



Cholesterol And Sitosterol, Two Members of the Steroid Family which Structures Differ by A Single Ethyl Group, but which Maintain the Right Balance between Plant and Animal Kingdoms

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Abstract — *Cholesterol* and *Sitosterol* are two members of the steroid family, which molecular structures differ only by the presence of an ethyl substituent at the position 24 of the steroid skeleton. *Cholesterol* is mainly synthesized in large quantities in the liver of animals and only in small quantities by plants. In contrast *Sitosterol* is only synthesized by plants. This tiny difference of an ethyl group between the two steroids structures have induced profound effects on the climatic changes during evolution, but plant sterols still have important effects on cholesterol metabolism on humans.

Keywords: *steroids, cholesterol, sitosterol, plants, animals, metabolism*

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