

Antioxidants reduce the risk of cardiac death

Dietary supplements of Q10 and selenium, two antioxidants, can reduce the risk of death from cardiovascular disease by half. That is the conclusion from a study of 443 people over the age of 70, carried out by researchers at Linköping University and the Karolinska Institute.

“We saw a risk reduction of 54 per cent in those who received the active substances, compared with those who received a placebo. That is a remarkably high rate,” says *Urban Alehagen* (pictured), senior physician and associate professor of Cardiology at Linköping University.

It was previously known that selenium and coenzyme Q10 separately counteract the oxidative stress characteristic of patients with heart failure. To achieve a satisfactory effect, however, both of these substances are needed, and the study now being published in the *International Journal of Cardiology* is the first of its kind in the world.

443 residents of the municipality of Kinda in Östergötland with an average age of 78 were recruited for the study. Following a medical examination which included ultrasound monitoring of the cardiac function, the participants were divided into two groups. One group was administered four capsules containing Q10 and selenium daily, in addition to any other medication, while the other was given a placebo, i.e. capsules without any active substances, and served as the control group. The study was double-blind, meaning that neither participants nor researchers knew which group was taking which substances until the study was completed after four years.

In that time, half the group had dropped out for various reasons. Of those that remained, just under 6 per cent of those who had taken active substances had died, compared with 12 per cent of the control group. Better cardiac function and a lower level of cardiac stress markers were also noted for the group that had taken active substances.

Urban Alehagen is pleased and surprised by the results, but urges caution in interpreting them: “Although it had 443 participants and an unusually long intervention period, this remains a small study which needs to be followed by further trials.”

Article: [Cardiovascular mortality and N-terminal-proBNP reduced after combined selenium and coenzyme Q10 supplementation](#) A 5-year prospective randomized double-blind placebo controlled trial among elderly Swedish citizens by *Urban Alehagen, Peter Johansson, Mikael Björnstedt, Ulf Dahlström and Anders Rosén*. *International Journal of Cardiology* online, 25 May, 2012.



Urban Alehagen, Senior Physician and Associate Professor.