

the great all-rounder[®]
Mushrooms[™] for Life



Mushroom Fact Sheet No.5 – Helping to prevent cancer

For a long time, scientists have known that adequate fruits and vegetables reduce the risk of heart disease, stroke and some cancers. Is it the fibre or the folate? Is it the antioxidants or the minerals? It is unlikely that any one nutrient or compound in food provides the protection against future disease. It is far more likely that the synergy of all the compounds in foods combine to offer protection to the body.

It is not surprising that mushrooms have also been found to play their part in the health of Australians, even though they are neither fruit nor vegetable. Many mushroom species have been assessed for their antioxidant ability to neutralise the free radicals that damage DNA in cells (see Mushroom Fact Sheet No.2 – Antioxidants).

The mushroom contains compounds that suppress two enzymes called aromatase and 5-alpha-reductase. Aromatase converts the hormone androgen to estrogen, which in turn can promote the development of breast cancer, especially in post-menopausal women. Currently, aromatase inhibitors are being used in the treatment of estrogen-dependent breast cancer.

The enzyme 5 alpha reductase converts the hormone testosterone to dihydrotestosterone and is thought to play a role in the development of prostate cancer and benign prostate enlargement in men. The inhibitors of this enzyme reduce the incidence of prostate cancer. The research on animal cells suggest that **compounds in mushrooms could have a role in the protection against breast and prostate cancer.**

Research published in late 2006 shows that mushroom extracts reduced breast cancer growth. *“Eating 100 grams, or even less, of mushrooms per day could have an effect on preventing new breast cancers”*, said lead researcher Dr Shiuan Chen. Dr Chen has begun human clinical trials and we await the outcome of those trials.

Eating an adequate amount of selenium seems to reduce the risk of some cancers. Fortunately, mushrooms provide about a quarter of your daily needs of selenium.

Although it is too early to say that eating mushrooms will stop you from getting breast or prostate cancer, the future looks very rosy for the mushroom and the results of on-going research on the health benefits of the mushroom are eagerly awaited. In the meantime, we can say with confidence that mushrooms are a very useful source of B vitamins, essential minerals and antioxidants, as discussed in Mushroom Fact Sheets No.1, No.2 and No.3.

Recipe selected from www.cookingwithmushrooms.com

Per Serve	Protein	Fat	Sat. Fat	Carb	kJ	Fibre
Mushroom Noodle Stir Fry	17g	29g	4g	22g	1725	8mg



For more information visit www.mushroomsforlife.net