

# Sulfur (S)



**Sulfur** is an element belonging to the group of non-metals such as phosphorus. It usually has the appearance of a yellow powder or solid. It occurs in nature in various minerals as well as in its pure elemental form. Because it is present in all living organisms, it is also found in fossil fuels. Nonetheless, it is extracted mostly as a byproduct of industrial processes and is mainly used for production of the most important chemical substance of our modern times - sulfuric acid.

**S**  
Sulfur

[Ar] 3s<sup>2</sup> 3p<sup>4</sup>

Atomic number protons/electrons	Neutrons (most common isotope)	Atomic weight (amu)	Atomic radius (pm)
<b>16</b>	<b>16</b>	<b>32.06</b>	<b>105</b>

## Functions/Health effect:

In humans, sulfur is a component of two amino acids and several co-enzymes. It plays a role in building and fixing your DNA, in metabolism and insulin production, collagen and elastin synthesis, the detoxification process, and many more. While many chemical sulfur compounds, such as hydrogen sulfide, are toxic to us, others are beneficial, such as a compound called allicin, which gives garlic its distinctive aroma and health benefits.

## Sources:

Sulfur is found in all foods, and allium vegetables such as garlic, leaks and onions, and cruciferous vegetables such as broccoli, cauliflower and kale are particularly good sources. Eggs are another good source of sulfur. There also exist special medicines containing sulfur prescribed for certain medical conditions. There is no recommended daily allowance as the majority of the population will consume enough by eating a healthy and rich diet with no need for supplementation.

## Did you know that?

Chemical sulfur compounds called mercaptans are added to natural gas to make it detectable in case of leakage. Although most sulfur compounds have strong odor, pure elemental sulfur is odorless.

Garlic contains 33 sulfur compounds, and another sulfur compound in onions is the reason why you cry when cutting them.

Some cave bacteria can use sulfur as an energy source. In the process, they create stalactites called snottites, which drip sulfuric acid strong enough to burn holes in your clothes.

Food  
division

