Blame the supermarkets

Alistair Forrest puts macrophages under his microscope.

A spot of mould or a dark spot on an apple never did anyone any harm, our grandparents may well have said.

The supermarkets don’t agree, and reject any fruit or vegetables with the slightest hint of a blemish.

But the fact is, not only does a little mould or a trace of natural yeast not do us any harm, it actually used to do us all a lot of good. These microorganisms contain compounds in their cell walls that are critically important in priming the innate immune system.

However, we no longer have many of them in our diet thanks to modern attitudes to visually perfect foods, the widespread use of fungicides and the over-sanitisation of our kitchens.

These blemished heroes are Beta-Glucans 1-3 and 1-6 which act as immune modulators. “They are polysaccharides, long molecules made up of carbohydrate, and perfectly harmless to the body so there is no risk of side-effects,” said Barclay Lamont, Managing Director of Vitalize Health, the immune system specialists who have developed Betamune®.

A high immune, purified Beta-Glucan 1-3, 1-6 for intensive supplementation especially during illness.

“Our immune system – specifically cells called macrophages – recognise certain receptors in the walls of pathogens (invading foreign bodies such as viruses). This is mimicked by harmless Beta-Glucan 1-3, 1-6 which triggers an enhanced immune response enabling the body’s defence system to attack and overwhelm the invaders.”

However, when our bodies are lacking in energy or nutrition, worn down with stress, recovering from an operation or illness, or when the virus is simply too strong – that response doesn’t happen fast enough. As a result, we become weakened and ill.

So can taking a supplement really help? In studies, experts have found that the body actually recognises Beta-Glucan 1-3, 1-6 as a pathogen, priming it for an immune response. (1) Glucans activate both the macrophages (immune cells) and neutrophils (abundant but innate immune cells) to navigate to and overcome pathogens. More activated white cells are ready to attack, creating a rapid response to infection.

“So when taken daily, should any virus attempt an infection, the body’s immune system is always in perfect condition, primed and ready to stop it,” added Lamont.

Scientists from organisations as wide-ranging as the National Cancer Institute (US), Harvard Medical School, Brazilian State University of Campinas, University of Naples, even the Institute for Problems of Nuclear Power Plant Safety at Chernobyl, Ukraine, have studied the Beta-Glucans group of polysaccharides. Nearly 8,500 scientific papers recording studies of Beta-Glucans have been listed on PubMed, the website of the US National Library of Medicine.

Interesting work at the Vietnamese Institute of Biotechnology, Hanoi, published in 2011 found that Beta-Glucans could improve immunity response, when combined with vaccines, against Avian Flu (H5N1). (2)

Beta-Glucans have also shown promise for improving post-operative outcomes. University of Washington School of Medicine found that peri-operative administration of Beta-Glucans reduced serious postoperative infections or death by 39 per cent after high-risk non-colorectal operations.

A Korean study from the Chungbuk National University concluded: “Beta-Glucans are potent immune-modulators that have multiple activities such as anti-inflammatory activities. Beta-Glucans might be widely used in the therapy of infectious diseases.” (3)

The Pentagon in America has been so impressed by the results of the numerous trials it has now stockpiled quantities of Beta-Glucan 1-3, 1-6 in case of flu pandemic or all out biological attack. Meanwhile trials are underway in Europe to see if Beta-Glucans can be used in animal feed to reduce the quantity of antibiotics used by the farming industry.

Back where it all began, East German scientists Professors Fleischer, Westphal and Gerber who began working on Beta-Glucans behind the Iron Curtain as a way of improving well-known East German sports prowess, are now at the Biotech Institute of the Technical University of Berlin where their work has concluded that refined Beta-Glucans are easily the most effective way of stimulating anyone’s immune system.

“Best of all, being natural products, Beta-Glucans are safe for everyone from children to the elderly,” concludes Lamont.

For information on Vitalize Beta-Glucan supplements contact Linda Witcombe 0795 829 0279