

# What complementary and alternative medicine (CAM) can I safely use with chemotherapy?

Evidence-based information for patients



## Introduction

This booklet is designed to advise you on what we currently know about complementary and alternative medicine (CAM) use at the time of receiving chemotherapy. It does not cover CAM use at other times, for example, when you have completed conventional treatment.

It is not a criticism of CAM use, just a summary of current evidence-based studies on CAM effectiveness and safety at this time.

## What is CAM?

Complementary and alternative medicine (CAM) are products and treatments which are not widely used by conventional healthcare professionals.<sup>1</sup> CAM that is absorbed into the bloodstream, such as herbs and vitamin supplements, may interfere with chemotherapy effectiveness.<sup>2,3</sup>

## Mind-body CAM

Mind-body CAM such as massage, meditation, music, imagery, hypnosis, self-expression, mild exercise and acupuncture have established evidence and are able to be used safely with standard treatment.

Mind-body therapies should be your first consideration when looking for safe, complementary cancer care. (Table 1)



**This booklet will provide you with evidence-based information on which CAM we know is safe for you to use, if you wish, during treatment with chemotherapy.**

**Herbs and vitamin supplements are absorbed into the bloodstream and may interfere with chemotherapy effectiveness.**

**Mind-body therapies are safe and effective complementary treatments you can use while receiving chemotherapy.**

**Table 1.**

Safe, evidence-based mind-body CAM that may help during chemotherapy treatment<sup>4</sup>

\* Acupuncture, hypnosis and massage should be administered by specially trained practitioners

Mind-body therapy CAM	Supportive care use
Acupuncture*	<ul style="list-style-type: none"><li>• decreases acute vomiting caused by chemotherapy</li></ul>
Hypnosis*	<ul style="list-style-type: none"><li>• decreases nausea and vomiting caused by chemotherapy</li></ul>
Imagery and relaxation (body relaxation combined with visualisation e.g. imagining warm sun melting away cancer cells)	<ul style="list-style-type: none"><li>• boosts immune functioning during treatment</li></ul>
Massage*	<ul style="list-style-type: none"><li>• decreases nausea and vomiting caused by chemotherapy</li><li>• reflexology (foot massage) decreases anxiety during treatment</li></ul>
Meditation (combines relaxation with self-awareness, which brings the person into the moment, free from anxiety concerning the past or future)	<ul style="list-style-type: none"><li>• alters immune patterns by decreasing stress</li><li>• decreases anxiety and depression</li></ul>
Music	<ul style="list-style-type: none"><li>• reduces anxiety</li></ul>
Self-expression (includes written or verbal expression, artwork, humour and movement)	<ul style="list-style-type: none"><li>• decreases dark feelings and improves outlook</li></ul>
Mild exercise (includes yoga)	<ul style="list-style-type: none"><li>• reduces fatigue and promotes wellbeing</li></ul>

Other mind-body CAM that is safe to use during chemotherapy treatment: Aromatherapy (inhaled), Bowen therapy, Qi gong, Reiki, Tai Chi, Therapeutic touch



## Is there evidence to use CAM?

### To treat cancer

There is not yet enough conclusive evidence to recommend to you any CAM to treat cancer. Delaying conventional treatment to use CAM alone to try and treat cancer may potentially sacrifice years of your life, particularly if you are being treated with curative intent.<sup>5</sup>

### For chemotherapy support

Apart from mind-body therapies (Table 1) and ginger for the treatment of nausea, it is very difficult to find consistent, high quality studies which show beyond doubt that a CAM is effective, is safe, and is able to be recommended to you when you are receiving chemotherapy. Probiotics have shown some benefit to lessen diarrhoea, which can be a side effect of particular chemotherapy and fish oil has helped some lung cancer patients resist weight loss (Table 2).

**Table 2.**

Oral CAM that may help during chemotherapy treatment<sup>4</sup>

Oral CAM	Supportive care use
Ginger	<ul style="list-style-type: none"><li>• reduces nausea caused by chemotherapy</li></ul>
Probiotics/ Yoghurt	<ul style="list-style-type: none"><li>• decreased diarrhoea caused by chemotherapy</li></ul> <p><b>Caution</b> Probiotics are normally well tolerated; however, there have been rare cases of very ill patients receiving chemotherapy developing serious probiotic-caused infections</p>
Fish oil supplements	<ul style="list-style-type: none"><li>• fish oil taken daily may provide benefit to patients with lung cancer through maintenance of weight during chemotherapy administration</li></ul>

## Already using CAM to treat something else?

You may already be taking herbal medicines or vitamin supplements regularly to treat existing conditions, or occasionally for example to treat cold symptoms. It is important that you declare this CAM use, as there may be a chance of interaction depending on the chemotherapy you are receiving.<sup>6</sup>

## How may CAM interfere with chemotherapy?

Practitioners carefully calculate chemotherapy doses individually for you, as accuracy is crucial in ensuring that you get the maximum anticancer action with the least side effects possible. CAM that are absorbed into the bloodstream, such as herbal medicines, may potentially interfere with your chemotherapy in a way that lessens the anticancer effect or gives you more side effects by making the chemotherapy more toxic to you.<sup>2,3</sup> (Table 3)

Potential interactions with CAM may make chemotherapy more toxic to you, or may lessen the anticancer effect of the chemotherapy.

## Antioxidants: can I take them?

The use of supplemental antioxidants by cancer patients receiving chemotherapy remains controversial. Beneficial effects of taking antioxidant supplements to reduce side effects may be at the cost of lessening the chemotherapy anticancer effect, depending on which chemotherapy you are receiving<sup>7</sup> (Table 3). Until further definitive research is done, caution is advised when taking antioxidant supplements at the time of receiving chemotherapy.<sup>8</sup>

Beneficial effects of taking antioxidants to reduce side effects may be at the cost of lessening the chemotherapy anticancer effect

Fortunately, eating antioxidant-containing foods in your normal diet is safe with chemotherapy.<sup>7</sup>

Antioxidant-containing foods in your normal diet do not achieve high enough levels to interact with chemotherapy.



**Table 3.**

**CAM and potential interactions with chemotherapy<sup>2,3,7,9,10</sup>**

CAM	Interaction with chemotherapy	Explanation
Antioxidant supplements (Vitamins A, C & E, CoQ10 and others)	Interaction likely with particular chemotherapy  Diminishes radiotherapy effectiveness	Concern that antioxidant supplements may protect cancer cells as well as normal cells
Herbs, Chinese herbs, Medical herbal teas	It has been estimated that herbal interactions are responsible for a substantial number of unexpected toxicities of chemotherapy and possible under treatment seen in cancer patients  Chinese herbal mixtures often contain many different plant extracts which are highly biologically-active, increasing chance of interaction	There is indirect evidence for both positive and negative effects of herbal use with chemotherapy; however, currently, there is not enough information available about herb-chemotherapy interactions to make definite recommendations
Medicinal mushrooms ( <i>Coriolus versicolor</i> “PSK”, <i>Ganoderma lucidum</i> “Reishi”)	Interaction unlikely with most chemotherapy	No reported negative interactions
Trace mineral supplements	Interaction unlikely with very small doses of minerals	No information or valid explanations available for potential negative interactions
Homeopathy (also Bach flower remedies, Australian bush flower essences, Schuessler’s tissue salts)	Interaction unlikely	Homeopathic products are so diluted that there is little chance of interaction



# I still want to take CAM

If you decide to take CAM at the time you are receiving chemotherapy, for example if you have an advanced cancer and are willing to accept potential interaction risk, it is still very important that you tell your cancer specialist or pharmacist for documentation, to enable the best care to be given to you.

## Require more information?

### National Cancer Institute

Complementary and alternative medicine in cancer treatment:

<http://www.cancer.gov/cancertopics/pdq/cam/cam-cancer-treatment/patient>

Thinking about CAM: A guide for people with cancer

<http://www.cancer.gov/cancertopics/cam/thinking-about-CAM>

### Memorial Sloan-Kettering Cancer Center

Complementary therapies to ease the way during cancer treatment and recovery

<http://www.mskcc.org/cancer-care/patient-education/resources/complementary-therapies-ease-way-during-treatment-and-recovery>

### Cancer Council Australia

Complementary and alternative therapies:

<http://www.cancer.org.au/about-cancer/treatment/complementary-therapies-and-cancer.html>

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**Standard 1: Governance for Safety and Quality in Health Service Organisations**  
Involves setting direction, making policy and strategy decisions, overseeing and monitoring organisational performance and ensuring overall accountability for a service.



**Standard 2: Partnering with Consumers**  
Consumers and/or carers provided feedback on this patient information.



**Standard 4: Medication Safety**  
Reduction in the occurrence of medication incidents, and improvement to the safety and quality of medicine use.



**Standard 11: Service Delivery**  
Patients and the community have access to safe, high quality healthcare services that are appropriate, effective and meet their needs.



**Standard 12: Service Delivery**  
To ensure high quality care is delivered to consumers/patients through the care continuum.



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