

L448

## See Your Own Veins

自分の血管を見てみよう

## ■Purpose of Exhibition

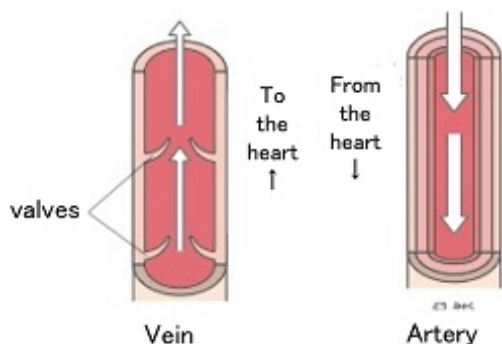
Place your arm on the table, and two types of images appear on the screen. One is a black-and-white image highlighting blood vessels (veins) in your arm, and the other is a color image showing red veins projected on the skin of your arm.

This exhibit enables users to look at veins that are normally invisible. You may find that there are more blood vessels than you expected, that there are small branches of veins, and that different people have different blood vessel patterns.

To ensure clear images, please be sure to place your arm closely on the table of the exhibit.



## ■Additional Knowledge



[Why are blood vessels clearly visible?]

Why are blood vessels clearly visible in a black-and-white image? This image shows blood vessels reflected by a beam of infrared light cast on the arm. Blood vessels, blood components in which are hard to reflect infrared light, appearing as dark lines. The palm vein authentication systems recently used by financial institutions work on the same principle.

[What are differences between a vein and an artery?]

Arteries carry blood away from the heart to the rest of the body, while veins carry blood back from the rest of the body to the heart.

Arteries have a thick muscle layer. This is because the heart pumps blood into the arteries at high pressure, whereas veins carry blood at much lower pressure. So, veins have valves that stop blood flowing backwards.

[Why do the veins of hands and legs look blue?]

The blood that flows in veins, in which the oxygen level is lower, appears darker than that in arteries. When viewed through the skin, the color of veins looks different from the original color, and when affected by the colors of their surroundings, moreover, they look bluish.

Article by Tomoko Horiuchi, curator