

The influence of our diet on circulation

There are many different causes of poor circulation and many conditions that can lead to poor circulation. Symptoms of these conditions can include “cold hands”, pins and needles in hands and feet, numbness, varicose veins, leg cramps, a heavy feeling in the limbs and swollen ankles. Serious and even life threatening conditions that can occur include leg ulcers, gangrene, kidney failure and brain aneurisms. We have 100,000 miles of blood vessels in a complex network throughout our body so anything that blocks blood flow can affect circulation.

Poor circulation is medically referred to as Vascular Disease. Vascular Disease includes any condition that affects your circulatory system including diseases of arteries, veins and lymph vessels as well as blood disorders that affect circulation. These include Peripheral Artery Disease, Renal Artery Disease, Varicose Veins, Venous Blood Clots, Aneurysm, Raynaud’s Disease, Peripheral Venous Disease and Erectile Dysfunction. I discussed each of these conditions in more detail in the Westmeath Topic in late 2012 and early 2013. If you missed them you can get them at www.whelehans.ie or ask our staff for a copy.

“Teflon versus Velcro”

Healthy arteries are flexible and elastic and blood runs through the veins as if they were lined with a nonstick surface that enhances blood flow like “Teflon”. As we age, this “Teflon” coating starts to get sticky, like “Velcro”, and this leads to many health risks. When arteries stiffen, they are more likely to clog with fatty substances such as cholesterol and cause heart attacks and strokes.

Influence of diet on circulation

Diet has an influence our circulation so changes in your diet can help prevent many of the symptoms of poor circulation. Being overweight has a negative effect on circulation; maintaining a normal weight through a balanced diet and regular exercise helps prevent circulation problems such as venous clot clots, erectile dysfunction and Raynaud’s disease.

Salt

Too much salt can slow circulation, mainly through its effect on blood pressure. Processed foods which form a major part of the modern diet contain very high levels of sodium (salt). Before many of us add any salt to our food, we are already taking in more than the recommended daily allowance of salt. Salt and sodium can increase blood pressure, so it is important to limit it. It is recommended to limit salt to about one teaspoon daily. On average, 75% of our salt comes from processed food. When buying canned, processed, and convenience foods, most are labelled with sodium content so buy the brands that are lower in sodium. High is more than 1.5g salt per 100g (or 0.6g

sodium) and low in salt is 0.3g salt or less per 100g (or 0.1g sodium). If you salt your food at the table, try using less, or none. It may take a little while to get used to the new flavours, but you may find that food tastes better when you use less salt.

In February 2009, the *American Journal of Clinical Nutrition* published the results of a group of Australian researchers who tested the effects of a low sodium diet on a group of 29 overweight men and women with normal blood pressure. The participants of the study were first asked to stick to a low sodium diet for two weeks and then they were asked to consume a “normal” sodium diet where sodium levels are not restricted. During the low sodium phase the participants’ blood pressure went down significantly. Researchers also did a “brachial artery flow mediated dilation” which determines circulatory health and this test showed that circulation improved significantly during the low sodium diet. This shows that too much sodium (salt) in our diet negatively impacts on our arteries thus affecting circulation.

Can vitamin D help circulation?

One form of poor circulation is referred to as peripheral artery disease (PAD). PAD is poor circulation in the legs and feet. The main cause is atherosclerosis, where plaque made up of fatty substances including cholesterol causes narrowing to the arteries in the lower half of the body. The symptoms of PAD include weakness, an inability to walk long distances, feeling cold in the extremities, numbness and pain. A healthy lifestyle including a balanced diet, regular exercise and not smoking helps prevent PAD.

Recent research from the Albert Einstein College of Medicine in New York shows that vitamin D increases blood flow to the legs and prevents peripheral artery disease (PAD). Your body can actually manufacture D on its own (with a little help from the sun). Because exposure to sunlight can vary widely in Ireland depending on the time of year, experts state that supplements may be necessary if you do not get enough vitamin D through diet or sunlight. Many types of milk, along with some breads and cereals, are fortified with vitamin D. You can also find D naturally in fatty fish such as salmon, margarine and egg yolks. Whelehan’s sell *Adult D*[®] vitamin D supplement which contains 1000IU of vitamin D₃. It costs €11.95 per 100 pack. This is a very cost effective vitamin D supplement as it works out at only €3.58 per month when you take one daily. D₃ is the easiest type of vitamin D to absorb.

Atherosclerosis

Atherosclerosis occurs when arteries become clogged up by fatty substances, such as cholesterol. These substances are called plaques or atheromas. This build up of plaque is the root cause of various vascular diseases such as peripheral venous disease, PAD, erectile dysfunction and Raynaud’s Disease. It also causes cardiovascular conditions such as angina, heart attack, stroke and peripheral vascular disease.

Certain factors increase the risk of atherosclerosis including smoking, diabetes and high blood pressures.

Diet is a major factor, especially a diet high in fat and cholesterol. Over the course of years and decades, plaque builds up, narrows the arteries and makes them stiffer. This makes it harder for blood to flow through them. Clots may form in these narrowed arteries and block blood flow

Changes to your diet which prevents atherosclerosis

Eating more fish

Fish oil stimulates blood circulation, increases the breakdown of fibrin, a compound involved in clot and scar formation, and additionally has been shown to reduce blood pressure. There is strong scientific evidence that omega fatty acids reduce blood triglyceride levels and regular intake reduces the risk of heart attack. Healthy women who said they ate fish five times a week or more had a 45% lower risk of dying of heart disease over the next 16 years than healthy women who ate fish less than once a month, according to the Journal of the American Medical Association. An editorial in the May 15, 2000 issue of the American Journal of Cardiology claimed the time had come to add fish and fish oil supplements to the list of standard treatments of coronary heart disease.

Reduce fatty foods

Keep Trans fats to a minimum and ensure no more than 7% to 10% of your calorie intake comes from saturated fats. This includes fats found in butter, hard margarine, salad dressing, fried foods, snack foods, sweets, and desserts. When using fats as a food additive or for frying (bear in mind grilling is healthier than frying), use fats high in monounsaturated or polyunsaturated fats, for example, olive oil or peanut oil.

Healthier sources of protein

Protein is important as it is responsible for building and repair of the body's tissues amongst many other important functions. Commonly eaten high-fat protein foods (meat, dairy products) are among the main culprits in increasing heart disease risk because of their high levels of fat. Try to balance the amount of animal, fish, and vegetable sources of protein. Vegetable sources of protein include beans, nuts and whole grains; they are healthy choices because they provide fibre, vitamins and minerals as well as protein. The best animal protein choices are fish and poultry. When eating red meat, stick with the leanest cuts, choose moderate portion sizes, and make it only an occasional part of your diet.

Limit cholesterol consumption.

Limiting dietary cholesterol is recommended to prevent atherosclerosis. You can reduce cholesterol by getting energy from complex carbohydrates such as brown pasta, sweet potatoes and wholegrain breads and by limiting simple carbohydrates such as sugary drinks like coke, sugar and sweets. An egg a day is healthy for adults. When it comes to lowering blood cholesterol levels, limiting saturated fats is more important than limiting dietary cholesterol intake. The recommendation is not to exceed 300 milligrams of dietary cholesterol each day.

I have more in-depth information on atherosclerosis on our website, www.whelehans.ie, or you can ask a member of staff for a free copy.

Other foods that can improve Circulation

Fruits and vegetables of any kind are good for your health, particularly oranges, which contain high levels of bioflavonoids to promote blood flow while also strengthening capillaries. Watermelon is a natural source of lycopene, which has been known to help prevent plaque build-up, a common cause of poor blood flow. Nuts are rich in vitamin B3, which helps boost the blood flow. Garlic also helps promote circulation. Omega 3s found in fish improve circulation, especially oily fish such as salmon, fresh tuna, mackerel, herring, sardines and pilchards. We should eat two portions of fish per week, one of them oily

For comprehensive and free health advice and information call in to Whelehans, log on to www.whelehans.ie or dial 04493 34591.