

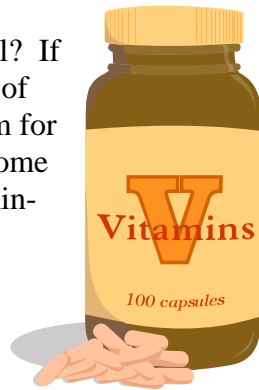
Nutrition Matters

Nutrition Services, York Region Health Services

Vitamin-mineral supplements... To take or not to take...

Do you pop a daily vitamin pill? If so, you're not alone. Millions of Canadians do and most of them for the wrong reasons. Here are some reasons why people take vitamin-mineral supplements:

- "Because I don't eat a well balanced diet, they are my nutritional insurance."
- "They protect my health while I'm dieting."
- "They give me energy."
- "They help with my stress."
- "They cure or prevent colds."
- "They prevent diseases such as heart disease and cancer."



Let's take a look at each of the reasons more closely. You may be in for a surprise!

1. Nutritional insurance

A well-balanced diet following **Eating Well with Canada's Food Guide*, not a vitamin pill, will give you and your family the best insurance that you are getting the nutrients you need. Instead of a pill, follow these guidelines daily:

- Choose whole grain and enriched breads, cereals, pasta and rice
- Eat at least one dark green and one orange vegetable each day
- Drink milk or fortified soy beverages or eat milk alternatives such as low-fat cheese and yogurt

- Enjoy protein-rich foods such as meat, fish, poultry, eggs, beans, chickpeas, lentils and nuts

If you do not eat foods from one or more of the four food groups on a daily basis, your intake of some nutrients may be low. If you are unsure that you are getting all of the nutrients needed for good health, speak to a registered dietitian.

2. Protect health while dieting

You cannot replace all the goodness of food with a pill. If you are following a low-calorie diet, you may not be getting enough of certain nutrients, such as iron and calcium. Get advice from a registered dietitian. You may need a multivitamin supplement. Careful menu planning is also necessary.

3. Gives energy

There are two proven energy boosters - a nutritious diet and regular physical activity. Energy comes from the calories in the food you eat. The vitamins in food help to change food into energy but they do not supply energy by themselves. Why not try a daily walk or bike-ride to re-energize while strengthening your heart, lungs and muscles?



4. Helps stress

Many people either over-eat or under-eat when they are under stress. If you are “stressed out”, pay close attention to what you eat. Eating well can help give you the power you need to cope with the stresses of daily living. Your body may need extra of certain vitamins and minerals during times of physical stress, such as surgery or during a severe infection. You don’t need extra vitamins when you are under emotional stress.

5. Cure or prevent colds

Scientists are studying the role of vitamins and minerals in the prevention and treatment of colds. Studies show that vitamin C and zinc do not prevent or cure the common cold. However, vitamin C and zinc may reduce how bad you feel and how long the cold lasts. Your best defence against the common cold is plenty of rest, healthy eating, physical activity and washing your hands.

6. Prevent diseases such as heart disease and cancer

Research has **not** shown that taking large doses of vitamins through supplements can prevent diseases such as cancer and heart disease.

Phytochemicals: A good reason to stick with food

Phytochemicals are plant chemicals found in vegetables and fruit. These chemicals provide health benefits such as lowering the risk for cancer and heart disease. Hundreds of phytochemicals have been discovered. For example, indoles and isothiocyanates are compounds formed in broccoli, brussels sprouts, and cauliflower when they are cooked or chewed.

These compounds may prevent the onset of cancer.

Some phytochemicals act as “antioxidants”. Antioxidants protect cells from the damaging process called oxidation. Oxidation may lead

to cancer or heart disease. Vitamins C and E, selenium and beta-carotene are antioxidants.

Studies suggest that supplements do not provide the same health benefits as food. It is still unknown whether it is one phytochemical or a combination of them that provide the health benefit. Research on phytochemicals is ongoing and many of these compounds remain to be discovered. To be sure you are getting the benefits of all the phytochemicals found in food, eat a variety of vegetables and fruit every day.



The benefits of phytochemicals can be achieved by eating a variety of vegetables and fruit each day, including those that are dark green and orange.

Who needs vitamin-mineral supplements?

Women in child-bearing years

- Women who have very heavy periods should see their doctor about their iron status
- All women who could become pregnant should take a multivitamin containing a minimum of 0.4 milligrams (mg) of folic acid every day to reduce their risk of having a baby with a neural tube defect (i.e. spina bifida). Eating a healthy, well-balanced diet including foods high in folate is also important



Pregnant and breastfeeding women

- All women who are pregnant or breastfeeding should take a multivitamin containing folic acid every day. Pregnant women should ensure that their multivitamin also contains iron



Children

- Breast-fed infants need vitamin D while being solely breast-fed
- If the drinking water where you live is low in fluoride, a fluoride supplement may be recommended. Ask your dentist

Vegetarians

- As there are many differences in the diets of vegetarians, vegetarians should speak to a dietitian to find out if a supplement is recommended
- Vegetarians require more iron and zinc than non-vegetarians do. The need for iron and zinc supplements should be discussed with your doctor
- If no animal foods including eggs or milk products are eaten, vitamin B₁₂, vitamin B₆, calcium and vitamin D supplements may be needed
- Breast-fed infants and children of strict vegetarian parents need foods fortified with vitamin B₁₂ or a B₁₂ supplement

Older adults

- For people over the age of 50, 1200 mg per day of calcium is recommended to reduce the risk of osteoporosis. It may be difficult to obtain this amount through food. If your requirements are not being met through your diet, a supplement may be needed. Ask your doctor.

- It is advised that people over the age of 50 take 400 International Units (IU) of vitamin D and that people over the age of 70 take 600 IU. A Vitamin D supplement may also be required for people who live in countries with colder climates, where there is little exposure to sunlight. Most standard multivitamins contain about 400 IU of vitamin D

Calcium and vitamin D requirements for older adults

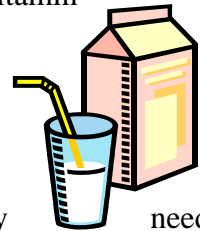
<u>Age</u>	<u>Calcium(mg)</u>	<u>Vit. D(IU)</u>
51-70	1200	400
>70	1200	600

Athletes

- Some athletes, especially runners, may be at risk for iron deficiency. Iron requirements for athletes may be higher than for non-athletes. Therefore, an iron supplement may be required
- For moderate exercise there is no need for vitamin-mineral supplements. A well-balanced and nutritious diet will provide your body with all the nutrients it needs. It is also important to have enough food and fluids before and after exercising

People with restricted food intake

- People with food allergies, food intolerances or poor appetite may need vitamin and mineral supplements
- People who do not eat or drink enough milk or milk alternatives or those who cannot digest milk products (i.e. lactose intolerance) may need calcium and vitamin D-fortified foods such as orange juice with calcium or soy beverages



with calcium and vitamin D. Otherwise, a supplement may be required. A calcium supplement of 300 mg can replace the calcium in each serving of milk or alternative not included in the diet. When choosing a calcium supplement, ensure that the supplement also has vitamin D to help improve the absorption

People on certain medications

- Certain medications such as laxatives, certain antibiotics and aspirin can interact with some vitamins and minerals. Check with a pharmacist or a dietitian

People with medical conditions

- People recovering from surgery or who have long term illness may need a supplement. Check with your doctor

So, taking a vitamin-mineral supplement is important for some people, but vitamin-mineral supplements cannot replace a balanced and nutritious diet. Eat well by emphasizing vegetables, fruit, and whole grain products.

*For a copy of *Eating Well with Canada's Food Guide*, call Health Connection.

If you are taking vitamin-mineral supplements, it is always best to take them with a meal for better absorption.



Five supplement hunting tips

Your best source of nutrients is food. If however, you, or someone in your family is in one of the above groups that need to take a supplement, here are some tips

Tip 1 – Buyer beware

- Use brands that are reasonably priced (store brands are less expensive than name brands)

Tip 2 – Read labels

- Check that the expiry date has not passed.
- Check that the product has a Drug Identification number (DIN) or a Natural Product Number (NPN) on the package. These numbers let you know that the product has been approved for use.
- Multivitamin-mineral supplements should include:
 - Vitamins: D, E, C, B₁₂, B₁ (thiamine), B₂ (riboflavin), niacin, B₆ (pyridoxine), folic acid
 - Minerals: calcium, magnesium, iron, zinc

Tip 3 – More is not better

- Be careful not to take too much of any vitamin or mineral. There may be health risks related to taking too much. Large amounts of vitamins A and D, iron, zinc, calcium, selenium, folic acid and vitamin B₆ are particularly harmful in large doses

Tip 4 – Natural or synthetic?

- It doesn't matter, your body can't tell the difference

Tip 5 – Child safety

- Keep supplements and children's vitamins away from children's reach. Children's vitamins may look like candy to a child and taking too many can poison them