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**Molecules of Interest – Mangiferin – A Review**

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***Author’s contribution***

*The sole author designed, analyzed and interpreted and prepared the manuscript.*

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**ABSTRACT**

Mangiferin is a 1,3,6,7-tetrahydroxyxanthone-C2-β-D-glucoside that has been reported to occur

naturally in several genera. It exhibits a wide array of biological activities and also in several cases

is responsible for the traditional use of its natural sources. It has been shown to exhibit various

pharmacological activities, and thus has several possible applications in clinical research. This

review presents a comprehensive literature search of different studies carried out on this

secondary metabolite, especially its antidiabetic, anticancer, and antioxidant effects as well as,

anti-inflammatory, antiviral, immunomodulatory and antimicrobial activities. The emphasis of the

current review is on the chemistry and biological activity of mangiferin and its derivatives in addition

to rational and ecologically acceptable methods for provision of this natural compound on a large

scale. Therefore, further investigations may help in exploiting its properties and developing phytopharmaceuticals

based on it.

*Keywords: Mangiferin; xanthone; antidiabetic; anticancer; antioxidant; antimicrobial; antiviral; antiinflammatory.*

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