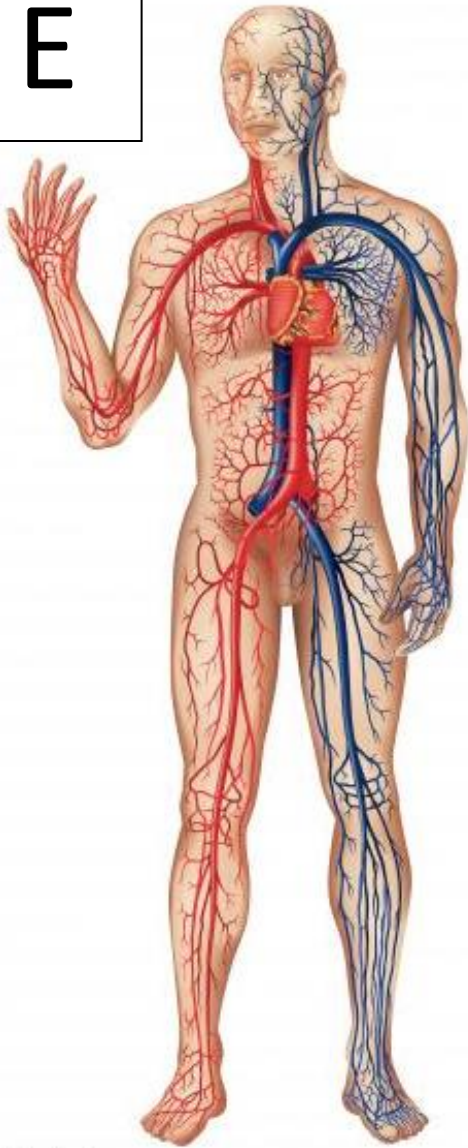


# What Is the Relationship Between the Digestive System and Circulatory System?

Like many parts of the body, the digestive system and circulatory system are related in a number of integral ways. When most people think of the circulatory system, they

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picture the heart and lungs acting to pump blood throughout the body. The enteric system, or the gut, which contains many digestive organs, requires about 30% of all cardiac output. This large amount of blood, needed for ongoing digestive functions, is the basis for the interrelation of the digestive system and circulatory system.

Generally speaking, the digestive system breaks down food that is consumed into necessary components, like vitamins and nutrients, and allows for absorption of these nutrients into the bloodstream. The circulatory system acts to move these necessary nutrients around the body as well as transport unwanted materials away.

There are two primary ways in which the digestive system and circulatory system rely on each other. The first is the need of the circulatory system for digestion to continue to function. The second is the delivery of nutrients from the digestive system to the body's bloodstream for circulation.

Like all organs and systems of the body, blood is constantly needed for performance. Blood itself is not crucial, but the nutrients within this vital fluid

are. These nutrients supply the tissues and cells with chemicals they need to continue living. The bottom line is that, without nutrients, there is no life, and without circulation, there are no nutrients.

The dynamic between the digestive system and circulatory system is mutual. Although the digestive system needs blood from the circulatory system to work properly, the circulatory system also needs the vital substances that are absorbed by the small vascular intestines in the digestive system.

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## RELATIONSHIPS BETWEEN THE SYSTEM

