

# TRANSFORMATION      Digestion and CARDIOVASCULAR HEALTH

We don't have to be cardiologists to support our patients' cardiovascular health. I certainly am not a specialist in that area, but I do know that both nutrition and digestion play a major role in maintaining the health and longevity of this important system. Transformation's audience has typically not been the cardiologist, but rather Chiropractors, Naturopaths, Integrative MDs, Nutritionists and all other holistic practitioners who assess and support their patients as a whole bringing the body into balance.

The intention of this article is to bring nutrition and digestion into focus as we learn about cardiovascular health and how that brings balance and wellness for all 11 systems of the body. Next to the digestive system, I believe our cardiovascular system is arguably the most important system in the body.

Without nutrients from digestion, the heart cannot pump. And without the heart pumping blood, the nutrients are not delivered. We must have both, and both rely on each other.

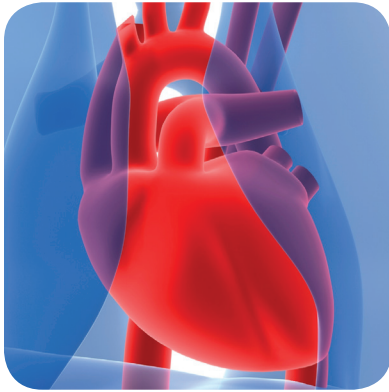
The cardiovascular system, also called the circulatory system, is made up of the heart, the vessels, and the blood – *the pump, the pipes, and the fluid*. Think of it as our internal transportation system. As we look at each part separately, consider the role each part plays in our body and keep in mind the fact that our dietary and lifestyle choices are what influence this system the most.

## THE BLOOD

I want to start with the blood first because it affects everything else. For the most part, what we put in our body ends up in the blood. Under ideal conditions, we use it or eliminate it. Under not-so-ideal conditions, we continue to circulate it or store it in our organs and tissues. Excessive circulating or stored toxins will ultimately have a negative impact on the body, in this case on the heart and vessels. We all want the ideal conditions, right? So how do we get there?



Our blood is made up of red blood cells (RBC), white blood cells (WBC), platelets, and plasma. That's interesting – we all know there is so much more in the blood. But remember, we are talking about our transportation system. The blood and its RBC's are the transporters. The RBC's carry oxygen, nutrients, hormones, enzymes, and neurotransmitters to their target sites – our cells, tissues, and organs. Without this transportation system, it is very easy to see the body would quickly cease to function. The blood is also responsible for carrying waste and toxins from the



cells for removal from the body. Without this function, our internal environment would become unbearably polluted and basically shut the body down. Therefore, maintaining the blood is crucial to not only the cardiovascular system but our entire body and its ability to function!

The quality of our diet and digestion can often be reflected in our blood, specifically the health of the cells and the presence or absence of other molecules.

A balanced diet properly digested supplies glucose, fatty acids, amino acids, vitamins, minerals, and antioxidants that promote healthy RBC's and minimize cholesterol, plaque, free radicals (glycated and oxidized proteins), and toxins. Our goal is clean blood and, simply put, “clean” blood protects the vessels and heart and very efficiently delivers nutrients throughout the body.

The next point of interest is the flow of the blood. Our own endogenous enzymes are at work constantly managing and controlling fibrin and clot formation. Excess proteins in the blood, poor digestion, and stress can all cause the RBC's to aggregate and clump together. When this happens, their ability to transport nutrients and remove waste is severely diminished. If aggregation and poor flow persists, the heart has to work harder, the vessels become damaged and our health suffers. Supplemental digestive and proteolytic enzymes are a very natural and effective way to manage the content of the blood and how well it flows.

## THE HEART

Let's talk about the heart – the “engine” that drives our transportation system. When was the last time your heart stopped or took a break from its day-to-day beating? Has it had a vacation lately? I realize that is a silly question and know that it cannot stop, but I am trying to make you think. From the moment it begins beating (which by the way is around day 21 after fertilization until the moment we die) our heart beats! When you think about that it is pretty amazing! Why the constant beating? The heart's sole purpose is to pump blood through the vessels, transporting nutrients and oxygen to every cell in the body. Without it we die.

So what can we do nutritionally to support our heart? Since the heart is a muscle, and as mentioned above never stops moving, it needs a constant supply of fuel for energy. We must supply it with proper amounts of carbohydrates and fats and ensure proper digestion for optimum availability of this fuel. It also needs proteins and amino acids to maintain its tone and strength. Additionally, from these food sources certain nutrients such as omega 3 fatty acids, Vitamin E, folic acid, other B vitamins, and magnesium are also necessary for energy production and optimal heart function. Other factors that influence the heart are regular exercise, how well we manage stress and of course the health of the vessels and blood. If the vessels and blood are not well maintained, they put a greater demand on the heart, increasing wear and tear and risk for disease.

## THE VESSELS

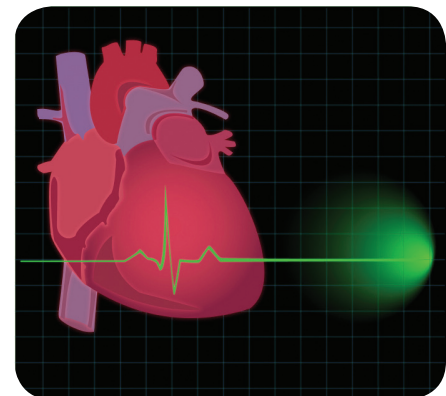
Our vessels are a network of arteries, veins, and capillaries that carry blood to and from the heart. With regard to the vessels, we are interested in their flexibility, volume capacity and having smooth, clean walls. Hardening of the arteries constricts blood flow and puts a greater demand on the heart to pump and deliver blood. Damage and inflammation to the internal walls allows for plaque buildup and also constricts and limits blood flow. Both scenarios can lead to high blood pressure and cardiovascular disease.

This leads us back to the content of the blood, where control of excess fats, proteins and free radicals is important. Again, healthy diet (EFA's and antioxidants) and optimal digestion will help maintain the vessels in good condition. To sum this up – the healthier our diet and digestive system are, the healthier our blood, heart, vessels, and entire body will be!

## WHAT WE SEE IN THE CLINIC

There are many ways to monitor the cardiovascular health of our patients – lipid profiles, B/P, HRV, inflammatory markers, and arterial calcification to name a few. Assessing these parameters not only gives us a baseline to measure results but also tells us the area of greatest priority to focus on. If you look at our *Clinical Observations* article on Cholesterol, you will see the positive results for lowering total cholesterol, LDL, and improving TC/HDL ratios.

It is not uncommon to hear “my cholesterol is better,” “my blood pressure is down,” “I no longer have edema,” or “my energy is better.” Not to mention the elimination of side effects when the patient is able to discontinue their prescription





**NUTRITION** - They need to manage their fat intake by avoiding saturated and trans-fats and by eating healthy fats like salmon, avocado, walnuts, olives, and olive oil. Eating organic, natural “whole foods” will increase nutrients and antioxidants and help limit free radical damage.

**ENZYMES** - Additional lipase is needed to support digestion of fats and help minimize plaque buildup, promoting healthy lipid ratios. Increased protease is also needed to improve blood flow and manage the lipoproteins (LDL and HDL) and oxidized proteins. This added protease will also help control inflammation and support timely elimination of toxins. Depending on the patient's needs and level of compliance, additional supplements can be added such as antioxidants, EFA's, and herbal formulas for cellular health and repair.\*

## CONCLUSION

The cardiovascular system is our body's internal transportation system – blood is contained in the vessels and pumped by the heart. The blood carries nutrients, oxygen, hormones, and immune mediators *to the cells* and metabolic waste *from the cells*. In these efforts, the cardiovascular system plays an important role in maintaining a healthy cellular environment, protection from disease, promoting healing, and supporting constant communication between the systems of the body. Transformation's enzyme formulas are designed to help promote healthy digestion, blood flow and clotting, immune modulation, and detoxification.

Here at Transformation™, we receive many calls from practitioners asking if enzymes will help their patients. It is pretty clear that support of the digestive and cardiovascular systems will have a positive effect on the body, regardless of the specific imbalance. So yes, I can confidently say *enzymes will help your patients 100% of the time!* When I'm asked what enzymes you should use, the answer is also clear. We almost always start with our digestive (TPP Digest or DigestZyme) and probiotic (TPP Probiotic or Plantadophilus) formulas plus a protease formula between meals (TPP Protease or PureZyme).\*

For additional information or assistance with your patients, call 1-800-777-1474 or visit our website, [www.TransformationEnzymes.com](http://www.TransformationEnzymes.com). We look forward to hearing from you soon!



### About the Author

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