

Food Fact Sheet: Supplements

If you walk around your local supermarket, pharmacy or health food shop you will see a huge selection of vitamins, minerals and other nutritional supplements in a bewildering range of doses, and combinations.

What are supplements?

As the name implies, supplements (dietary / nutritional) are any product that aims to 'supplement' the diet with nutrients that could potentially be missing. There are hundreds of different products; from well know vitamins and minerals to bee pollen, green tea and ginkgo biloba. But do we really need these supplements or are they just a waste of money? How much should you have? Are they safe? Mixed messages from the media, family and friends can make things even more confusing. This Food Fact Sheet will help you decide.

Who needs supplements?

People take them for a wide variety of reasons; the most common of these is wanting to maintain or improve their health. However, most people can get everything they need to be healthy by eating a varied, balanced diet. You can do this by eating:

- Plenty of fruits and vegetables – aiming for a variety and at least 5-a-day
- Plenty of starchy foods such as bread, potatoes, rice and pasta – some with each meal
- Some milk and dairy foods (or suitable dairy free alternatives which are fortified with calcium, such as fortified soya, coconut or oat-based products) – adults need 2-3 servings per day to reach the recommended amount of calcium
- Some beans, pulses, fish, eggs, meat or other foods rich in protein – 2 portions per day
- Limiting foods which are high in salt, sugar and fat

It is important to note that a healthy balanced diet doesn't just provide you with essential vitamins, minerals and nutrients, but also other elements which cannot be obtained from a nutritional supplement. Fibre, which is essential for healthy gut function, is a good example of this. There are certain groups of people who may benefit from taking supplements.

The chart over leaf shows what The Department of Health recommends. Some women who are pregnant, or who have a baby under one year, and children from 6 months of age until their fourth birthday may qualify for Healthy Start vitamins. Healthy Start women's vitamins contain Folic Acid, vitamin C and vitamin D and Healthy Start children's vitamin drops contain vitamins A, C & D. Speak to your doctor, midwife or health visitor to see if you qualify. If you think you are not having enough of one or more nutrients and are thinking about taking a supplement, always consult your doctor, or ask to see a dietitian.

Choosing a supplement

- Always buy from a reputable source - for example, your local chemist, pharmacy or supermarket, and not from an unknown company on the internet
- Check the label – it should tell you the amount in each dose and should have an expiry date
- Make sure you really need them - ask your doctor, dietitian, pharmacist or chemist

Risks

Although most nutritional supplements are safe if taken in the correct doses, there are some risks.

Quality - Internet products may not meet UK standards and may not have gone through the same checks as products from a more reliable source. There could be less of the active ingredient than claimed, or the product could contain ingredients harmful to your health. If you want to buy supplements via the internet choose a recognised high street retailer that also trades online.

Quantity - Taking too much of a vitamin can be dangerous. Some vitamins are 'water soluble', meaning they dissolve in water, and any that your body doesn't need will leave your body when you pee. Some vitamins are 'fat-soluble', meaning they dissolve in fat, and will not leave your body when you pee.

Who?	Which supplement?	Why?
	Vitamin D	

All children from six months to five years	7 – 8.5 micrograms of vitamin D (unless having 500ml fortified infant formula a day)	To prevent vitamin D deficiency
Breastfed babies from birth to 12 months	8.5-10 micrograms of Vitamin D in vitamin drops per day	To prevent vitamin D deficiency
General population aged four years and over	10 micrograms of Vitamin D per day	To prevent vitamin D deficiency
Folic Acid		
Women who are trying to conceive and women who are in the first 12 weeks of pregnancy	400 micrograms of folic acid daily	To reduce the risk of neural tube defects in the unborn baby
Women who have had a previous pregnancy affected by a neural tube defect or they or their partner have neural tube defect or women who have diabetes	5 mg of folic acid daily	To reduce the risk of neural tube defects in the unborn baby in this high risk group.
Women who have diabetes and are pregnant	5 micrograms of folic acid daily	To reduce the risk of prevent neural tube defects in the unborn baby.
Calcium		
Women exclusively breastfeeding who are following a dairy free diet	1000mg of calcium	To prevent nutritional deficiencies.
Other		
People who suffer from certain medical conditions for example iron deficiency anaemia, or if you have had stomach surgery	As recommended by your doctor	To prevent or correct a deficiency

This means you cannot store water-soluble vitamins. However, your body can store the fat-soluble vitamins A, D, E & K and you can become unwell if you take too much of these vitamins. You can make sure you don't take too much of any vitamin by only ever taking the recommended dose on the label (unless advised by your doctor). If you take more than one supplement, make sure that you are not doubling up on any nutrients. For example, if you take a multivitamin tablet which includes vitamin D, don't take an additional vitamin D supplement unless advised to by a health professional.

Other risks

- Wasting your money! Supplements can be expensive and a lot of them have no proven benefits at all. They may claim to delay ageing, boost your metabolism or make you slimmer but in fact there is little or no evidence to back up many of these claims
- Supplements may have interactions with some medication and some are unsafe if you suffer from certain medical conditions. This is why it is important to talk to your doctor before taking any supplements
- Fish liver oil should not be taken by pregnant women as it contains vitamin A; large amounts can be harmful to babies
- Vitamin E supplements should be avoided by people with cardiovascular disease as it can increase the risk of further heart attacks
- Effervescent (fizzy) vitamin supplements contain approximately a gram of salt per tablet. So you might want to consider changing to a non-effervescent alternative, especially if you have been advised to limit your salt intake

Summary

Most people can get all of the vitamins and minerals they need from a balanced diet and time in the sun. In some cases, a supplement can have benefits, but they are not a substitute for a healthy, balanced diet. Before taking a supplement, make sure your information is reliable and speak to your doctor, dietitian, pharmacist or chemist.