

You have had your arteries checked by doppler so what does this mean?

Understand that most people have blood vessel disease- almost everyone in the western world has blood vessel disease caused by refined plant oils and animal fats or milk fats in the diet. Blood vessel disease only shows in its advanced stages unless an autopsy was carried out and this is how it was first discovered that blood vessel disease can be present in most teens.

Atherosclerosis in Young People

The Value of the Autopsy for Studies of the Epidemiology and Pathobiology of Disease.
Am J Pathol. 1998 Oct; American Journal of Pathology

1. All U.S. teenagers sampled had fatty streaks in some segment of their arterial system. Intermediate lesions (fatty plaques) developed from fatty streaks in the aorta and coronary with wide age variation but the extent of the lesions increased steadily from 15 to 34 years.
2. Raised lesions were detected earlier in the aorta than in coronary arteries; lesions containing lipids were present in the aorta of 15- to 20-year-old individuals.
3. The presence of coronary artery lesions having concentric microarchitecture and a large number of inflammatory cells was correlated with the presence of **circulating immune complexes**.

Despite this bad news the good news is that if we look at eating foods in their natural state which are plant based and this is done correctly our body is able to reverse the damage.

As much as 95% of diabetes care is self-care and, over the course of a lifetime, people with diabetes will need a variety of skills and the knowledge to enable them not only to live with their condition on a day-to-day basis but to cope when crises occur. The crisis occurs sudden when to one's surprise all the body's energies to rebuild itself are exhausted but it's not necessary that this should occur.

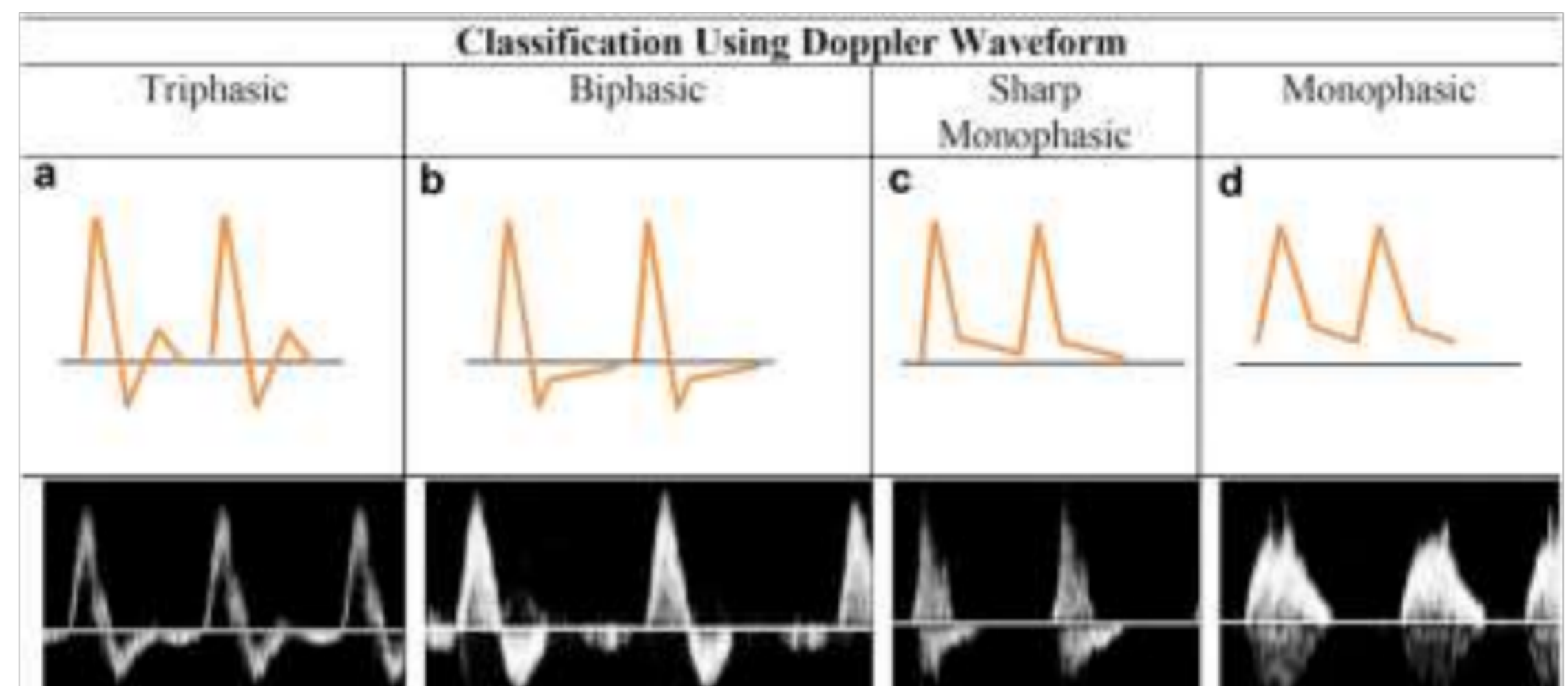
When the ultrasound picks up a change in the natural wave of the heartbeat, often associated with diabetes or peripheral vascular disease the deterioration has been advanced to make such an impression in the results. The body does a wonderful job in securing the weakened area and preventing it from traveling through the body and killing the person.

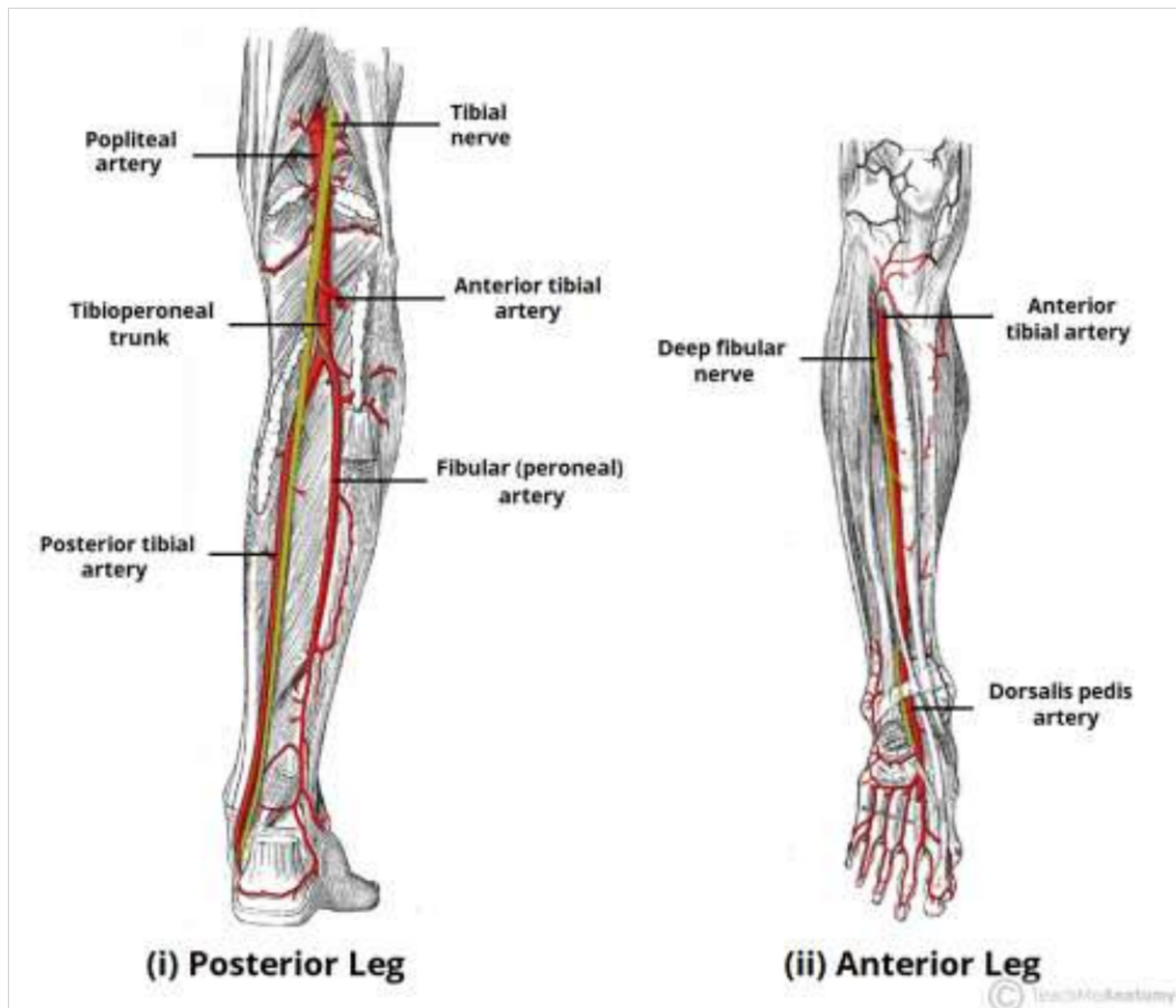
We determine the integrity of the arteries by

1. The doppler type of wave see image
2. The pressure found in the arteries
3. Amplitude of the signal

The group likely to be affected-

1. Renal insufficiency
2. 60+ years
3. 50+ years Smoker/ diabetic
4. Obese





We are generally measuring the larger blood vessels of the leg.

The wave from a triphasic continuous wave loses its bounce or the wave is cut from continuous and is described as biphasic or monophasic - basically the natural heart beat wave is altered or cut.

We can also

measure if pressure is ok just like measuring pressure through a hose. We compare the pressure on the legs to the pressure on the arm. If the pressure does not cut off the doppler signal it means that the arterial wall flexibility is lost indicating hardening of the arteries.

The pressure in the legs is divided by the arm pressure indicating whether blood pressures are normal in the leg. "In several studies, the sensitivity of an ABI measured at rest is about 68-84% and the specificity is about 84%-99%. Measuring the ABI after exercising (e.g. walking on a treadmill) increases the sensitivity of the test for identifying PAD by about another 25%."

ABI pressure results are indicated below-

ABPI value	Interpretation	Action	Nature of <u>ulcers</u> , if present
1.3 and above	Abnormal Vessel hardening from <u>PVD</u>	Refer or measure <u>Toe pressure</u>	<u>Venous ulcer</u> use full <u>compression bandaging</u>
1.0 - 1.2	Normal range	None	

0.90 - 0.99	Acceptable		
0.80 - 0.89	Some arterial disease	Manage risk factors	
0.50 - 0.79	Moderate arterial disease	Routine specialist referral	Mixed ulcers use reduced compression bandaging
under 0.50	Severe arterial disease	Urgent specialist referral	<u>Arterial ulcer</u> no compression bandaging used