

Cardiovascular health

Is there a simple way to deal with it?

Calcification of arteries is often a silent process – no symptoms appear before it might be too late. An unexpected heart attack or cardiac arrest occurs – sometimes with fatal consequences. In most cases, we do not know when or how early in life calcification starts, but we do know that an increased amount of calcium in the arteries is an independent risk factor for poor cardiovascular health – often leading to cardiovascular disease. Preventive measures should thus be taken at an early stage, and the preventive measures should be safe, easy and cost-effective, as well as readily available for the public. NattoPharma is working to obtain this.

New knowledge of the vitamin K dependent protein Matrix Gla protein (MGP) has revealed insight into mechanisms of calcification, and most importantly, knowledge of preventive ways to combat calcification problems. Research also indicates that preformed calcified areas could be regressed, meaning that calcification of arteries is not an irreversible process. This might give medical doctors, as well as the public, a new and easy tool to prevent and even treat cardiovascular problems due to calcification. We are speaking about simple vitamin K2 supplementation – an effective form of vitamin K that strongly influences the body's own defense mechanisms for unwanted calcification. This is not yet well-known to the public health authorities.

MGP has shown to be the strongest natural inhibitor of arterial calcification. This small protein can bind calcium ions and prevents calcium from being deposited in the arterial vessel walls. The scientific proofs are convincing, especially as individuals

deprived of MGP suffer severely from over-calcified arteries, leading to an early death. An interesting aspect of MGP is that it must be activated before it can function: it needs vitamin K, and especially the form of vitamin K called vitamin K2 (as menaquinone-7). Without vitamin K2, MGP does not function, with resulting calcification. Supplementing both animals and humans with a rather small dose of vitamin K2 that reaches the arteries restores activity for MGP. Research conducted by NattoPharma, in collaboration with world experts, is now going on to reveal the need for vitamin K2 for optimal health. Interestingly, all data so far show the following: only very few foods contain vitamin K2 in the westernised diets; men and women are usually deficient in vitamin K2, while populations that do consume some vitamin K2 have a significant reduction in cardiovascular events and deaths. MGP is now becoming an important biomarker for cardiovascular calcification, while supplementation with vitamin K2 is the choice for activating MGP, thus improving the body's ability to deal with calcium deposits.

Vitamin K2 is naturally produced in micro-organisms. One should thus eat fermented foods, and especially the Japanese dish Natto-fermented soybeans. This traditional dish contains large amounts of vitamin K2 (as menaquinone-7). However, as natto is not often preferred, vitamin K2 needs to be available in supplements or in fortified foods. Fermented cheeses are an alternative source. However, the amount of cheese needed each day would also give lots of fats. Green leafy vegetables contain vitamin K1, but not vitamin K2, which is the most effective K vitamin in

activating MGP. NattoPharma has developed and documented the natural form of vitamin K2 called MenaQ7®. It contains the optimal form menaquinone-7, and is presently the only vitamin K2 product legally adopted by the EU Commission.

Scientists and medical doctors are becoming aware of this very simple and easy way to prevent arterial calcification. Several cardiovascular specialists are also eager to test potential effects on patients to regress calcification, as few other simple means are able to do so. It is important to make the health authorities aware of this new EU approved vitamin, and to really include it in the daily recommendations for good cardiovascular health. For more information and references, contact info@nattopharma.com; see also www.menaq7.com, www.vitamink2.org, or www.nattopharma.com.

MenaQ7®
Natural Vitamin K2

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