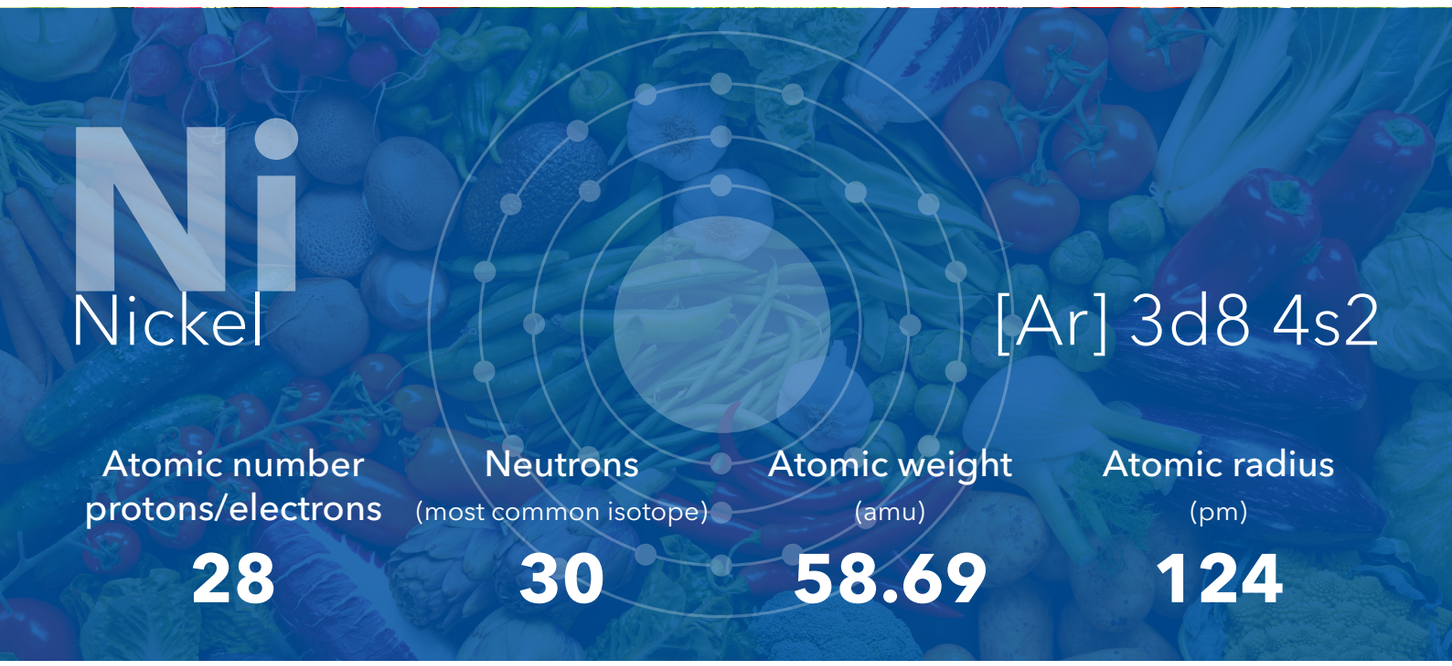
Nickel **(Ni)**

Nickel is a hard transition metal with silvery-white appearance and occurs naturally in the environment. It is one of the most abundant elements on Earth and is found in many mineral ores. Nickel is used extensively in everything from stainless steel, superalloys, baterries, in the process of electroplating, as a chemical catalyst and base metal in coins.



Functions/Health effects:

Depending on the route of exposure, nickel causes variety of health problems. Contact with the skin causes irritation, allergies or even dermatitis, as some nickel ions can be absorbed by the skin. Breathing nickel particles may lead to lung damage and eventually to nose and lung cancer. Chronic nickel exposure also damages liver, kidneys, and reproductive system in humans.

Sources:

Since nickel is an essential element for plants, some of them contain significant amounts of this metal. Some vegetables, such as spinach, asparagus, carrots, broccoli and green beans as well as cocoa, chocolate and nuts are significant sources of nickel. Nickel is also present in the air in the form of nanoparticles produced during burning of fossil fuels, which contain nickel and a number of heavy metals.

Did you know that?

Nitinol is a shape memory alloy made from nickel and titanium. When heated, this material has the ability to return to its original shape even after severe deformation.

Nickel is the fifth most abundant element on Earth, although most of it is present in the outer core of Earth along with iron. On the surface, it is only the 22nd most abundant element.