Blood to the heart muscle is provided by the left and right coronary arteries, which arise from the aorta and then branch into increasingly tinier vessels. Each coronary artery supplies blood to its own area of muscle. In humans, very small, hair like vessels (capillaries) are often the only interconnections between the coronary arteries and their service areas. Sometimes, however, larger vessels interconnect the supplied areas.
Do-it-yourself cardiac bypass surgery: All you need is walking shoes and The China Study Diet Plan

When cholesterol-clogged plaque narrows an artery that feeds the heart, the body responds by trying to bulk up tiny blood vessels in the heart. As these so-called collateral vessels grow more muscular and interconnected, they begin to reroute some of the blood flow around the blockage. Scientists have been trying for years to nudge collateral blood vessels to develop and prosper, but without great success. However, you can do it at home without anything more high-tech than a comfortable pair of shoes and this china study diet.

Growing new collateral blood vessels can ease chest pain (angina), limit heart attack damage, improve survival rate, And good thing is just exercise and the China Study Diet Plan can boost these blood vessels.

Exercise dramatically increases blood flow through the coronary arteries. The inner lining of the arteries responds to this "stress" much as it does to the stress of atherosclerosis, by stimulating collateral blood vessels to elongate, widen, and form new connections.

But note that a little bit of exercise won’t do the trick. You need to push your heart. If you aren’t used to exercising, that may mean brisk walking. Any activity that gets your heart beating faster will do as long as you keep it up for 20 to 30 minutes at a time and do it several times a week.

It is a great way to prevent Heart disease, Hypertension, High cholesterol, Diabetes, Migraine etc and studies show that it can help some people with narrowed coronary arteries safely avoid bypass surgery or angioplasties.
**Back-up system’ reduces deaths due to heart diseases.**

**Figure 1.** Influence of collateral supply on infarct size. A, Occlusion of a coronary artery with subsequent myocardial infarction. Before the occlusion occurred, the area of infarction (depicted in gray) was not supplied sufficiently by collateral vessels; thus, the size of the infarct comprises a large area (that is, the entire area at risk). B, Occlusion of the same coronary artery at the same site, but in this case, the area at risk was well supplied by collateral vessels (arrows). Therefore, this patient will have no infarction at all.

**How to Turn the Capillary Network Into Collaterals**

When there is increasing traffic volume on a highway, it may make sense to make the alternate route to allow a higher traffic volume. In short, the same happens to the coronary arteries: When blood flow is increased, the inner layer of vessel cells (endothelial cells) sense this necessity and start the process of forming new arteries called "collateral vessels". In response to endurance exercise training (such as running, bicycling, swimming, and hiking) with china study diet plan, blood flow is increased, which leads to formation of collaterals. This is a very elegant treatment everybody can accomplish. It reduces the chances of the occurrence of angina pectoris, myocardial infarctions, and death. Beyond the interventional, surgical, and medical treatments against coronary artery disease, this collateral training is a natural and valuable therapy that many patients can apply by themselves, for themselves, if only they are aware of it.

Small bypass vessels which act as a ‘back-up system’ for the heart’s main arteries play a significant role in reducing the mortality of patients with coronary artery disease, according to new research.
Coronary collaterals are tiny, specialized blood vessels that connect the larger vessels in the heart. They can be thought of as the heart’s ‘back-up system’ as they are essentially invisible until activated, when they can enlarge their diameters in order to carry significant blood flow and bypass blockages.

This study pooled data from 12 studies enrolling 6,529 patients. Researchers compared patient survival rates in participants with a high number of natural bypass vessels with those with minimal bypass vessels. Survival rates were higher among those who had a higher number of well developed vessels, compared to those with fewer or no such vessels. It is found that whether patients underwent stenting to open their blocked artery or were treated with medications only, they had improved survival if their natural bypass vessels were better developed.

“A growing body of research demonstrates that these vessels are protective and reduce mortality in patients with blocked coronary arteries. We should find means to promote these natural bypass vessels in order to improve outcomes for patients with heart disease.”

Similarly, these collateral arteries are formed in every part of the body when needed and with these we can prevent our self from Heart disease, Hypertension, High cholesterol, Diabetes, Migraine etc and unnecessary invasive procedures.