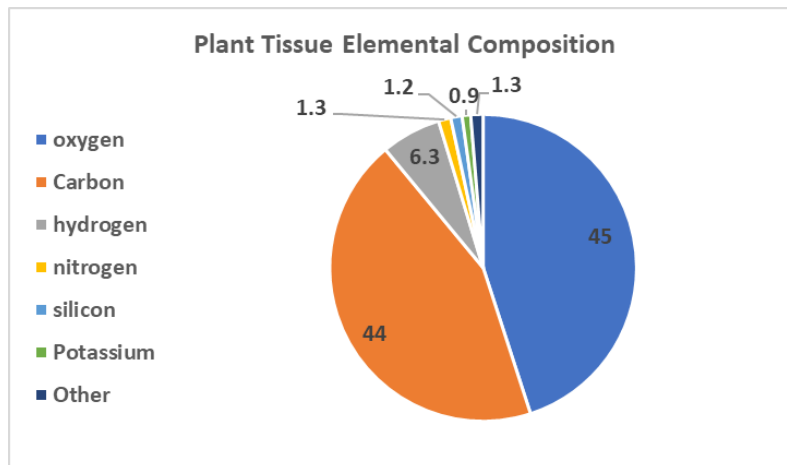
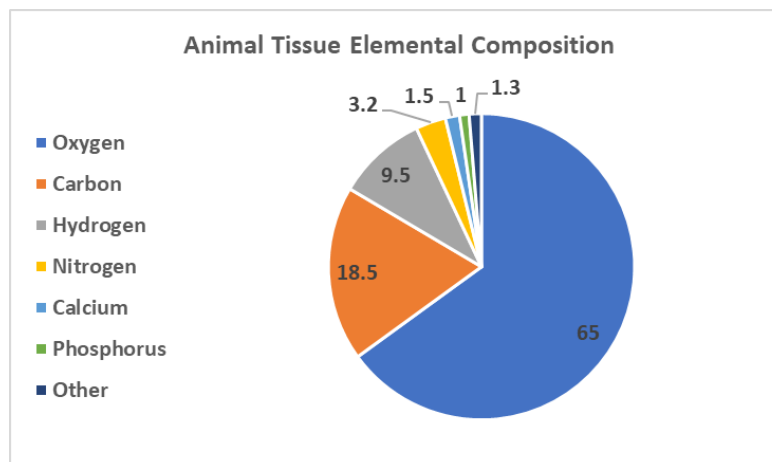


## Did you know?

Elemental concentrations in plant tissue can vary widely depending on the stage of growth and environmental conditions, but composition of majority of plant's tissue is close to:



Almost 99% of the mass of an animal's body is mainly made up of six elements: oxygen, carbon, hydrogen, nitrogen, calcium, and phosphorus. About 1.3% is composed of other elements, with potassium, sulfur, sodium, chlorine, and magnesium being the majority. The remaining elements are trace elements; the mass of all trace elements put together is less than 10 grams in the human body.



If we removed the water from our bodies, we would find that carbon makes up most of the rest of our weight, or mass; the same is true for plants. We get carbon from our food, but plants don't get their carbon from the soil, or from the sun, or from water. Where do plants get carbon from?

Carbon (from Latin: carbo "coal") is a chemical element with the symbol C and atomic number 6; It is nonmetallic and tetravalent making four electrons available to form covalent chemical bonds. The atoms of carbon

can bond together in different ways, termed allotropes of carbon. The best known are graphite, diamond, and amorphous carbon. Carbon is a solid substance, therefore has no ability to travel by itself, but in the burning process, carbon joined with oxygen gains mobility becoming the gas known as carbon dioxide, which is moved by wind and may travel from the burning forests of California and be pulled out of the air by plants in New York giving them carbon that is crucial for their existence.

It is one of the most important gases on the earth because plants use it to produce carbohydrates in a process called photosynthesis. Since humans and animals depend on plants for food, photosynthesis is necessary for the survival of life on earth. There would be no plants, no trees, no life on Earth without carbon dioxide. The atmosphere of Earth, commonly known as air, is the layer of gases that surrounds the planet Earth and is retained by Earth's gravity. By volume, dry air contains 78.09% nitrogen, 20.95% oxygen, 0.93% argon, 0.04% carbon dioxide, and small amounts of other gases.

In nature everything is self-regulating, for example: the population of predators depends on the population of prey, more animals that predators can feed on leads to a growth in the predator population. An overgrown population of predators will lower population of prey and over time the population of predators will adjust to reach an optimal level. Similarly rising levels of CO<sub>2</sub> in the atmosphere will cause an abundance of trees and plants, which through photosynthesis will bring down the level of CO<sub>2</sub> to an average of 250 to 350 ppm depending on elevation and other circumstances.

Before air conditioning in the big city entire families on hot summer days would spend nights and sleep in a park. In New York City in July or August, in the middle of the day when an average person walking down the street stops at the store just to cool off, in Central Park and other parks we can see mothers with little children, chatting for hours. The same day, the same city, almost the same place, but there is one difference: trees. Trees to extract carbon dioxide from the air during photosynthesis need the same amount of energy that was released when burning the carbon and they take it from sunlight, thus lowering its intensity which makes a significant, noticeable, difference. In the city on a scorching summer day an AC becomes a necessity, but in the suburbs in houses overshadowed by the trees there is no real need for it.

Some say that the accumulation of greenhouse gases is responsible for fluctuating temperatures and other weather abnormalities. There is one problem. In the summer, the temperature rises on sunny days, but in the winter on cloudy ones. We should ask ourselves "why does this happen?" In a greenhouse the temperature rises on sunny days all year around and drops on cloudy days.

The answer is simple. In greenhouses heat is trapped by glass walls and ceiling. The Earth doesn't have it, so the same clouds which prevent sunlight from heating the earth in the summer instead are trapping and holding heat close to the surface of the earth in the winter.

Clouds pushed by winds may travel thousands of miles and mainly they are responsible for weather changes all over the world also changes in ocean currents are causing local climatic shifts, not CO<sub>2</sub>

If middle school student using basic knowledge about plants, CO<sub>2</sub> and photosynthesis can easily prove that CO<sub>2</sub> is not a pollutant, is not responsible for global warming or cooling and can prove that the rising of level of CO<sub>2</sub> in the air stimulates the growth of trees to stabilize the climate. Then why did the EPA declare CO<sub>2</sub> a pollutant under the Clean Air Act and established New Source Performance Standards (NSPS) to limit carbon dioxide emissions?

Follow the money some will say. Many people behind this regulation became rich and famous and are living a lavish life, many scientists have secured well paid jobs. They are gaining power and at the same time the average person is losing their freedom, prosperity and ability to succeed in life. It is a modern form of slavery, worse than the slavery ended by the American Civil War, a slavery of socialism and communism, creating misery for all, responsible for the deaths of over 100 Million people in last century alone.