

What is vitamin D?

Although most often categorized as a vitamin, vitamin D is actually a hormone. Vitamins cannot be produced by the cells in your body and thus must be obtained via consumption from dietary sources. Vitamin D, however, can be made by the cells in your body in a process that involves the conversion of cholesterol derivatives into vitamin D using sunlight.

Vitamin D₃ is produced in the skin of humans (and other vertebrates) after exposure to ultraviolet B light (uVB). Vitamin D₃ only becomes biologically active after two conversions; one in the liver (primarily) to 25-hydroxyvitamin D(25 OHD), the circulating form of vitamin D, and then in the kidney to 1,25-dihydroxyvitamin D (1,25 (OH)₂D), the biologically active hormone form which is also known as calcitriol. Calcitriol or biologically active vitamin D is often considered the most potent steroid hormone in human physiology.