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Editorial

Back to the Natural Herbs

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Regarding the environmental hazards arise from pollutions of air, water, and foods, we suggest people all over the world to use the natural herbs as a daily lifestyle to control the dangerous complains of toxicants. Moreover, there is an increased demand for using plants in therapy "Back to nature" instead of using synthetic drugs, which have many adverse effects that may be more dangerous than the diseases itself [1]. In the following report, we will mention some herbs that recommended for dietary lifestyle.

Nigella sativa

Nigella sativa seeds and its products are one of the most medicinal plants. The use of them in the field of therapy is so old. The ancient Egyptians used *N. sativa* in the treatment of many diseases. Moreover, it is one of the most important Islamic traditional medicine. *N. sativa* and its active constituent thymoquinone (TQ) have long been used in traditional medicine for treating various conditions related to the respiratory and gastrointestinal systems as well as different types of cancers [2]. *N. sativa* seeds have a long-term history in medicine with diverse therapeutic benefits against hypertension, headache, bronchial asthma, gastrointestinal problems and eczema [3] in addition to antioxidant activity [4,5]. It has been reported thymoquinone (TQ), present in a volatile oil of *N. Sativa* induces antioxidant, anti-inflammatory [6,7] and inhibits the development of many types of malignant neoplastic disease cells [8,9].

Costus speciosus

Costus speciosus is native to South East Asia, especially found in India, Srilanka, Indonesia and Malaysia. *C. speciosus* have numerous therapeutic potentials against a wide variety of complains. The therapeutic properties of *C. speciosus* are attributed to the presence of various ingredients such as alkaloids, flavonoids, glycosides, phenols, saponins, sterols and sesquiterpenes. The rhizomes and roots are ascribed to have an anthelmintic, expectorant, tonic, aphrodisiac, flatulence, anti-inflammatory, antidiabetic, hepatoprotective, antihyperlipidemic, antispasmodic and antimicrobial activities [10]. Indeed, leaf extract of *C. speciosus* shows potential *in vitro* anticancer activity toward liver cancer [11]. *In vitro* studies were stated the antioxidant potentials of *C. speciosus* extracts, which integrate hydroxyl radical scavenging activities and free radical quenching abilities [12]. The anticancer potential of *C. speciosus* rhizome extract was evaluated in human colon adenocarcinoma cell lines by the annexin-fluorescein isothiocyanate-conjugated assay. *C. speciosus* rhizome extract showed significant antioxidant and antiproliferative activities in a dose- and time-dependent manners [13].

Phoenix dactylifera

Phoenix dactylifera belongs to the *Arecaceae* family; its leaves, barks, pits, fruits and pollens have antioxidant, anticancer, hepatoprotective, neuroprotective, nephroprotective, gastrointestinal protective, antidiabetic, antihyperlipidemic, sexual improvement and antimicrobial potentials [24]. The broad pharmacological effects of *P. dactylifera* may be attributed to the powerful and beneficial ingredients including phenolics, flavonoids, carotenoids, vitamins, minerals, amino acids, fatty acids and organic acids [14]. *P. dactylifera* belongs to the Arecaceae botanical family, which contains about 200 genera with around 3,000 species [15]. *P. dactylifera* have been developed in the Middle East over the last 6000 years [16]. Numerous research studies have proven the preventive effect of *P. dactylifera* against dif-

ferent environmental chemicals that may be toxic for some tissues in animal and human [17]. Phenolics of powerful antioxidants have been isolated from *P. dactylifera* such as ferulic, gallic, catechin, chlorogenic, caffeic, coumaric, resorcinol, protocatechuic, dactyliferic, 3-o-caffeoylshikimic, sinapic, p-hydroxybenzoic, vanillic, syringic, procyanidin and isochlorogenic acids [18-20]. The anthocyanins, apigenin, isoquercetrin, quercetin, quercetrin, procyanidins, luteolin and rutin constitute the flavonoid content of *P. dactylifera*. Moreover, *P. dactylifera* contains considerable amounts of antioxidant vitamins C, A and E [21-23].

Chicory (Cichorium intybus L.)

Chicory (Cichorium intybus L.), a member of the *Asteraceae* family, is a well-recognized herb possessing several biological activities. It is native to Europe and Asia, and was grown by ancient Egyptians as a medicinal plant, vegetable crop, and animal feed [25]. Chicory has been used in traditional medication for the treatment of various diseases, particularly bowel-gastric disorders. Important phytochemicals with nutraceutical potential are distributed throughout the plant such as phenolic acids, flavonoids, coumarin, cinnamic and quinic acid derivatives, and anthocyanins [26]. As well, it contains compounds with putative health benefits, such as alkaloids, inulin, sesquiterpene lactones, vitamins, chlorophyll pigments, unsaturated sterols, saponins, and tannins [27]. Fresh chicory root has been stated to possess antimicrobial, anti-hyperglycemic, immunostimulant, antioxidant, anti-toxic, anti-inflammatory, and anti-tumor activities [28]. Leaves also are good sources of phenols, vitamins A and C as well as potassium, calcium, and phosphorus [29]. Due to phytochemical and nutritional composition, C. intybus L. would be an outstanding candidate in pharmaceutical formulations and play a significant role in improving the health.

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