

# Asian Medicinals Questions and Answers

## **What Are Patented Asian Medicinals?**

They are commercially manufactured, mass produced medicines that follow traditional Chinese formulations. Manufactured medicinals are sold in packages, with pictures of the wildlife they claim to contain, such as the illustration of a tiger on the box. The Endangered Species Act and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) make it illegal to import products containing endangered species.

## **Why Is The U.S. Fish and Wildlife Service Concerned About These Medicinals?**

As the agency responsible for enforcing CITES, the U.S. Fish and Wildlife Service (Service) has had a long-term conservation commitment to tiger and rhino protection. Its interest in the link between medicinals and endangered species prompted the Service's National Fish and Wildlife Forensics Laboratory to analyze products seized at ports of entry. The Forensics Lab found no evidence of endangered species in these patented over-the-counter medicinals, but significant levels of mercury sulfide and arsenic.

## **What Is The Problem If There Are No Endangered Species Products In The Medicinals?**

The popularity of these items maintains the demand for wildlife products containing endangered species. Also, although the products analyzed do not contain endangered species, the toxic metals present in the medicinals may pose a health risk to consumers.

## **The Service Suggests That Certain Over-the-Counter Asian Medicinals May Represent A Health Risk. Why?**

Ingestion of arsenic and mercury may have dangerous cumulative effects over time. The table included with this fact sheet indicates the toxins found in products sampled by the Forensics

Laboratory. The Service currently is working with the U.S. Food and Drug Administration, which sets tolerance levels for such toxins. Establishing such levels will help consumers more easily determine the levels at which some medicinals are harmful to health.

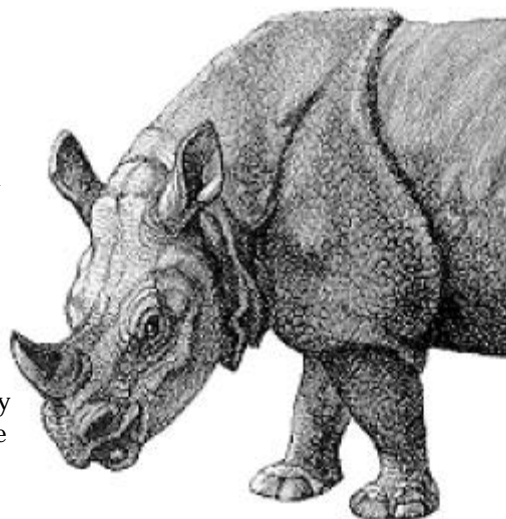
The State of California's Department of Health Services also has divided patented medicinals into risk-related categories. Mercury sulfide and arsenic sulfide fall into Category 1, ingredients that are toxic when taken internally. Under California's Sherman Food, Drug and Cosmetic Law, sale of these products is illegal.

## **Are Toxins Intentionally Included Or Are They Byproducts Of The Process?**

The Chinese pharmacopeia lists realgar (arsenic sulfide) and cinnabar (mercury sulfide) as therapeutic agents. Traditionally they have been used in Asian medicinals. However, none of the medicinals analyzed list them as ingredients. Realgar and cinnabar appear to be associated with products claiming to contain tiger bone or rhinoceros horn.

## **Is There A Safe Level For Mercury Or Arsenic Sulfide?**

Studies evaluating levels of these compounds have not been completed. However, studies published in Australia reported chronic arsenic sulfide poisoning from traditional Chinese medicine with an average intake of approximately 10.3 milligrams per day. Studies published in Britain reported chronic mercury sulfide poisoning from Indian ethnic remedies with approximately 262.0 milligrams per day. Ingestion of the daily recommended dose of Asian herbal balls could theoretically provide up to 72 milligrams of arsenic and up to 1.2 grams of mercury. Arsenic and mercury bioconcentrate in the body. A small dose over a long period of time eventually could produce chronic toxicity.



Analysis of Herbal Ball Samples					
Sample	Medicinal	Manufacturer	Lot #	Arsenic	Mercury
1	An Gong Niu Huang Wan (n= 4)	Tung Jen Tang Pharmaceutical Factory, Nanjing, China	unk	yes	yes
2	Da Huo Luo Wan (n= 3)	Guanghou Chen Li Ji Pharmaceutical Factory, Guangzhou, P.R. China	89 06 05	no	yes
3	Dendrobium Moniliforme Night Sight (n= 2)	Tientsin Drug Manufactory, Tientsin, China	8505218	no	no
4	Niu Huang Chiang Ya Wan (n= 3)	Tianjin Drug Manufactory, Tianjin, China	4850182	yes	no
5A	Niu Huang Chiang Hsin Wan (n= 16)	Peking Tung Jen Tang, Peking, China	9010-111 8807-120	yes	yes
5B	Niu Huang Chiang Hsin Wan (n= 3)	Peking Tung Jen Tang, Peking, China	8209-184	no	no
5C	Niu Huang Chiang Hsin Wan (n= 3)	Peking Tung Jen Tang, Peking, China	8209-184	no	no
6		Tientsin Manufactory, Tientsin, China	unk	yes	yes
7	Niu Huang Chiang Hsin Wan (n= 4)	Beijing Tongren Tang, Beijing, China	9104-104	yes	yes
8	Niu Huang Chiang Hsin Wan (n= 1)	Beijing Tung Ren Tang, Beijing, China	unk	no	no
9	Niu Huang Qing Xin Wan (n= 1)	JH	9205-307	yes	yes
10	Ta Huo Lo Tan (n= 3)	Beijing Tung Jen Tang, Beijing, China	184-113	yes	no
11	Tsai Tsao Wan (n= 4)	Peking Tung Jen Tang, Peking, China	8507-115	yes	yes
12	Yan Shen Jai Jao Wan (n= 3)	United Pharmaceutical Manufactory, Fushan, China	T Jn 137	no	yes

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November 1999

