

# Diabetes and dietary supplements



Diabetes  
New Zealand



Vitamins, minerals, herbs - just some of the extensive range of dietary supplements available without prescription. What is the evidence for the need for dietary supplements? What effects may they have on your diabetes?

**Elizabeth Stewart** from the Institute of Food Nutrition and Human Health at Massey University provides some answers.

## What are dietary supplements?

Dietary supplements include herbal medicines, homoeopathic medicines, traditional medicines, aromatherapy products, vitamins and minerals. They may also be called complementary medicines or therapeutic products.

There is currently no requirement in New Zealand for dietary supplements to undergo any independent scrutiny of quality and safety. In the future, product standards are likely to be covered under joint Australia and New Zealand healthcare and therapeutic products legislation.

Some reasons people give for taking supplements:

- I don't always eat properly so it's to make sure I get everything I need
- The soil is deficient in essential minerals
- I was told it would cure my 'slight' diabetes
- They can't hurt me and they may do some good.

## How can taking supplements affect diabetes?

A recent study showed that nearly one-third of people with diabetes use alternative remedies. Most do not openly tell their health professionals they use these therapies.

Although supplements may appear to be 'natural', this does not mean they are suitable to take if you have diabetes. Recent studies for supplements you can purchase over the counter show:

- Chromium - studies have failed to show any significant benefit for blood glucose levels
- Vanadium - there is no evidence of improved blood glucose levels

- Glucosamine - may boost blood glucose levels or worsen insulin resistance
- Echinacea - could make auto-immune diseases such as Type 1 diabetes worse by affecting the immune function
- Omega-3 Fatty Acids (fish oil capsules)- may lower triglycerides in people with diabetes but slightly raise LDL cholesterol (the 'bad' cholesterol)
- Large placebo-controlled trials of antioxidants e.g. vitamins C and E, beta carotene and other carotenoids, have failed to show benefits and in some instances have suggested adverse effects
- The role of vitamins B1, B6 and B12 in treating diabetic neuropathy has not been established.

Dangerous herbs and supplements you should never take include: chaparral, coltsfoot, comfrey, ephedrine (ephedra or ma huang), germander, jin bu huan, lobelia, phenylalanine, sassafras, L-tryptophan, yohimbe.

There is no scientific evidence to suggest any long term benefits in taking dietary supplements.

There is also potential for toxic results from taking excess doses and for adverse reactions with diabetes medications.

'The herbal supplement from the health food shop was all natural so I thought it wouldn't hurt me. I told my doctor about it and found out it could stop my blood pressure medicine from working.'

Mary, Papakura

### What are some possible interactions with prescribed medications?

Some combinations of prescribed medications and dietary supplements can be harmful.

- If you are on a blood thinner such as warfarin or aspirin - increased bleeding can occur if you also take alfalfa, chamomile, evening primrose oil, feverfew, garlic, ginger, ginkgo biloba, ginseng or red clover
- St John's Wort interferes with antidepressants such as fluoxetine e.g. Prozac
- If you take diabetes medication - ginseng can further lower your blood glucose levels, possibly causing a low blood glucose level reaction
- If you take a drug that makes you sun-sensitive e.g. certain blood pressure medications - St John's Wort can worsen the sun-sensitivity
- If you take the heart drug digoxin or a thiazide diuretic (a class of drugs used for blood pressure) - dried aloe by mouth, cascara sagrada, senna or liquorice can cause low potassium levels.

There is insufficient evidence to show over-the-counter dietary supplements are suitable for diabetes management.

More research including long-term trials is needed to assess the safety and potential benefits of dietary supplements and other complementary therapies for people with diabetes.

### What should I do if I already take supplements?

- If in doubt, don't take it
- Tell your health care team about any supplements you take - your prescribed medications may need to be adjusted
- Discuss any supplements with your doctor, diabetes nurse or dietitian before trying them - it is not worth endangering your blood glucose levels and ultimately your health
- If you decide to use a supplement and notice any unusual effects, stop taking it and contact your healthcare professional
- Supplements cannot cure diabetes - the consequences of not following prescribed diabetes medication can be very serious and even life-threatening
- If your doctor has prescribed a supplement, continue to take it as prescribed e.g. folate for preventing birth defects, calcium to reduce osteoporosis, iron for anaemia
- The food supply in New Zealand is safe and nutritious - use it to get your daily vitamin and mineral needs from natural food sources and a balanced diet.



You'll find a guide to healthy food choices in this *Inā te kai ora/Here's Healthy Food* pamphlet.

Download from [www.diabetes.org.nz](http://www.diabetes.org.nz) or for printed copies contact Diabetes Supplies Ltd, phone 0800 DIABETES (0800 342 238), fax 03 434 5281, Freepost DNZ, PO Box 54, Oamaru 9444, email [info@diabetes.org.nz](mailto:info@diabetes.org.nz)