Every day, your body produces skin, muscle, and bone. It churns out rich red blood that carries nutrients and oxygen to remote outposts, and it sends nerve signals skipping along thousands of miles of brain and body pathways. It also formulates chemical messengers that shuttle from one organ to another, issuing the instructions that help sustain your life.

But to do all this, your body requires some raw materials. These include at least 30 vitamins, minerals, and dietary components that your body needs but cannot manufacture on its own in sufficient amounts. Vitamins and minerals are considered essential nutrients—because acting in concert, they perform hundreds of roles in the body. They help shore up bones, heal wounds, and bolster your immune system. They also convert food into energy, and repair cellular damage.

But trying to keep track of what all these vitamins and minerals do can be confusing. Read enough articles on the topic, and your eyes may swim with the alphabet-soup references to these nutrients, which are known mainly be their initials (such as vitamins A, B, C, D, E, and K—to name just a few). In this article, you’ll gain a better understanding of what these vitamins and minerals actually do in the body and why you want to make sure you’re getting enough of them.

Although they are all considered micronutrients, vitamins and minerals differ in basic ways. Vitamins are organic and can be broken down by heat, air, or acid. Minerals are inorganic and hold on to their chemical structure. It means the minerals in soil and water easily find their way into your body through the plants, fish, animals, and fluids you consume. But it’s tougher to shuttle vitamins from food and other sources into your body because cooking, storage, and simple exposure to air can inactivate these more fragile compounds.
Many micronutrients interact. Vitamin D enables your body to pluck calcium from food sources passing through your digestive tract rather than harvesting it from your bones. Vitamin C helps you absorb iron. The interplay of micronutrients isn’t always cooperative, however. For example, vitamin C blocks your body’s ability to assimilate the essential mineral copper. And even a minor overload of the mineral manganese can worsen iron deficiency.

How to cite this article: Srikanth. “Editorial Note on Essential Vitamins and Minerals for Health.” J Vit and min 10(2021): 2-1