



HEALING WITHOUT HARM

**WORKING TO REPLACE THE USE OF ANIMALS IN TRADITIONAL CHINESE
MEDICINE**

Jill Robinson, MBE
Founder and CEO, Animals Asia Foundation
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HEALING WITHOUT HARM: WORKING TO REPLACE THE USE OF ANIMALS IN TRADITIONAL CHINESE MEDICINE

March 2009: Traditional Chinese medicine (TCM) is a complex subject but, at its core, is the belief that mind and body are inextricably linked and, if both are in equilibrium, a person should be healthy. Chinese herbal medicine emphasises the interaction of body, mind and spirit and the patient's relationship with the environment.

Whereas Western medicine tends to compartmentalise a patient's condition and pin down the causal agent, such as a virus, poison or bacterium, TCM is primarily holistic and clinically based in terms of its overall efficacy. Where Western medical experts blame physical matter, the Chinese believe these physical triggers cause disease only if the body has been weakened by other factors, which they call "excesses". These are the wind, cold, summer heat, dampness, dryness and fire, and they affect the balance of yin and yang; the negative and positive forces in the body. Any imbalance will allow disease to take hold.

The principles and effectiveness of traditional medicine generally complement Western medicine very well. TCM can be effective in early diagnosis and treatment of chronic degenerative diseases, while Western medicine can be effective in diagnosing and treating accidental illnesses and the malfunction of seriously ill organs. Consequently, a growing number of practitioners from both cultures are readily embracing an East-West concept of healing and health.

Traditional (Asian) medicine provides healthcare for up to half of the world's population. The World Health Organisation alone has, so far, established 26 international collaboration centres to conduct research into traditional medicines – seven of which are in China. China's current goal is to lead the 21st century world medical sector with traditional Chinese medicines and currently exports about US\$600 million worth of traditional Chinese medicines worldwide. The total trade volume today exceeds US\$2 billion a year. The use of traditional medicine in China itself remains widespread.

Similarly, in Vietnam, the use of traditional medicine is commonplace. Since the Vietnamese Traditional Medical Association was founded in 1957, it has established local organisations in 53 provinces and has published over 240 Vietnamese traditional medical journals.

In the West too, traditional medicine is gaining market share. In the US, for the three months to December 2008, nationwide retail sales of vitamins and supplements amounted to nearly US\$639 million, up almost 10 per cent from the same period in 2007. That includes a nearly 6 per cent increase in sales of herbal supplements alone, according to Information Resources Inc, a Chicago-based market research firm.

Nationwide herbal and botanical supplement sales were US\$4.8 billion in 2007, when the recession began, up 4.3 per cent from 2006. That was a marginally higher increase compared with the previous year, according to the Nutrition Business Journal, an industry-tracking publication.

In Australia, the use of herbal medicine is increasingly becoming mainstream with retail sales of herbal products estimated at over A\$200 million in 2002, according to Hans Wohlmuth of the School

of Natural and Complementary Medicine, Southern Cross University, Lismore, NSW, Australia (writing in the Journal of Herbal Pharmacotherapy).

According to the Economist Intelligence Unit, sales of traditional Chinese medicines outside the mainland account for just 3-7 per cent of the US\$30bn global herbal-medicine market in 2004. Sales volume, however, is increasing on the back of rising interest in major markets such as the EU and the US. On a country basis, the UK is the biggest market outside Asia. British demand for Chinese herbal remedies is growing 20 per cent a year, with annual sales amounting to some £150m (US\$276m), according to market research conducted by Liu Zudong, managing director of UK-based Great Chinese Herbal Medical Company.

The UK now has about 1,000 registered practitioners – both ethnic Chinese and Western – of traditional Chinese medicine and at least as many unregistered ones, says Michael McIntyre, chairman of the London-based European Herbal Medicine Association. Other experts put the figures higher still, noting that since 1997 there has been a leap in the number of Chinese-run clinics across the country. It is estimated that there are at least 3,000 such clinics, often located in major shopping areas, many employing unregistered Chinese doctors.

Bad news for animals

While this increase is laudable, it should also be recognised that there exists a painful side-effect for many of the animals utilised in the trade. Although animal ingredients amount to less than 10 per cent of the traditional medicine pharmacopoeia, the growing popularity of traditional and holistic healing is now exposing a serious and wide-ranging impact on many animal species.

The wild-animal markets in Asia are nothing less than torture grounds for millions of wild, domesticated and endangered species and, the absence of any animal welfare legislation in many countries in Asia – including China, Vietnam, Burma (Myanmar), Laos and Cambodia – allows the cruelty to continue. In addition, the conservation impacts on many animal species worldwide used in traditional medicine preparations are also significant and, unless urgent reforms are introduced, many species face the same fate as the rhino, tiger and bear, which have become endangered in part due to commercial utilisation.

History has shown that international commercial trade in wild animals, their parts and derivatives, whether from wild or captive animals, is virtually impossible to regulate and hence is rarely sustainable. The regulations and controls that are brought in to address the conservation problems are limited, impractical – and often worthless – in their effectiveness.

By legalising the trade, new markets are opened as consumers are encouraged to try something they have previously ignored. This increased consumer demand causes black markets to flourish and poaching to expand.

Research into herbal alternatives then becomes superfluous, as there seems little point in using substitutes while the animal species remain on the market. Finally, new animal welfare initiatives are undermined and delayed because of the ongoing legal trade in animals and their derivatives.

Similarly, banning the use of animals, without the addition of complementary public education initiatives, encourages a black market as people are willing to take higher risks for higher prices. Even

regulating the trade will cause a chain reaction as one species replaces another which has become endangered – and then, that species too becomes endangered.

Claims of sustainability lack credibility

Humans have a responsibility to ensure the ecologically sustainable coexistence of humans and animals. However, the cruel and inhumane treatment of animals under the guise of sustainable use is not acceptable. Claims of sustainability do not legitimise the infliction of pain and suffering.

Between 1971 and 1994, as a result of widespread poaching, the world's rhinoceros population of five species fell by 90 per cent. The greatest threat was the demand for rhino horn and, to a lesser extent, other body parts for traditional medicine in Asia, where it has been used principally as an antipyretic, fever reducing, drug, but is also taken as a treatment against flu, convulsions, epilepsy and nosebleeds.

Similarly, half a century ago, there were 25,000-30,000 tigers in Asia but, according to conservation figures this number is now thought to be less than 5,000. Once again, the cause of decline can be directly attributed to traditional medicine which, historically, has used nearly every part of the tiger in its preparations. Today, tiger bone – particularly the humerus or upper front leg bone – is the only remaining part in the modern TCM Materia Medica; it is used to treat rheumatism.

Of the eight species of bear in the world, seven have seen their numbers seriously diminished – and none more so than the Asiatic black bear (or moon bear), whose population has been decimated by two decades of bile farming. Poaching to satisfy this demand is widespread throughout all the range states of this magnificent, endangered, species.

Chinese texts list various bear parts for use in traditional medicine, including bear meat, gall bladder, brain, blood, bone and paw. Bear bile is classified as a “cold medicine” and it is used to treat heat-related illnesses, such as high fever, convulsions, delirium associated with extensive burns, red eyes, trauma, sprains, fractures and haemorrhoids.

So how do the traditional medicine community and the governments of Asia address this decline in endangered species? Well, perhaps the most responsible way has been to publicise the plight of these rapidly declining animals and suggest the alternatives. Sadly, however, this action is often flawed when the replacements are simply another species of animal. An example of this is the recommended replacement for rhino horn which, in 1991, was cited as saiga antelope horn in a research project funded by WWF.

Today, the saiga antelope is highly endangered. The alternative cited in the same report was buffalo horn and, although clearly this species is a long way from extinction, we should remember the fate of the saiga antelope, particularly when, according to the President of the Herbalist Association in Hong Kong, Dr Ho Ka Cheong, rhino horn can be simply, cheaply and effectively replaced by Aspirin.

Similarly with tiger replacements, and I quote Peter Jackson of the IUCN Cat Specialist Group: “The awesome tiger has played a major role in the cultures and religions of Asia since time immemorial. Not surprisingly, its power has been invoked in traditional medicines with use of its bones and other parts to cure a variety of illnesses. Other cats, notably the leopard, snow leopard, and golden cat have

been used in these medicines.” All of these species are now endangered.

And so to the bear

Asia’s bear populations – notably that of the Asiatic black bear – had declined considerably by the early 1980s when the Chinese government gave the go-ahead for the practice of bear bile farming. The farmers claimed the industry would protect bears in the wild because they would no longer be killed for their whole gall bladders.

So these bears (also known as moon bears) are kept – often immobilised – in tiny metal cages for life. A hole is carved from the bear’s abdomen through to the gall bladder. This fistula, through which the bile drips freely, is kept permanently open with repeated prodding by the farmer as the wound tries to heal or it is permanently implanted with a metal catheter through which the bile is tapped. Bile is usually extracted once or twice a day.

Dr Fan Ziyong from the CITES office in Beijing maintains that one bear held captive on a farm can save 40 bears in the wild – when considering that one wild bear gall bladder yields 50 grams of bile, whereas one captive bear can yield 2kg of bile per year.

However rational the maths might sound, the inherent problems with bear farming remain – there is still a demand for wild-caught bears as livestock for farms, and the industry has created two tiers of consumer – those who buy the cheaper farmed bile and those with more money who prefer the “real thing” in the form of whole gall bladders from wild-caught bears.

Let’s look for a minute at the “real thing”: Despite the fact that bear bile does, in fact contain a significant amount of ursodeoxycholic acid which, when synthesised from cow bile, is used to break down gallstones. It is also interesting to consider the words of John Seller of CITES who said: “Fakes in the market question whether the products themselves are efficacious”. This statement is particularly interesting when considering observations by Dr Ed Espinoza of the National Fish and Wildlife Forensic Laboratory in Oregon, USA, who found that samples of supposed bear bile turned out to be domestic pig bile.

In addition, Dr Lee Hagey PhD from the Department of Medicine, University of California, said: “Pig is an effective substitute to bear bile as the crystals mimic bear crystals and the gall bladders look the same. I believe that probably many people in Asia have been taking pig bile and not bear bile. I also believe that before the current fad of bear bile, Asians used pig bile labelled bear bile. So we can say that they have always used pig bile with good effect.”

Growing concern among TCM community

In recent years, a growing number of traditional medicine practitioners have recognised these concerns and those of cruelty and are beginning to embrace a new philosophy and humane consciousness in line with their own principles of being in harmony with nature. In a recent paper presented at a bear symposium in South Korea, Scarlett Pong, President of the Practising Pharmacists Association in Hong Kong, said that many practitioners do not stock or use products from endangered species because, among other reasons, “they are morally offensive and there are plenty of perfectly acceptable herbal alternatives”.

Indeed, the effectiveness of these humane herbal and synthetic alternatives to animal parts is being actively researched and promoted. In 1995, for example, Beijing's Institute of Materia Medica Chinese Academy of Medicinal Science produced artificial musk from synthetic and purified compounds only – no animal components. When tested on 1,000 patients as an anti-inflammatory agent, the artificial musk showed the same results as natural musk.

Similarly, the Guangdong Provincial Hospital of Traditional Chinese Medicine in China demonstrates a unique combination of TCM and Western medicine and is seen as the leading regional and national leading in medical education, research, treatment and surgery. Although the hospital uses animal parts in medicines to treat patients, it has strict controls regarding the use of animals and now uses cow bile to replace bear bile, buffalo horn to replace rhino horn and cow bone to replace tiger bone. But more importantly, research continues in their efforts to eventually replace all medicines containing animal products with herbs.

In a 1993 paper, representatives from the Chinese Association of Medicine and Philosophy provided a list of herbal substitutes for rhino horn, bear bile and antelope horn. For rhino horn they recommended herbs by the name of *Rehmannia glutinosa* and *Coptis chinensis*, which demonstrated significant antipyretic activities during a test conducted by Professor Paul But of the Chinese University of Hong Kong.

For antelope horn, they recommended tian ma, gou teng and chrysanthemum and, in 1994, they joined with EarthCare to produce a report entitled “Herbal Alternatives to Bear Bile” in which they stated that for every ailment currently treated with bear bile, they can prescribe a combination of plant-derived, non-endangered alternatives, which are cheaper, more readily available and just as effective. Synthetic bile too, is also popular across Asia, particularly in South Korea, China and Japan.

None of these points have been lost on the authorities in Beijing and Sichuan. In July 2000, in recognition of the cruelty on bear farms, the slump in demand for bile and the subsequent economic problems for the farmers, and in recognition of the herbal alternatives, they signed an agreement with Animals Asia Foundation to rescue 500 bears from the worst farms in Sichuan Province, to promote the herbal alternatives to bear bile and to work towards the final elimination of bear farming. Since then, the “China Bear Rescue” has escalated, and Animals Asia now has rescued 260 farmed bears leading to the closure of over 40 farms.

Endorsement from TCM community

Joint statement from practitioners of traditional Chinese medicine for submission to CITES:

“In recognition of the conservation and animal welfare concerns regarding endangered species, this declaration shows support for replacing all wild animals with non-endangered herbal substitutes in traditional Chinese medicine.” – Signed 1 June 1999:

Dr Lo Yan Wo, Chairman, National Association of Chinese Medicine (200 members in Hong Kong and Taiwan);

Scarlett Pong BSc, the Practising Pharmacists Association of Hong Kong (800 members in Hong Kong);

Dr Ho Ka Cheong, President, Hong Kong Chinese Herbalist Association Ltd, (4,000 members in Hong Kong, US, Australia, UK).

Vietnam's bile trade

While bear farming has been illegal in Vietnam since 1992, the practice is still widespread and around 4,000 bears remain trapped on bile farms. Animals Asia has been negotiating with the Vietnamese Government on the issue since 1999. In 2005, after years of lobbying by AAF as well as other international and local NGOs, the authorities promised to act to phase out bear bile farming and in 2006, Animals Asia signed an agreement with the government to rescue 200 bears and to work together to stamp out bile farming.

Our Vietnam Moon Bear Rescue Centre, nestled in a beautiful valley in the buffer zone of the stunning Tam Dao National Park, 70km north of Hanoi, will eventually be home to 200 “ambassador” bears that have suffered for years at the hands of bile farmers. To date, the centre has rescued 23 bears, either from farms or from smugglers who were transporting them to farms.

In our sanctuaries in both China and Vietnam, we have plans for herb gardens featuring various alternatives to bear bile as part of education trails for visitors.

We still have a long way to go as, clearly there are officials and, of course, farmers themselves who want bear farming to continue. However, the slump in demand for bile within some areas of China itself, together with the fact that few hospital doctors are prescribing its usage, show that the herbal and synthetic alternatives are being readily accepted among current consumers.

Growing scientific evidence

Armed with a generous grant from the Pong Ding Yuen Endowment Fund for Education and Research in Chinese-Western Medicine, which has been matched by Hong Kong Government funding, Assistant Professor Feng Yibin and his colleagues at the University of Hong Kong School of Chinese Medicine began researching the effectiveness of various Chinese herbal alternatives for ailments commonly treated using bear bile products, early in 2008.

Many people believe that bear bile cannot be replaced by herbal alternatives because of a lack of supporting systematic, comparative research. The aim of Professor Feng and his team is to conduct research to compare the effectiveness of bear bile and herbal alternatives, using modern, rigorous scientific procedures.

Professor Feng recently released preliminary findings comparing extracts from two species of the herb, coptis, against raw bear bile and purified active ingredients from bear bile. The tests showed coptis to be far more effective than bear bile at killing cancer cell lines.

These initial results are very exciting. Further tests are planned to compare coptis and its extracts with bear bile, for their effectiveness against a variety of liver conditions.

In recent years too, we have been joined by eminent practitioners of traditional medicine who represent literally thousands of doctors, herbalists and pharmacists in Hong Kong and mainland China who agree that all animal parts can, and should, be replaced with herbs. Today, we are bringing traditional medicine and animal welfare together by asking traditional doctors and consumers to recognise animals as sentient beings – capable of feeling discomfort, misery and pain – and encouraging the replacement of animal parts with herbs wherever possible.

With the cooperation of practitioners worldwide, there is the potential for saving literally millions of animals' lives each year. We will also inevitably move closer towards phasing out a cruel and unregulated trade while, at the same time, elevating the reputation of traditional medicine as being valuable, desirable – and cruelty free.

Health concerns for consumers

Animals Asia has repeatedly called on the Chinese authorities to look urgently into the possible harmful side-effects of contaminated bear bile sold as a cure-all in TCM.

Working with Chinese and Vietnamese pathologists, Animals Asia is compiling a growing dossier of evidence that the bears tapped for their bile are developing liver cancers at an alarming rate. Asiatic black bears held in captivity rarely contract liver tumours unless they are very old, but almost half of the rescued bears that have died were euthanised because of liver cancer.

The authorities should be asking what the bile taken from such sick bears was doing to the health of humans who consumed it. The bears' livers and gall bladders are often severely diseased, the bile contaminated with pus, blood and even faeces. A healthy bear's bile is as fluid as water and ranges in colour from bright yellowy-orange to green. Our vets have described bile leaking from the gall bladders of our rescued bears as 'black sludge'.

Synthetic alternatives

The prized ingredient in bear bile, ursodeoxycholic acid (UDCA), is used by TCM practitioners for a myriad of complaints, everything from hangovers to haemorrhoids. However, UDCA can be synthesised easily under laboratory conditions – the UDCA produced is pure, clean and reliable.

Since 2006, Animals Asia has been telling the authorities of our concerns, but still nothing is being done, despite the fact the so many families have been affected by the milk contamination scandal. Here we have a very similar scenario; people who take bear bile as a traditional medicine cure have a right to know just what it is that they are consuming.

Dr Wang Sheng Xian, a Chengdu pathologist, who is analysing the livers of bears that have died from liver cancer said: "The more I learn about the extraction of bile from bears, the more I would never recommend this kind of drug to my family and friends. I personally think we are better to use alternative drugs and never extract bile from bears ... this kind of drug could be harmful to people. There are many effective and affordable synthetic alternatives as well as more than 50 herbal alternatives.

"Although I respect TCM, what I have seen from the samples from caged bears makes me doubt that products like this work. Bear bile products produced by farmers are only processed by baking the bile into a powder and not refined. This kind of preparation does not eliminate the contaminants in the bile. As we can see, the bile causes very sick bears – can we use this kind of bile for medicine for humans, especially as it is baked at a low temperature? I personally think we had better use alternative drugs and never extract bile from bears," Dr Wang said.

A Vietnamese pathologist has also expressed grave concerns for the health of both humans and bears after conducting clinical examinations of the damaged gall bladders of three moon bears rescued from

bile farms by Animals Asia.

Dr Dang van Duong, Chief Pathologist at the Bach Mai Hospital in Hanoi said he was shocked by the condition of the bears and urged consumers to think twice before taking the bile from such diseased animals. Dr Duong made the comments after conducting histo-pathological examinations of the gall bladder specimens of three bears that recently underwent cholecystectomies (removal of the gall bladder) at Animals Asia's new Moon Bear Rescue Centre near Hanoi.

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