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### **P3.9. A multifaceted review of peas as natural resources for a sustainable future**

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The presented manuscript was developed through collaboration within CA DIVERSICROP, which supports scientific networking across Europe on sustainable crop diversification. The review offers a current and comprehensive synthesis of scientific evidence on peas (*Pisum sativum* L.), highlighting their nutritional value, health benefits, environmental advantages, and growing significance in plant-based diets and sustainable food systems. The Manuscript combines contributions from 23 co-authors from 10 countries, with all co-authors making significant contributions to their respective areas of expertise. With growing global interest in sustainable, health-conscious diets, a comprehensive understanding of the nutritional and therapeutic potential of peas is more crucial than ever. This review synthesizes current evidence on the nutritional composition, bioactive compounds, physicochemical properties, and health benefits of peas; examines their technological and functional applications in sustainable food innovation; and highlights opportunities to valorize underutilized pea components within circular economy frameworks. The article examines the full range of peas' value, from their fundamental nutritional contributions to their emerging roles in disease prevention and the treatment of various health conditions, positioning peas as a strategic crop at the intersection of human and planetary health and environmental sustainability. The insights gained from this review could inform and facilitate policy development, supporting the creation of frameworks that promote sustainable agricultural practices, enhance food security, and drive the transition to circular food systems.

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