



Follow Instructions from Chinese Medicine Practitioners on the use of Herbal Medicines

Before consuming any herbal medicines, one should consult a Chinese medicine practitioner (CMP), follow instructions on decoction, and consume at the suggested time and dosage.

Consumption should cease upon recovery, and prolonged use without instruction from CMP should be avoided.



Purchase Herbal Medicines from Licensed Chinese Herbal Medicine Retailers

Purchasing from **licensed** Chm retailers can ensure the herbal medicines are from reputable suppliers and minimise the risk of acquiring herbal medicines that are improperly processed.

Rinse the Herbal Medicines Before Decoction

Since **sulphur dioxide is soluble in water**, its residues in the herbal medicines can significantly be reduced after washing, soaking and decoction.

Herbal medicines should be rinsed under running water to remove dirt on the surface for hygienic purposes, then soaked thoroughly in water before decoction.



Do Not Purchase or Consume Herbal Medicines with Overly Bright or White Colours, or Pungent Sour Smell

In general, herbal medicines that have been fumigated by sulphur would have a pungent smell and their colours would appear brighter. An overly pungent sour smell or bright colours may indicate the herbal medicines being excessively fumigated by sulphur. When in doubt, stop consuming and consult healthcare professionals.



Reference for proper decoction method:

https://www.cmro.gov.hk/html/eng/useful_information/public_health/pamphlet/Preparing_Herbal_Decotions.html



The information in this pamphlet may be re-disseminated or reproduced, provided that the Chinese Medicine Regulatory Office (CMRO), as the source of information, is acknowledged and that the re-dissemination or reproduction is for non-commercial use. Any other reproduction, adaptation, distribution, dissemination or making available of the information in this pamphlet for commercial use is strictly prohibited unless prior written authorization is obtained from the CMRO.

HERBAL MEDICINES AND SULPHUR DIOXIDE



Sulphur Fumigation of Herbal Medicines

Sulphur fumigation is a traditional method of processing herbal medicines. Its application can help with **insect killing, mould prevention, bleaching, preservation and anti-oxidation** of herbal medicines, and hence their better storage.



When herbal medicines are fumigated by sulphur dioxide (SO_2) gas produced by burning sulphur, insects in them would be killed and activity of mould could be inhibited. Sulphur dioxide would also combine with water in the herbal medicines to form sulphurous acid then sulphites which possess anti-oxidation effects. These can help with the storage of Chinese herbal medicines (Chm) to a certain extent.

However, **abuse or overuse of sulphur fumigation** not only compromises the quality of herbal medicines but also leads to high sulphite residues, which may pose health risks.

Adverse Effects of SO_2 on Human



Sulfur dioxide and sulphite (hereinafter collectively referred to as sulphite) have low acute toxicity. Once ingested, it is oxidized into sulfates and excreted via urine. Therefore, **consumption of small amounts of sulphite poses relatively low health risks to the general population.**

However, individuals who are sensitive to sulphite, especially those with asthma, may experience adverse reactions. These may include asthma attacks, skin allergies, headaches, nausea, and vomiting.

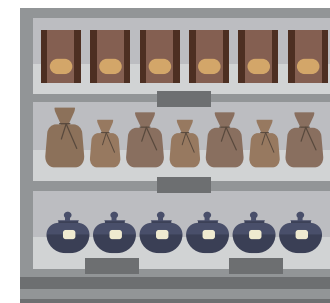
In addition, excessive short-term intake of sulphite may **cause gastrointestinal irritation**. Animal studies indicate that long-term excessive consumption may lead to **gastric inflammation, abnormal cell proliferation, potential occult blood in feces**. Furthermore, high long-term intake may affect the nervous system, including delayed visual evoked potentials (slower nerve response to stimuli) and impaired memory function.



Procure Herbal Medicines from Reputable Suppliers



To ensure the quality, Chinese herbal medicine (Chm) wholesalers should procure from reputable suppliers while Chm retailers should do so from licensed Chm wholesalers. **Do not purchase Chm of doubtful source or quality.** All imported herbal medicines must conform with the regulatory requirements of their places of origin. When in doubt, the supplier should be asked to provide relevant documentary proof of the quality for the concerned herbal medicines.



Store Herbal Medicines Properly

The herbal medicines should be stored properly according to their quality and medicinal properties. **Sulphur fumigation should not be overly relied upon for insect and mould prevention.** Processed herbal medicines that are accepted upon inspection should be promptly stored with proper record so that the stock can be dispatched according to the "first-in, first-out" principle.