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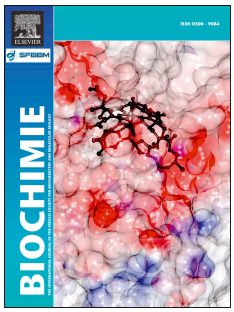

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Control of adipogenesis by oxylipins and PPARs

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Abstract. Oxylipins are bioactive metabolites derived from the oxygenation of ω3 and ω6 polyunsaturated fatty acids, triggered essentially by cyclooxygenase and lipoxygenase activities. Oxylipins are involved in the development and function of adipose tissue and their productions are strictly related to diet quality and quantity. Oxylipins signal *via* cell surface membrane (G Proteins coupled receptors) and nuclear receptors (peroxisome-proliferative nuclear receptors), two pathways playing a pivotal role in adipocyte biology. In this review, we made an attempt to cover the available knowledge about synthesis and molecular function of oxylipins known to modulate adipogenesis, adipocyte function and phenotype conversion, with a focus on their interaction with peroxisome proliferator-activated nuclear receptor family.

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