

## **Rose hip (*Rosa canina L.*): A functional food perspective**

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### **ABSTRACT:**

Rose hip (*Rosa canina L.*) is the pseudo-fruit of the rose plant, which is widely known as a valuable source of polyphenols and vitamin C. Both *in vivo* and *in vitro* studies have demonstrated that this fruit exhibits anti-inflammatory, antioxidant, and antiobesogenic activities. The health benefits of Rose hip (RH) have been attributed to its wide range of bioactive compounds including the anti-inflammatory galactolipid: (2S)-1,2-di-O-[(9Z,12Z,15Z)-octadeca-9,12,15-trienoyl]-3-O- $\beta$ -D-galactopyranosyl glycerol (GOPO), vitamin C, phenolics, lycopene, lutein, zeaxanthin, and other carotenoids. As cyclooxygenase inhibitors, RH compounds may reduce the risk of cancer, heart disease, and various inflammatory conditions. The aim of this review is to present an overview of the functional, medical, and physiological properties of RH.

**Keywords:** *Rosa canina*, Rose hip, antioxidant, anti-inflammatory, GOPO, lycopene, and vitamin C