

Therapeutic Potential of *Umbilicus rupestris* in Modern Phytotherapy

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Introduction: Wild edible plants, defined as species that grow spontaneously without cultivation, hold nutritional and medicinal value, particularly in traditional diets of rural populations [1,2]. *Umbilicus rupestris* (Salisb.) Dandy, a succulent species of the Crassulaceae family, is native to Western Europe and the Mediterranean, where it thrives on stone walls, cliffs, and rocky surfaces. Despite its historical use in folk medicine, particularly for treating skin inflammations and burns, scientific research on its bioactive potential remains limited [3,4]. **Objective:** This review aims to assess the therapeutic potential of *U. rupestris* and its possible applications in modern phytotherapy. **Methodology:** Different databases (PubMed, Scopus, and Web of Science) were searched using keywords such as “*Umbilicus rupestris*”, “succulent” and “therapeutics” with a temporary range between 2010-2025. **Results:** The plant's extracts exhibit a low energy value, making them suitable for inclusion in low-carbohydrate diets, particularly beneficial for individuals managing metabolic disorders such as diabetes [5]. Its biochemical composition reveals a predominance of polyunsaturated fatty acids (PUFAs), with an advantageous omega-3 to omega-6 ratio for cardiovascular health. Moreover, studies have highlighted the anti-inflammatory potential of *U. rupestris*, showing inhibition of induced inflammation in Wistar rat paws in a dose-dependent manner [6]. The extracts also display antimicrobial properties, effectively inhibiting the growth of multidrug-resistant Gram-positive and Gram-negative bacteria, without exhibiting cytotoxic effects at tested concentrations [5]. **Conclusions:** These findings suggest promising applications for *U. rupestris* in dermo-cosmetic formulations, antioxidant supplements, and therapeutic agents for inflammatory and infectious diseases. Future research should focus on exploring the underlying mechanisms of these bioactivities and evaluating their clinical relevance, contributing to incorporating this underexplored medicinal plant into modern phytotherapeutic practices.

Keywords: *Umbilicus rupestris*, phytotherapy, bioactivity, antioxidant, anti-inflammatory, antimicrobial

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