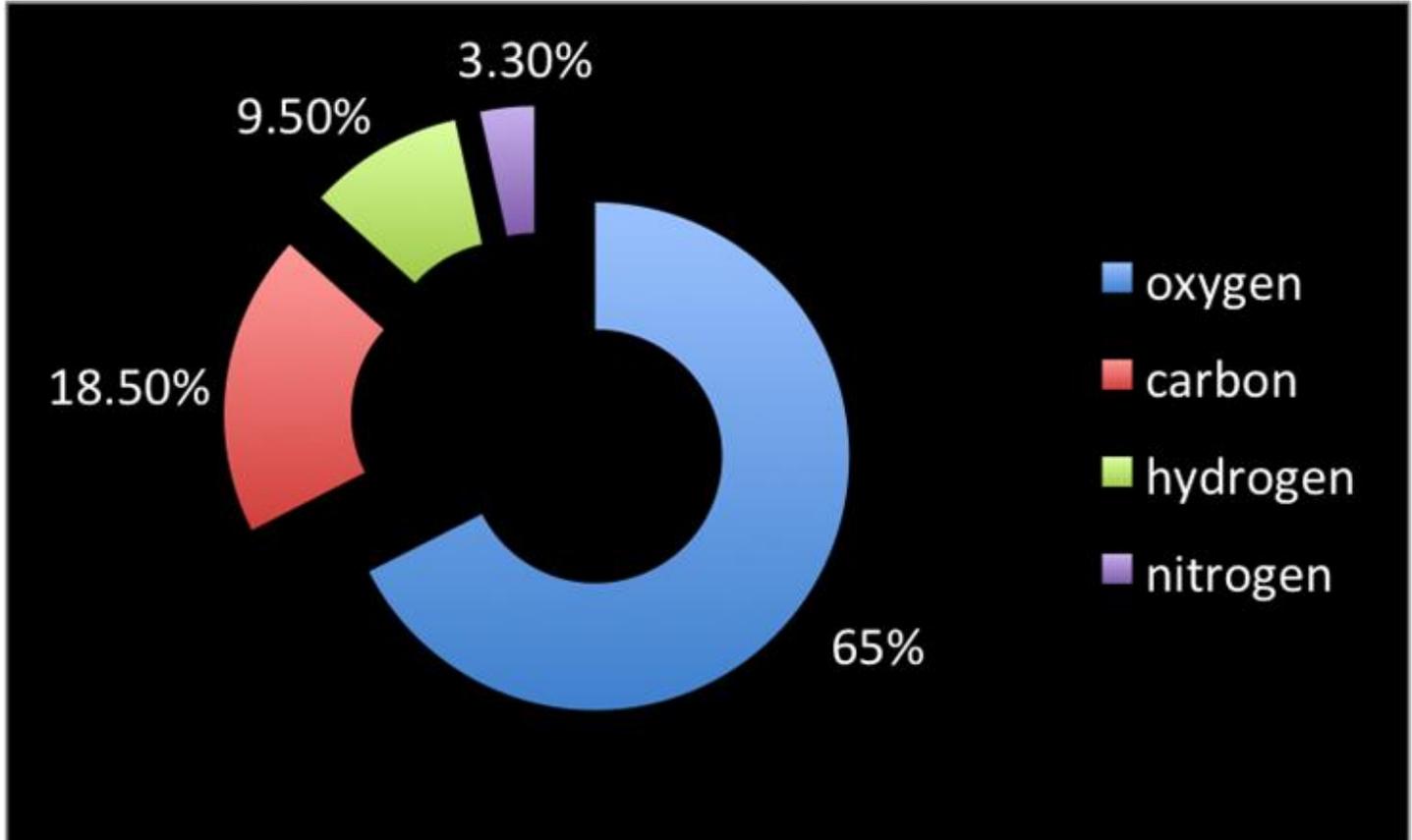


# Cosmic Recipe for Earthlings

By Dolly Setton

Crucial elements in people formed later in the universe's history than expected.



## Human Body Ingredients

The four ingredients below are essential parts of the body's protein, carbohydrate and fat architecture. (Expressed as percentage of body weight).

### **Oxygen — 65.0%**

Critical to the conversion of food into energy.

### **Carbon — 18.5%**

The so-called backbone of the building blocks of the body and a key part of other important compounds, such as testosterone and estrogen.

### **Hydrogen — 9.5%**

Helps transport nutrients, remove wastes and regulate body temperature. Also plays an important role in energy production.

### **Nitrogen — 3.3%**

Found in amino acids, the building blocks of proteins; an essential part of the nucleic acids that constitute DNA.

# Other Key Elements

## **Calcium — 1.5%**

Lends rigidity and strength to bones and teeth; also important for the functioning of nerves and muscles, and for blood clotting.

## **Phosphorus — 1.0%**

Needed for building and maintaining bones and teeth; also found in the molecule ATP (adenosine triphosphate), which provides energy that drives chemical reactions in cells.

## **Potassium — 0.4%**

Important for electrical signaling in nerves and maintaining the balance of water in the body.

## **Sulfur — 0.3%**

Found in cartilage, insulin (the hormone that enables the body to use sugar), breast milk, proteins that play a role in the immune system, and keratin, a substance in skin, hair and nails.

## **Chlorine — 0.2%**

Needed by nerves to function properly; also helps produce gastric juices.

## **Sodium — 0.2%**

Plays a critical role in nerves' electrical signaling; also helps regulate the amount of water in the body.

## **Magnesium — 0.1%**

Plays an important role in the structure of the skeleton and muscles; also found in molecules that help enzymes use ATP to supply energy for chemical reactions in cells.

## **Iodine (trace amount)**

Part of an essential hormone produced by the thyroid gland; regulates metabolism.

## **Iron (trace amount)**

Part of hemoglobin, which carries oxygen in red blood cells.

## **Zinc (trace amount)**

Forms part of some enzymes involved in digestion.

Source:

<http://discovermagazine.com/galleries/2013/august/cosmic-recipe-for-earthlings#.UgbMApJGYoN>