About dairy, nutrition and health
"Throughout the different stages of life, the daily consumption of milk and dairy products contributes to the intake of valuable nutrients."
The FrieslandCampina Institute

Who

The FrieslandCampina Institute is the gateway to FrieslandCampina’s expertise on dairy, nutrition and health. The institute informs, inspires and engages scientists, nutritionists and healthcare professionals worldwide, by actively sharing its knowledge.

What

The FrieslandCampina Institute provides scientists and professionals with the most recent scientific knowledge and practical tools on a wide variety of nutrition and health topics, ranging from general health to the nutritional composition of milk and dairy products. This information focuses on dairy nutrition which contributes to a healthy life: from childhood nutrition to nutrients contributing to healthy aging.

Why

By sharing scientific expertise and working together with nutrition and health experts, the FrieslandCampina Institute aims to contribute to improving the nutritional status of people worldwide.

"The FrieslandCampina Institute shares knowledge and expertise on the nutritional properties of milk and dairy products, in order to improve the health and well-being of people worldwide."
FrieslandCampina benefits from an international staff of 560 research and development experts across continents, each committed to investigating the power of milk and dairy products. These experts encourage advanced research and innovations, by collaborating with internationally respected institutes of knowledge including universities and other organizations. This network produces new insights into the relation between milk or dairy products and nutrition and health, resulting in a broad global scientific community with access to the latest scientific insights.

Partners
The global presence of FrieslandCampina enables the Institute to be part of a large network of initiatives and organizations, which foster research and communication on the nutritional and health benefits of dairy products. In the Netherlands, FrieslandCampina works with prestigious institutes and universities including Wageningen University and Research centre, VU University Amsterdam, Maastricht University, University of Groningen and TI Food and Nutrition on important health issues such as obesity, diabetes, cardiovascular health and sustainable and affordable diets.

In other parts of the world FrieslandCampina focuses on childhood malnutrition, and cooperates with regional universities and institutes including Universiti Kebangsaan in Malaysia, Institute of Nutrition Mahidol University in Thailand, National Institute of Nutrition in Vietnam and Center for Applied Health Technology and Clinical Epidemiology (CAHT-CE) in Indonesia.

FrieslandCampina representatives are also active in science-based communication platforms on dairy consumption and health founded by national dairy associations and other dairy companies. Examples of these platforms include the International Dairy Federation (IDF), the European Dairy Association (EDA) and the Global Dairy Platform (GDP).
Scientific seminars and workshops

The FrieslandCampina Institute organizes workshops, seminars and conferences in order to discuss most recent science-based findings on dairy nutrition and health with professionals.

Mailings and e-newsletter

Mailings and newsletters summarize recent developments in nutritional science and the relevance of dairy products, provide columns on a variety of topics and give an overview of conferences in which the FrieslandCampina Institute participates.

Science-based information

The FrieslandCampina Institute aims at providing an independent scientific overview. To achieve this, the institute highlights scientific discussions, notifies new recommendations or opinions of health authorities, and invites experts to give their professional view, or review the standpoint of the Institute.
The Netherlands

For over ten years the FrieslandCampina Institute, located in the Netherlands, has been providing scientists, nutritionists, and medical and healthcare professionals with scientific information and practical tools.
In recent years FrieslandCampina Institute’s activities have become increasingly international, giving a global perspective. With the recently established Research and Development Centre in Singapore, the FrieslandCampina Institute extends its nutritional expertise network in Southeast Asia.
Many people strive for a long and healthy life. No matter where we live or how old we are, this requires a healthy lifestyle, with a balanced intake of a wide variety of nutrients. As milk is a natural source of nutrients, it can contribute to a healthy diet. Throughout all stages of life, two or three servings of milk per day provide us with many essential nutrients.
A healthy and nutrient-rich diet, together with plenty of physical activity is essential for the growth and development of children.
The first years of life are characterized by the rapid growth and development of our body and brain. These processes determine the energy, macronutrient and micronutrient requirements.

After the first year of life, the growth in weight and height is not as rapid as during the early months, but rates still remain very high. Toddlers become more physically active, and begin to walk and say simple words. At the same time, muscle mass further increases, bones lengthen, and the brain rapidly develops. It is crucial that nutritional requirements are met, so that the muscle, bone and brain tissue can develop optimally. Along with nutrition, physical activity from early childhood provides major health benefits. Physically active toddlers and preschool children show enhanced bone health, motor skills, cognition, and emotional and social development. Developing a physically active and less sedentary lifestyle in early childhood may therefore have sustained benefits later in life.

During adolescence, the life stage in which children grow into adulthood, lifestyle choices and nutritional patterns change. In puberty, adolescents explore their own boundaries, reject parental dietary choices and start making their own. This often results in an insufficient intake of fruit, vegetables and nutrient-rich foods such as milk, all of which are important for a healthy lifestyle.

Milk, the basis of all dairy products, provides children with essential nutrients such as protein, calcium, phosphorus, potassium, vitamin B2 (riboflavin) and vitamin B12. The FrieslandCampina Institute provides professionals in nutrition and health with the most recent research findings and information materials to help improve the dietary pattern of children worldwide, supporting optimal growth and development.
Insight in nutrition by SEANUTS

In 2009, FrieslandCampina commissioned the South East Asia Nutrition Survey (SEANUTS). This multi-center study included 16,744 children between the ages of six months and twelve years, in four countries, Malaysia, Indonesia, Thailand, and Vietnam.

SEANUTS resulted in a better understanding of the diet, health, dietary needs and general dietary patterns of children in Southeast Asia. The survey revealed that while overnutrition is a clear concern in Malaysia and Thailand, and an emerging problem in the urban areas of Vietnam and Indonesia, undernutrition still persists throughout Indonesia and in rural Vietnam. A strikingly high number of children showed vitamin D deficiency - irrespective of gender or country of residence - and borderline insufficient vitamin A levels were also common. Additionally, low intakes of other key nutrients were observed, including low calcium intakes.

FrieslandCampina seeks the best collaboration on both a local and international level. SEANUTS was undertaken with the help of renowned local contributors including the University Kebangsaan Malaysia (UKM), PERSAGI (Persautuan Ahli Gizi, Indonesia) with Mahidol University (Mahidol, Thailand) and with the National Institute of Nutrition (NIN) - Vien Dinh Duong in Vietnam.

The findings of the survey will help local governments and policy makers to develop and implement a scientifically grounded nutrition policy for children in Southeast Asia. FrieslandCampina will use the results of this study to provide tailor-made nutrition to meet the nutritional needs of children in this region.

The FrieslandCampina Institute creates awareness concerning the magnitude of the issues identified, using peer-reviewed publications about SEANUTS and symposiums to reach both national and international governments, key opinion leaders and health care professionals, with the aim to help them to improve the health status of the children now, and in the future.
In many regions throughout the world, milk and dairy products are recognized as important contributors in the intake of valuable nutrients, and can therefore contribute to people’s daily diets.
Dairy products can play an important role in a healthy and balanced diet, due to their wide variety and nutrient-rich composition.

During the adult years, nutritional focus shifts towards staying healthy and staying active. European research shows that special attention is needed to ensure sufficient intake of vitamin D, iron, selenium and potassium.

Dairy products can play an important role in a healthy and balanced diet, due to their wide variety and nutrient-rich composition. As such, the nutrients in dairy products contribute to keeping our bodies in optimal shape throughout adulthood.

The FrieslandCampina Institute is involved in several international partnerships focusing on healthy nutrition for adults, including a partnership with the European Federation of the Association of Dietitians (EFAD).

Information material from the FrieslandCampina Institute targeting adults, available for health care professionals, emphasize the importance of basic foods in dietary habits.

Peak bone mass
Until approximately the 30th year of life, the body builds bone mass. Milk is a natural source of nutrients required for normal bone development, including calcium, protein and phosphorus, all of which contribute to reaching optimal peak bone mass.

Staying healthy in adult years
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Micronutrients in milk
One glass of milk is a source of at least five vitamins and minerals, including calcium, phosphorus, potassium, vitamin B2 and vitamin B12. In some countries, FrieslandCampina milk and milk products also contain added vitamins such as vitamins A and D.
The role of milk in a healthy diet

All over the world, dietary guidelines recommend the consumption of dairy on a daily basis, as part of a healthy diet. From Europe and Asia through to Africa and the Americas, milk and dairy products are perceived as an important source of nutrients at all stages of life.

On average, the recommended daily intake of milk and dairy products is approximately two to three portions a day. Certain countries such as China, Turkey, the Netherlands and South Africa also advocate higher dairy intakes for specific target groups.

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Milk and milk products form an integral part of a healthy, balanced diet for all ages. Semi-skimmed milk delivers a significant amount of vitamins B2 and B12 and other nutrients, such as calcium, phosphorus and potassium. Milk can also be used as a carrier for added vitamins and minerals. The exact nutritional composition of milk differs around the world as a result of seasonal variations, the type and quality of animal feed and method of preservation (e.g. pasteurized, sterilized or powdered). But the key nutrients remain the same.

Lactose intolerance

Two-third of the world's population is lactose intolerant: they cannot digest lactose.

People with lactose intolerance are usually able to consume approximately 12 g of lactose, which is roughly equivalent to 250 ml milk. As semi-hard cheeses contain hardly any lactose, these are often well tolerated.

One glass of milk (200 ml) delivers approximately 30% of the recommended daily amount of calcium.
The key to healthy aging

A healthy diet and sufficient exercise are essential for staying healthy.
Milk is a source of protein and calcium. Protein contributes to the maintenance of muscle mass and normal bones. Calcium is needed for the maintenance of normal bones and contributes to normal muscle function.

Adequate nutrition and sufficient exercise are vital to healthy ageing. Nutritional guidelines for the elderly focus on adequate levels of micronutrients, fluids, energy and proteins to fulfill nutritional needs. In particular, special notice is paid to the risk of developing age-related diseases.

After the age of 60, many people have suboptimal micronutrient intakes, such as calcium and vitamin D. Even later in life there is a reasonable risk of undernutrition and insufficient hydration, both of which are often overlooked. As a result of protein-energy undernutrition, the body’s energy metabolism changes, shifting from the use of body fat as a primary source of energy to an increased use of protein from muscles. People who suffer from undernutrition therefore have higher energy and protein requirements.

A nutritious high-quality protein diet, in combination with exercise, is important for muscle mass preservation during aging. Healthy muscles, in combination with healthy bones, increase mobility and independence. Milk is a source of protein and calcium. Protein contributes to the maintenance of muscle mass and normal bones. Calcium is needed for the maintenance of normal bones and contributes to normal muscle function. Milk and dairy drinks also contribute to the fluid intake.

For FrieslandCampina Innovation and the FrieslandCampina Institute, healthy aging is one of the focus areas for scientific research, development and communication. In the Netherlands there is a close collaboration with specific partners including the Alliance Nutrition Gelderse Vallei and the Malnutrition Steering Group (Stuurgroep Ondervoeding). On the website of the Institute, medical and health care professionals can find information materials on healthy aging.

Vitamin D recommendations

In 2010, the Institute of Medicine published new recommendations for vitamin D intake. The recommended dietary allowance was set at 15 µg per day for people between the ages of 1-70, while the RDA for people over 70 was set at 20 µg per day.

Body mass and function

To help people over 65 years maintain and regain lean body mass and function, it is recommended to aim for an average daily intake of 1.0 to 1.2 g protein per kilogram of body weight.
Nutrients for strong bones

A proper nutrient supply is important for maintaining normal bones. In light of this, not only is calcium important, but also vitamin D, phosphorus, magnesium and protein.

The adequate intake of protein, vitamin D, calcium and phosphorus during the first 30 years of life is particularly crucial, as during this phase peak bone mass is reached, which largely determines bone health later in life. From the age of approximately 50, bone mass diminishes. At this stage of life, adequate nutrient intake is very important for bone maintenance. Milk provides a significant amount of protein, calcium and phosphorus. All of these nutrients are involved in the development and maintenance of bones.

Along with adequate nutrition, regular physical activity is an important factor in achieving and maintaining optimal bone and muscle mass. It appears that for people over 65, physical activity results in even better bone health maintenance as they age. Combining physical activity with the intake of milk protein appears to amplify the effect of physical activity on the maintenance, and even increases the muscle mass.

From birth until approximately the age of 30, bone formation exceeds bone mineral resorption, resulting in increased bone density and peak bone mass.

From the age of around 50, bone mass diminishes. The higher the peak bone mass, the stronger the bones will be later in life.
The FrieslandCampina Institute provides information and advice to professionals regarding nutrition, dairy products and health, based on the most recent scientific findings. This information is intended exclusively for professionals and not for consumers, clients or patients.

Disclaimer

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