

Introductory Text

Research has shown that mushrooms can boost so called "Natural Killer Cells" and enhance the immune system, naturally reducing the risk of some cancers. And best of all the research suggests just 100 grams – or three button mushrooms – a day is required to gain the benefits. To find out more why not LISTEN to Accredited Practising Dietitian, author and university lecturer, Glenn Cardwell in his discussion with Tony McManus. A transcript of the interview is also available [HERE](#).

Mushrooms and the immune system

Interview Glenn Cardwell / Tony McManus

Date – 3 September 2007

Tony - Glenn Cardwell is back with us - Accredited Practising Dietitian and author, university lecturer and an expert on mushroom nutrition. He is back with us to talk about and answer some questions on mushrooms as a potential disease fighter.

Glenn we have spoken in the past and chatted about the range of nutrients in mushrooms but I understand the power of the mushroom goes way beyond that.

Glenn Cardwell – Oh indeed Tony, it does. We know that mushrooms seem to be helping our immune system fight infection. If we look at boosting our immune function, we are looking at being fit, we are looking at eating well, but it seems the antioxidants in mushrooms are also boosting our immune system.

And in fact there was some research released at the Experimental Biology Conference in 2007 showing that mushrooms boost what we call "Natural Killer Cells", they boost antimicrobial compounds and they also seem to have an anti-cancer boost to the immune function as well. So there is a number of ways that the mushroom seems to be improving our immune function.

Tony - Glenn did I read that mushrooms have been linked to reducing cancer risk. How much truth is in that?

Glenn Cardwell – Well, that's absolutely true Tony because it was in December of 2006 in a very prestigious journal called *Cancer Research* where a US study found that compounds in mushrooms are reducing the risk of breast cancer. So, in other words, they seem to be slowing down breast cancer development in postmenopausal women because they are working in a similar fashion as some chemotherapy is working.

It also seems to be working to reduce the risk of having benign prostate enlargement and indeed prostate cancer. Again the compounds in mushrooms seem to be working to have a natural effect of reducing cancer risk.

Tony - That's great news, so you are saying that mushrooms could in fact reduce the risk of both breast and prostate cancer?

Glenn Cardwell – Absolutely! There may be other compounds in mushrooms too that could be doing that. We know that there are lectins in there which reduce the risk of cancer and, of course, the selenium. What is happening now at the Beckman Research Institute in California, we are just beginning with some funding for a clinical trial to see how effective mushrooms are in reducing the risk of breast cancer. So that is pretty exciting for us.

Tony - Well let's be clear about this. We are not saying that mushrooms can cure cancer?

Glenn Cardwell - No, no, no we wouldn't say that it would cure cancer, but the early research seems to be very, very promising and very encouraging, showing us that mushroom compounds may well be reducing our risk of both breast cancer and prostate cancer.

Tony - How many mushrooms should we be eating really to get the true health benefits?

Glenn Cardwell – The US research has actually said that we need about 100 g of mushrooms each day to get the anti-cancer potential benefits. That works out to be about three button mushrooms, and if people want some more information on the health benefits of mushrooms Tony, I am recommending they go to www.mushroomsforlife.net.

Tony - That website again www.mushroomsforlife.net