



## *Astragalus. membranaceus* *Bunge*

None

In Asia, the dried root of Astragalus has been used as a conventional medicinal herb for more than 2,000 years. Astragalus can help inflammation as well as immunity, with some evidence suggesting it's ability to increase the body's production of white blood cells [1]. It is harvested from Longxi County in Gansu Province, and is grown on fertile land that ensures an abundance in active compounds, like Astragaloside IV (C<sub>41</sub>H<sub>68</sub>O<sub>14</sub>). Astragaloside IV stimulated proliferation and migration of keratinocytes via regulation of the Wnt signaling pathway. Furthermore, Astragalus has a therapeutic effect on inflammation, skin-reinforcing, wound healing, and immune-regulation [2]. Astragalus, as an adaptogenic herb, has been listed as an ODI ingredient in the United State and allowed to be used as food ingredient in China. It is a widely used herb in the world.



## *Atractylodes.* *macrocephala*

None

Atractylodes is a common herb in the Asian herb system, selected from the authentic herbal area of Xinchang County in Zhejiang Province where the climate and solid are suitable for the enrichment of many active ingredients such as sesquiterpenoids, triterpenoids, phenylpropanoids, flavonoids flavonoid glycosides, steroids, and polysaccharides. Atractylodes has a long history as a tonic herb in Asia and to boost gastrointestinal health, tumor dysfunction, osteoporotic relief, and so on [3]. Atractylodes has been listed as an ODI ingredient in the United State and is used as a nutraceutical in China.



## *Nepeta. cataria* L. (Catnip)

None

Nepeta. Cataria is a perennial herb in the Lamiaceae family, selected from Xiaoshan in the Zhejiang province. The dry aerial part of Catnip has been used as a conventional medicinal herb throughout history. Catnip have been widely used in Japan, China, and Korea as an anti-inflammatory treatment for influenza symptoms such as headache, cough, nasal plug, fever, and severe fatigue. Catnip also has been found to improve allergic, inflammatory, and infectious skin disease [4]. The polyphenolic components in Catnip have been identified to include hesperidin, luteolin, and diosmetin. These three phenolic constituents might contribute to the anti-inflammatory activity as well as the antioxidative activity of Catnip, although other active components could also play various critical roles in its protective effects [5]. Catnip has been listed as an ODI ingredient in the United State.

[1] Immunity: plants as effective mediators DOI: 10.1080/10408398.2011.633249

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[3] Zhu B, Zhang QL, Hua JW, et al. The traditional uses, phytochemistry, and pharmacology of Atractylodes macrocephala Koidz.: A

review. J Ethnopharmacol. 2018 Nov 15;226: 143-167.

[4] Ding NW, Kong LD, Wu H, et al. [Research on hemostatic constituents in carbonized Schizonepeta tenuifolia Briq]. Zhongguo

Zhong Yao Za Zhi. 1993 Sep;18(9):535-8, 573-4. Chinese. PMID: 8011107.

[5] Wang BS, Huang GJ, Tai HM, et al. Antioxidant and anti-inflammatory activities of aqueous extracts of Schizonepeta tenuifolia Briq.

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