

Your Questions Answered

Porcupine date for cancer – How “bezoar”?

Q: My father was diagnosed as having cancer and a relative insisted we try a very expensive Chinese medicine called ‘porcupine date’. For a toothpick-sized heap of powder, it will cost over RM1,000! What exactly is it and does it work?

A: The porcupine stone or ‘date’ is actually a bezoar – solid mass formed by tightly packed collection (or concretion) of partially digested or undigested material stuck in the stomach or other parts of the digestive tract. Bezoars may consist of partially digested hair (trichobezoars), fibre from fruits or vegetables (phytobezoars), or even hardened blocks of drugs e.g. antacids (pharmacobezoars).

The word “bezoar” comes from the Persian *pâdzahr*, which means, “expelling poison.” (رہزداپ)

In the region of South and South-east Asia, the bezoars of animal are usually taken from either monkeys or porcupines. Among the Chinese population, the porcupine bezoar is called *hao zhu zao* 豪猪枣 (or 箭猪枣) – literally “porcupine date” – and the Malays term it as “*guliga landak*” (sometimes, erroneously “*batu landak*”).

Porcupine phytobezoar

The porcupine is an herbivore and it is believed that when the animal is wounded or sick, it will look for herbs in the forest to heal itself. As the healing progresses, the phytobezoar stone may form in its stomach (and when it does, only one bezoar is formed in each porcupine). Thus, a ‘porcupine date’ is extremely expensive.

The porcupine phytobezoar (*lapis histricinus* or *lapis Malaccensis*) is found in the gall bladder of mainly the Malayan porcupine or Himalayan porcupine (*Hystrix brachyura*). Porcupine bezoar is usually roundish in shape with colour between pale or purplish, and green and white. It is soft or brittle, smooth and slippery to the touch. When steeped in water, the taste is intensely bitter.

A porcupine is a rodent – similar to the capybara and beaver – with many long, thin, and sharp spikes (called quills) on its back that stick out as protection when it is attacked. The quills are released by contact with them, or shaken off by the porcupine. (This animal is not to be confused with the unrelated smaller species of hedgehog – with similar outward appearance of protective spines that do not come off, but it will roll into a ball when in danger).



Powdery-type porcupine bezoar (Image source: y3kfreerecipes.blogspot.com)

EXPERT ADVICE

Bezoar credit

Bezoar stones were first documented in a western publication of a four-volume catalogue entitled, *Albertus Seba's Cabinet of Natural Curiosities: Locupletissimi Rerum Naturalium Thesauri Accurata Descriptio*.

Albertus Seba (1665-1736) was a Dutch pharmacist, zoologist and natural specimens collector. The thesaurus shows illustrations of his entire collections – from strange and exotic plants to snakes, frogs, crocodiles, shellfish, corals, insects, butterflies and more, as well as fantastic beasts, such as a hydra and a dragon.

In a modern reprint of the thesaurus, there is a mention in the notes section:

"Since ancient times, stones taken from particular animals were considered to possess magical and medical powers. In Seba's day bezoars were extraordinary popular. These stones formed from hairs that had accumulated and gummed together in the stomachs of ruminants. In a broader sense other stones taken from animals are likewise termed bezoars."

Types of porcupine bezoar

There are three types of porcupine bezoars, namely:

- Blooded – has reddish colour and not so common nowadays, thus much sought-after;
- Powdery – has a smooth surface and much harder than other types. It is considered the best quality, hence is the most expensive type; and
- Grassy – has a coarser surface and is of greenish-brown colour. It is also among the cheapest.

Due to its rarity, 0.38g of the porcupine bezoar reportedly might command a price from RM700 onwards, and one stone with the average size of a marble could fetch RM25,000 to RM72,000 (for a superior grade of 'powdery' type)!

Treatments

Use of porcupine bezoar in traditional Chinese medicine (TCM), or other complementary/alternative medicine (CAM), is quite similar to that of ox bezoar (gallstone) – which is called *niu-huang* (牛黃) or *calculus bovis*. They are claimed to remove toxins from the body.

The recommended dosage is 0.1-0.2g (in children) and 0.3-0.4g (in adult) – to be taken one to three times a day, depending on individual's health conditions. The powder can be put into the mouth directly or dissolved in a tablespoon with water, and should be taken with an empty stomach.

It is used in alternative medicine for its anti-inflammatory, anti-oxidant and immune-booster properties, as well as for body detoxification. Sometimes, it is also recommended for treatment of cancer, dengue fever, meningitis, herpes, throat infection, pneumonia, and as pre- and post-operation "anti-infective".

However, none of the above treatments have ever been proven in western medicine or through clinical researches. It is also ethically unsound to substitute properly prescribed antibiotics with porcupine bezoar for anti-infection regimen, or to mix allopathic medicine with TCM or CAM without prior consultation with your doctor. **OH!**

In the 2001 IUCN Red List of Threatened Species ver. 3.1, the Malayan porcupine is listed as "Least Concern", although previously classified as "Vulnerable". (A "Vulnerable" species is likely to become "Endangered", unless the circumstances threatening its survival and reproduction improve). In Malaysia, it is part of the protected mammal species under Section 68, of the Wildlife Protection Act 1972 (Act 76) – of which the maximum fine is not more than RM3,000 or a three-year jail term or both.