Anticancer Properties of Flavonoids: Roles in Various Stages of Carcinogenesis

Submitted by Emmanuel Lemoine on Wed, 12/11/2013 - 17:07

Titre: Anticancer Properties of Flavonoids: Roles in Various Stages of Carcinogenesis

Type de publication: Article de revue

Auteur: Clere, Nicolas [1], Faure, Sébastien [2], Martinez, Maria Carmen [3], Andriantsitohaina, Ramaroson [4]

Pays: Etats-Unis

Editeur: Bentham Science Publishers

Ville: Texas

Type: Article scientifique dans une revue à comité de lecture

Année: 2011

Langue: Anglais

Date: 2011/04/01

Numéro: 2

Pagination: 62 - 77

Volume: 9

Titre de la revue: Cardiovascular and Hematological Agents in Medicinal Chemistry

ISSN: 1871-5257

Mots-clés: Angiogenesis [5], Apigenin [6], Carcinogenesis [7], Delphinidin [8], Egcg [9], Flavonoids [10], Genistein [11], Metastasis [12], tumor initiation [13], tumor microenvironment [14], tumor progression [15] High dietary intake of fruits and vegetables is consistently associated with a reduced risk of common human cancers. The specific mechanisms of action of most phytochemicals in cancer prevention are not yet clear but appear to be varied. One class of compounds currently under investigation is flavonoids, a large group of molecules with similar structure. Although their bioavailability is discussed, numerous in vitro and animal model data suggest that flavonoids modulate important cellular and molecular mechanisms related to carcinogenesis, a multistep process involving the transformation, survival, proliferation, invasion, angiogenesis, and metastasis of the tumor cells. Epidemiological studies confirmed that, among many flavonoids, apigenin, epigallocatechin gallate, delphinidin and genistein appear to be beneficial compounds in various stages of carcinogenesis. Therefore, according to in vitro and in vivo studies, this review attempts to increase our understanding about the preventive and therapeutic effects of these compounds to facilitate extrapolation of results from animal studies to human situations.

URL de la notice: http://okina.univ-angers.fr/publications/ua249 [16]

DOI: 10.2174/187152511796196498 [17]

Lien vers le document: http://dx.doi.org/10.2174/187152511796196498 [17]

Titre abrégé: Anticancer Properties of Flavonoids
Liens

Publié sur Okina (http://okina.univ-angers.fr)