty meat should be avoided. In many cases animal fat in diet is evaluated worse than fat from plant sources because it contains a high proportion of saturated fatty acids, a major risk factor for heart disease (1).

1. Hu FB, Willett WC. Optimal diets for prevention of coronary heart disease. JAMA. 2002; 288(20):2569–78.

### 4. Do you eat liver once a week to meet your vitamin A requirements?

Yes  No

Liver is one of the most important sources of vitamin A. Whereas previously warnings have been issued against the regular consumption of liver because of high levels of contaminants, these are no longer justified since levels of heavy metals in the environment today are much lower than before. Guideline limits are exceeded only seldom, and then only by small amounts (1). During pregnancy women are advised not to eat liver more than once a month and to avoid liver during the first trimester, because an excessive intake of vitamin A can harm the unborn child.

As a vitamin A precursor, beta-carotene guarantees the vitamin A intake of large parts of the population. As a consequence of national food consumption habits, almost 50 percent of the daily intake of vitamin A is met by beta-carotene (2).

1. Bundesforschungsanstalt für Ernährung und Lebensmittel, Institut für Chemie und Physik, Deutschland. ForschungsReport 2004.

2. Deutsche Gesellschaft für Ernährung, Österreichische Gesellschaft für Ernährung, Schweizerische Gesellschaft für Ernährungsforschung, Schweizerische Vereinigung für Ernährung: Referenzwerte für die Nährstoffzufuhr. Umschau/Braus; 2008.

### 5. Do you consume 3 portions of milk or dairy products a day to maintain your supply of calcium?

Yes  No

Three portions of milk or dairy products per day are recommended as part of a balanced diet. A glass of milk, a pot of yoghurt or a slice of cheese, for example, would be one portion. These amounts ensure an optimal intake of calcium. Calcium from mineral water is utilized by the body just as efficiently as calcium from milk. Calcium-rich mineral water can therefore be a very good source of this mineral (1).

1. Heaney R. Absorbability and utility of calcium in mineral waters. Am J Clin Nutr. 2006; 84:371–374. Braus; 2008.