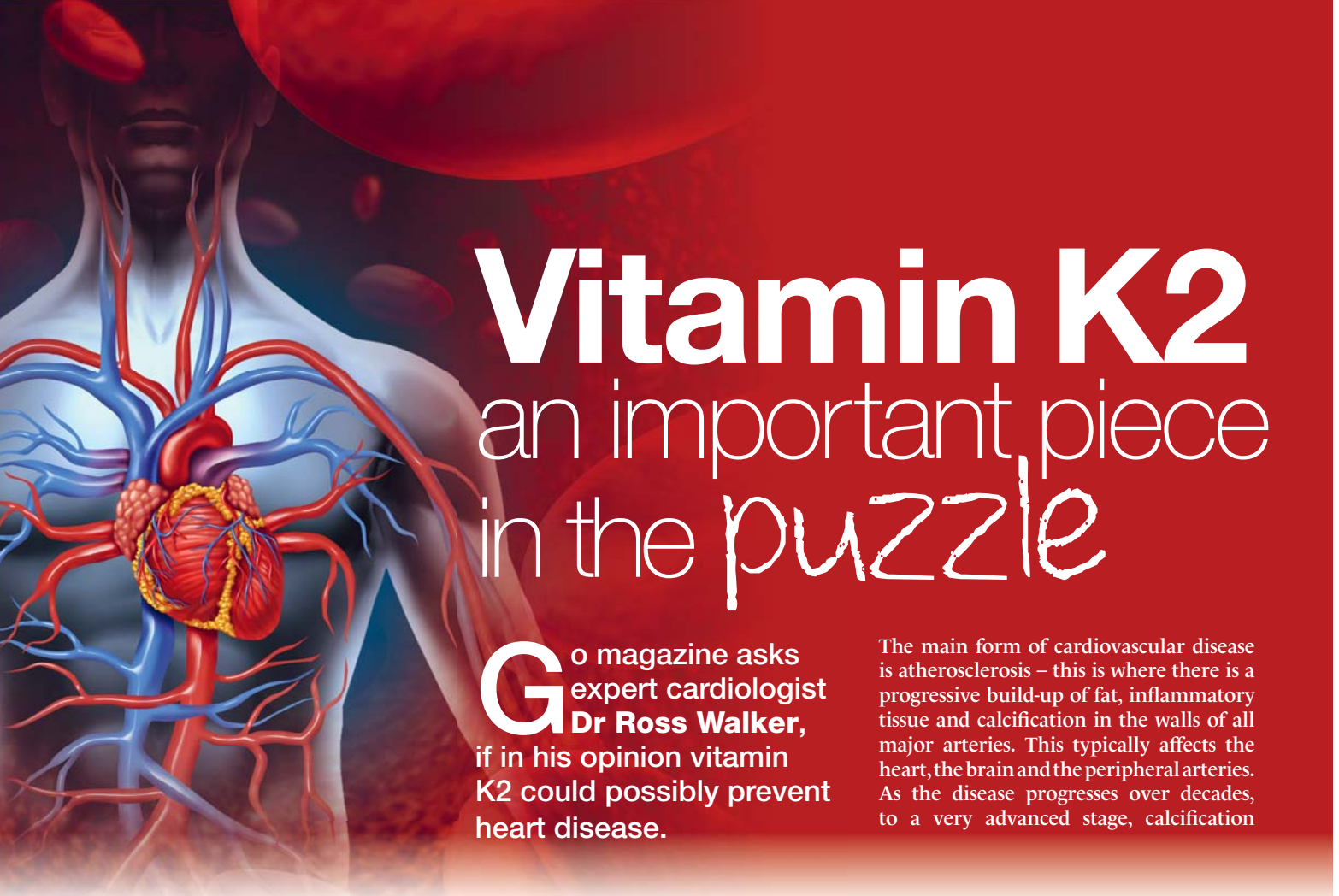

Vitamin K2 an important piece in the puzzle

Go magazine asks expert cardiologist Dr Ross Walker, if in his opinion vitamin K2 could possibly prevent heart disease.

The main form of cardiovascular disease is atherosclerosis – this is where there is a progressive build-up of fat, inflammatory tissue and calcification in the walls of all major arteries. This typically affects the heart, the brain and the peripheral arteries. As the disease progresses over decades, to a very advanced stage, calcification or hardening and stiffening of the arteries is a prominent feature. As the arteries become progressively calcified, the heart has to work harder, which leads to a subsequent increase in systolic blood pressure. Over the age of 50, increased blood pressure is a major risk factor for cardiovascular disease.

Dr Walker explains, "up until now, there has been little treatment directed at vascular calcification but a large body of recent work shows that vitamin K2 may be the answer. The important facts to consider here are firstly, vitamin K is a fat soluble vitamin that is intricately involved in the clotting process but also protects against vascular calcification. There is a particular protein known as matrix-gla-protein (MGP) which is one of the proteins that reduces vascular calcification. It has been shown that vitamin K2 is a vital factor in the normal functioning of MGP. Laboratory studies have clearly demonstrated that MGP deficiency leads to heavy calcification of the aorta, leading to early death.

Secondly, long term treatment with warfarin, which is a vitamin K antagonist, promotes vascular calcification.

Thirdly, a recent large study known as the Rotterdam Study looked at just over 4,800 elderly subjects and found that those who had the lowest intake of dietary vitamin K2 had the highest rates of cardiovascular death and aortic calcification.

Patients with chronic kidney disease typically have heavily calcified blood vessels and preliminary studies in patients with this condition have shown improvement in the progression of atherosclerosis with the use of vitamin K2. There are now a number of trials underway to study the benefits of K2 in people with advanced vascular disease and calcification and the results of these trials should be published over the next few years. The studies to date show that vitamin K2 is extremely safe and thankfully does not promote abnormal blood clotting."

Increasingly it appears that vitamin K2 will be an important factor to be considered in the management and prevention of atherosclerosis.

Dr Ross Walker is an eminent practicing cardiologist, author of seven books and a regular presenter on TV and radio in Australia.

Australian cardiovascular disease (CD) facts

- It's the leading cause of death in Australia
- Over 44,000 deaths every year are due to CD
- Every 12 minutes someone dies from CD
- CD is main reason for hospital admissions
- Over half a million people are admitted annually due to CD