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Press Article

Calcium Deposits in Blood Vessels ("Vascular Calcification")

Many people as they get older suffer from calcium "deposits" in their blood vessels, their arteries, and even in their heart valves. This is called "vascular calcification" and it is clearly a dangerous condition. The good news is, it is a disease of lifestyle – and as such lifestyle changes will stop its advance and potentially reverse it.

From an anthropological point of view, we see that "vascular calcification" is common in modern industrial societies but extremely rare in peoples leading a primitive lifestyle. It used to be a mystery why this might be.

It used to be thought that calcium and phosphate simply deposited themselves as a sediment on the vessel wall. Nevertheless, the mystery increased when doctors observed patients losing calcium from where it *was* wanted – in the bones – while adding calcium where it was not wanted – in the arteries. We now know that something extraordinary is going on.

Astonishingly, rogue hormone signals can reprogram some cells in blood vessel walls to become bone-making cells called "osteoblasts". Secondly, artery plaque (itself the result of dysfunctioning biochemistry) produces powerful bone-repairing agents (called "BMP2" and "Msx2-Wnt"). In other words, under dysfunctional hormone signaling, blood vessels have both the ability and the means to build bone!

Complex Signaling

The system of molecular signals is incredibly complex and is still not completely understood. Moreover, biological processes are incredibly intricate and often *unpredictable*. However, the good news is that we do not need to micromanage these processes. All we need to do is put our bodies in circumstances that it recognizes, and it then manages these processes in the way nature intended.

So what is going wrong?

High fat diets, diabetes, free radicals, inflammatory immune cells (macrophages), high phosphate levels, parathyroid hormone fragments, vitamin D medication, all induce cells in the tiny vessels (capillaries) in artery walls to become bone-building cells ("osteoblasts").

Most of the same factors drive the laying down of plaque in the arteries: inflammation, oxidation and scarring produced by bad fats, high glycemic, salty diets poor in micronutrients.

Reversal.

So blood vessels aren't just absorbing calcium and turning to stone. Instead, the calcified areas are living tissues actively undergoing regeneration and repair. All we need to do to fix the problem – or avoid it in the first place – is to reverse the bad lifestyle habits.

Since the calcification is due to a whole number of things going wrong simultaneously, there is no "magic bullet" or one simple "fix". These are just some of the main "circumstances" to rectify:

- For the **Diabetes**: consume a low glycemic diet (cut out ALL starches and sugars). Avoid consuming omega-6 oils (cut out the sunflower oil, safflower oil, corn oil etc.).
- For the **Free radicals**: consume plenty of antioxidants, i.e. low glycemic fruit, salads and vegetables.
- For the **Inflammation**: consume a good fatty acid profile: Avoid saturated and trans-fats, avoid omega-6 (like sunflower oil and corn oil), and boost omega-3 (like rapeseed oil and oily fish such as mackerel and sardine).
- For the **High phosphate levels**: phosphorous has become much more common in western diets in recent years. Where from? Cola drinks! Cut them out.
- For the **Vitamin D medication**: Don't do it! Get your vitamin D from sunshine (just as nature intended). That way the body stays in control of the kinds and amounts of vitamin D it uses.

Does all this sound familiar? Yes! It is part of the prescription for living the way our bodies RECOGNIZE. And you can find all this – and how to do it in my latest book *Deadly Harvest*. You can even consult the entire text for free on my website:

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Geoff Bond is a nutritional anthropologist and a recognized authority on what it means to be human in lifestyle terms. He gives teach-ins for the medical profession and general public.

Geoff's latest book, *Deadly Harvest*, is the reference work for lifestyle anthropology and the mastering of degenerative disease. It is stocked by all good bookstores in Cyprus.

More information about Geoff's work on his website: www.geoffbond.com

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