Bioactive Food Compounds Against Liver Cancer

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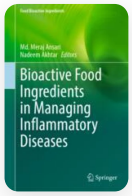

Bioactive Food Ingredients in Managing Inflammatory Diseases

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Part of the book series: Food Bioactive Ingredients ((FBC))

Abstract

Liver cancer arises from the dysregulated proliferation of hepatic cells and is driven by a multitude of contributing factors, as revealed through advanced cellular biology and comprehensive genomic investigations. Tumor initiation and progression in hepatic tissues are frequently attributed to somatic mutations, which may result in similar phenotypic manifestations across different liver cancer subtypes. Over recent decades, a deeper understanding of the genetic and molecular aberrations involved in hepatocarcinogenesis has emerged. This evolving insight holds promise for the development of innovative therapeutic agents capable of modulating multiple molecular targets implicated in liver cancer progression. This chapter explores the pathophysiological mechanisms underpinning liver cancer, outlines traditional treatment modalities, and highlights the therapeutic potential of bioactive phytochemicals. These naturally occurring compounds, present in everyday dietary sources, represent a valuable adjunct or alternative to existing liver cancer therapies, potentially improving outcomes through multi-target engagement and minimal toxicity.

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