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## Cancer and dietary supplements

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### Pharmacy

### Patient Information





## Introduction

Dietary supplements include herbs, plant materials and extracts, vitamins, and minerals. They are commonly used as alternative treatments to support health and wellbeing but may not necessarily benefit you during your treatment for cancer. This leaflet provides some information about some of the frequently asked dietary supplements.

## Supplements and cancer prevention

There is a lot of information available about the health benefits for the various supplements on the market. World Cancer Research Fund UK has reviewed the various studies and advises against taking supplements to reduce cancer risk. Some studies actually suggest high-dose supplements could be harmful, and may increase the risk of some cancers occurring. Instead, they recommend eating a varied, healthy and balanced diet to meet all your nutritional needs.

## Supplements and cancer treatment

Despite a lot of research into cancer and dietary supplements, there is not enough evidence to prove that they can help treat cancer or stop it coming back. Although herbs and plants may be natural, this does not mean that they are safe – they may cause side effects or interact with your prescribed medications. In addition, as these products are not regulated and tested in the same way as medicines, they may contain other harmful substances from the extraction or production process.

## Summary

The Royal Marsden recommends that you **do not** take supplements during chemotherapy or radiotherapy treatment for cancer.

Exceptions to this are:

- Vitamins or minerals prescribed to treat a known deficiency or as a supportive medication for some cancer treatments
- A multivitamin/multimineral may be appropriate if you are unable to eat a normal, balanced diet
- Homeopathic products at certain dilutions – see below for more details.

Some supplements may affect hormone-sensitive conditions, even after chemotherapy or radiotherapy has been completed. If you do choose to take supplements, please discuss with your clinical team, so they are made aware and can update your records.

## Vitamin and mineral dietary supplements

Vitamins and minerals are important nutrients to help our bodies work properly. The recommended amounts should be met through a varied, healthy and balanced diet. Supplements should not be used as a replacement for whole foods to achieve this.

### Should I take a vitamin supplement?

Taking high-dose supplements without medical supervision or advice may be harmful to your health. High doses of one nutrient may affect how the body absorbs other nutrients.

It is best to follow a balanced diet with a variety of food, rather than taking a supplement. Even multivitamin supplements with a wide range of nutrients will not contain all the beneficial substances found naturally in foods (such as fibre). If you are

struggling to eat a balanced diet, then please ask to be referred to a dietitian for advice.

If you are unable to eat a normal, balanced diet or you have a low level of a particular nutrient, you may need to take a dietary supplement. A doctor, whose care you are under, or dietitian can advise you on this.

In some cases, supplements may be prescribed by a doctor that you see for a medical reason. For example, you may be prescribed calcium and vitamin D supplements, as some treatments may weaken your bones.

### **What vitamins are recommended?**

If you are unable to eat a diet with enough nutrients and want to take a supplement, then a standard multivitamin and mineral supplement that contains up to 100% of the daily requirements can be taken.

Based on the safe upper levels of vitamin and minerals produced by the Expert Vitamin and Mineral (EVM) group, the following products contain appropriate quantities (other products may also be suitable):

- Boots® General Health A–Z
- Centrum® Advance Complete A to Zinc
- Forceval (this can also be prescribed by your doctor)
- Sanatogen® A–Z Complete
- Superdrug® A–Z multivitamins and minerals.

Make sure you **do not** exceed the stated dose and **avoid** taking more than one product containing the same vitamin or mineral. Also check that the product does not contain any other ingredients such as herbs or plant extracts, as this would make it unsuitable (further information below).

If you are not sure if the vitamin or mineral supplement(s) that you would like to take contains the appropriate dose, please discuss with your clinical team.

## Herbal and other dietary supplements

This includes non-vitamin and non-mineral supplements such as herbs, plant extracts, probiotics, and fish oil products.

Many of the supplements that we have looked at may affect how well your cancer treatment works. Some supplements may also interact with the additional medicines used in cancer treatment (such as anti-sickness medication). Other supplements that we reviewed could increase the risks of side effects from the cancer treatment.

Supplements are not tested for effectiveness or safety in the same way that conventional medicines are. This means that there is a lack of evidence for their safe use in combination with cancer treatments.

Therefore we recommend that no supplements are taken during chemotherapy or radiotherapy (**except for prescribed vitamins or minerals**, as discussed above). If you are taking supplements before treatment, we recommend that these are stopped during the period of cancer treatment (this includes the days between cycles of chemotherapy). Ideally you should stop a few weeks before starting treatment with chemotherapy or radiotherapy, and wait for a few weeks after the end of your treatment before restarting them.

Below is information on some of the more common dietary supplements:

**Antioxidants** – Many supplements are antioxidants or have antioxidant properties. Antioxidants may help prevent cell damage but may also stop chemotherapy or radiotherapy from working as well as we expect. We always advise that patients should avoid antioxidant supplements whilst on chemotherapy, radiotherapy and other treatments for cancer. Examples of antioxidants include coenzyme Q10, turmeric/curcumin, wheatgrass, and spirulina.

**Fish oils** – There is a risk that some types of fish oil supplements can affect some types of chemotherapy. Balancing this risk, we still encourage patients to eat the recommended amounts of fish as part of a balanced diet. This is currently two portions of fish per week, (one portion which is oily). If supplements are taken instead of eating fish then amounts similar to that of a diet are recommended, which is approximately 450mg of Omega 3 per day.

**Tea** – One to two cups a day of green tea or fruit and herbal teas are unlikely to affect your treatment. However, larger quantities could provide a big enough dose of the ingredients to potentially affect the chemotherapy or radiotherapy. To avoid this, try to have no more than two cups of herbal tea a day.

**Probiotics** – Probiotics contain live bacteria; there is a small risk that these could cause an infection which your body will not be able to fight as well as normal whilst undergoing treatment. Therefore we recommend that probiotic products are not taken whilst receiving cancer treatment, or if your immune system is weakened from treatment.

### **Taking supplements before surgery**

There is limited information on the risks of taking supplements before surgery and anaesthesia. If you are taking supplements, we recommend you stop them two weeks before planned surgery.

### **Supplements with oestrogen-like effects**

Some herbal supplements have oestrogenic effects, meaning that they act in a way similar to oestrogen. Taking them may affect hormone-sensitive conditions such as some breast, uterine, and ovarian cancers. As there is insufficient reliable information, women with hormone-sensitive conditions should avoid oestrogen-based and oestrogenic supplements. Examples of supplements with oestrogenic effects include:

- red clover
- milk thistle
- flaxseed
- liquorice
- isoflavones
- ginseng
- soya.

If you have a hormone-sensitive condition and wish to take a supplement after completion of your chemotherapy or radiotherapy, please discuss with your clinical team.

## Homeopathy

In homeopathy, a substance that in normal doses could cause an undesirable effect is used in very dilute amounts to treat that symptom. For example, something that can cause vomiting is used in homeopathic doses to prevent or treat nausea and vomiting. In homeopathy, the more diluted a preparation is, the more potent it is. This is very different from conventional medicine where a bigger dose of a drug would be expected to have a greater effect.

The strength of products is labelled with a number, followed by an x or c. Products of a strength less than **12c** or **24x**, may interact with the medicines and, similar to other herbal products, should not be taken whilst receiving chemotherapy and radiotherapy.

The dilution numbering system for homeopathic products can be confusing so if you are not sure about a product, do not take it without checking with your clinical team.



## Contact details

If you do choose to take supplements, please discuss with your clinical team, so they are made aware and can update your records.

Alternatively, please call:

**The Royal Marsden Macmillan Hotline: 020 8915 6899**

You can ring the hotline 24 hours a day, 7 days a week.

Call us straight away if you are feeling unwell or are worried about the side effects of cancer treatments.

This service provides specialist advice and support to all Royal Marsden patients, as well as to their carers, and both hospital and community-based doctors and nurses caring for Royal Marsden patients.

## Further support

Please see the details below for more information about supplements.

### **Cancer Research UK**

*[www.cancerresearchuk.org](http://www.cancerresearchuk.org)*

### **Macmillan Cancer Support**

*[www.macmillan.org.uk/information-and-support/coping/complementary-therapies](http://www.macmillan.org.uk/information-and-support/coping/complementary-therapies)*

### **World Cancer Research Fund UK**

*[www.wcrf-uk.org/uk/here-help/publications-and-resources/booklets-and-factsheets](http://www.wcrf-uk.org/uk/here-help/publications-and-resources/booklets-and-factsheets)*



## References

This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

The Royal Marsden Help Centre

Freephone: 0800 783 7176

Email: [patientcentre@rmh.nhs.uk](mailto:patientcentre@rmh.nhs.uk)

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Should you require information in an alternative format, please contact The Royal Marsden Help Centre.



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