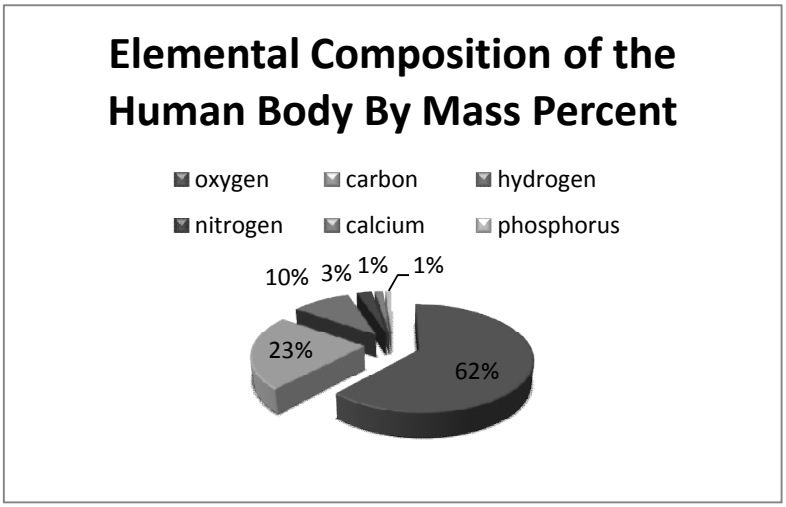
	Mass of element in a 70-kg person	Percent by mass
oxygen	43 kg	61.3533
carbon	16 kg	22.8291
hydrogen	7 kg	9.9877
nitrogen	1.8 kg	2.5683
calcium	1.0 kg	1.4268
phosphorus	780 g	1.1129
potassium	140 g	0.20
sulfur	140 g	0.20
sodium	100 g	0.14
chlorine	95 g	0.14
magnesium	19 g	0.03
iron	4.2 g	0.01
fluorine	2.6 g	0.004
zinc	2.3 g	0.003
silicon	1.0 g	0.001
rubidium	0.68 g	0.001
strontium	0.32 g	0.0005
bromine	0.26 g	0.0004
lead	0.12 g	0.0002
copper	72 mg	0.0001
aluminum	60 mg	0.0001
cadmium	50 mg	0.0001
cerium	40 mg	0.0001
barium	22 mg	0.00003
iodine	20 mg	0.00003
tin	20 mg	0.00003
titanium	20 mg	0.00003
boron	18 mg	0.00003
nickel	15 mg	0.00002
selenium	15 mg	0.00002
chromium	14 mg	0.00002
manganese	12 mg	0.00002
arsenic	7 mg	0.000010
lithium	7 mg	0.000010
cesium	6 mg	0.000009
mercury	6 mg	0.000009
germanium	5 mg	0.000007
molybdenum	5 mg	0.000007
cobalt	3 mg	0.000004
antimony	2 mg	0.000003
silver	2 mg	0.000003
niobium	1.5 mg	0.000002
zirconium	1 mg	0.000001
lanthanium	0.8 mg	0.000001
gallium	0.7 mg	0.000001
tellurium	0.7 mg	0.000001
yttrium	0.6 mg	0.0000009
bismuth	0.5 mg	0.0000007
thallium	0.5 mg	0.0000007
indium	0.4 mg	0.0000006
gold	0.2 mg	0.0000003
scandium	0.2 mg	0.0000003
tantalum	0.2 mg	0.0000003
vanadium	0.11 mg	0.0000002
thorium	0.1 mg	0.0000001
uranium	0.1 mg	0.0000001
samarium	50 µg	0.00000007
beryllium	36 µg	0.00000005
tungsten	20 µg	0.00000003



Notes

Oxygen is the most abundant element in the earth's crust and in the body. The body's 43 kilograms of oxygen is found mostly as a component of water, which makes up 70% of total body weight. Oxygen is also an integral component of all proteins, nucleic acids (DNA and RNA), carbohydrates, and fats.

Vanadium is the body's least abundant element (0.11 mg) that has a known biologic role, followed by cobalt (3 mg), the latter being a constituent of vitamin B12.

Rubidium is the most abundant element in the body (0.68 g) that has no known biological role (silicon, which is slightly more abundant, may or may not have a metabolic function).

The last of the body's elements to be discovered was **fluorine**, by Moissan in 1886.

Raw data from which this table was made are from Emsley, John, *The Elements* , 3rd ed., Clarendon Press, Oxford, 1998. This is a great trove of information, which I highly recommend for anyone wishing to learn more about the elements.