

# Traditional plant medicine

## why a rescue plan is desperately needed

*Dr Robert Verkerk, who heads up the Alliance for Natural Health International, warns us why we have to act now to rescue thousands of years of knowledge about plant medicine*

### Our intimate relationship with plants

The dog is man's best friend, so the saying goes. But it may be that our co-evolution with plants represents our most intimate relationship with our natural environment. It's perhaps more akin to the relationship that bees have with flowering plants.

Ongoing work with our closest, living, non-human relatives, the forest-dwelling primates, such as the orangutan and chimpanzee, is strengthening our understanding of the food and medicinal knowledge that has been learned over many hundreds of thousands years by our non-human cousins.

Naturalised Indonesian, of Dutch origin, Willie Smits<sup>1</sup> has rescued more orangutans from deforested areas of Kalimantan than all those held in captivity in zoos around the world. He has been studying the primate's behaviour for over 30 years, alongside his work to find ways of ameliorating the environmental and social havoc being wreaked by the deforestation of the Borneo rainforests.

This logging is so intense it even surpasses that occurring in Amazonia. Smits has found that our non-human cousins possess a knowledge of more than 4,000 species of plant within their natural rainforest habitat. They know a remarkable amount about the health benefits and medicinal properties of these plants. They spend around eight years teaching their young ones this knowledge. This mentally retained, botanical knowledge base almost certainly surpasses that of almost all humans.



However, for at least 5,000 years humans have been recording their knowledge of plants. Anthropologists like Jared Diamond believe that it was the development of the human voice box that caused the most significant evolutionary deviation from our non-human ancestors.<sup>2</sup> With this mutation, we learned to communicate verbally, build tools and commit our knowledge to stone, then paper, now to electronic media.

The quote, often attributed to Hippocrates (possibly incorrectly, say some academic commentators), 'Let your food be your medicine and your medicine your food,' rings ever more true. A huge amount of this knowledge is retained in so-called traditional medicinal cultures, represented today in many parts of the world.

Some of the most well-known, surviving systems are traditional Chinese medicine (TCM), Ayurveda (from the Indian subcontinent), Tibetan, Amazonian and various African traditions. Many traditions have been eroded by the rapid development of western medicine. Profit-driven pharmaceuticals have swept through the world in recent decades, often displacing very long-standing traditional systems, not because they are more effective but more because they are seen as a mark of progress. The process is not dissimilar to the way in which traditional diets have been replaced by western diets in so many parts of the world. There are few places in the world today where certain burger and fried chicken companies are unknown brands.

### Impact of globalisation

This is what globalisation offers, or more correctly, what it doesn't offer. It meters away diversity, so that over 80% of the whole-food trade is now based on a handful of species of cereals, fruits and vegetables. More and more of it is processed and refined to make it easier to ship around the world. The dietary simplification inherent in this modernisation of our food supply is at the heart (excuse the pun) of our current battle with the 'Big 5' chronic diseases: heart disease, cancer, diabetes, obesity and osteoporosis.

These diseases, one or more of which afflict the majority of us in the West once we pass the age of 50, are now viewed by the World Health Organization (WHO) as the largest burdens on healthcare systems the world over. This includes the so-called 'developing' world, as well as the



Some herbs used in Chinese medicine

'developed' world. Refreshingly, the WHO also see these diseases as being preventable and tied to nutrition and lifestyle, hence its launch in 2004 of the Global Strategy on Diet, Physical Activity and Health.<sup>3</sup>

It's a pity that most governments up until now, as well as the medical profession generally, have paid little more than lip service to the initiative. The reality is that most of us just get sick and then take western drugs because that's what's on offer when we see our local GP in his or her tightly scheduled, six-minute consultation.

### The dismantling of traditional healthcare systems

A very significant number of us in the West, largely outside of the medical establishment, have long seen the value of the great Eastern traditions. However, western reductionism - the mindset that is at least partly responsible for the industrial and technological revolution of the last two centuries - has already fragmented these traditions to the point that their overall value on health has been diminished substantially.

Acupuncture from China and panchakarma from India have been exported to health spas built for the rich. Yoga, central to the Ayurvedic tradition, is now widely practised in its physical form in fitness centres, with little attention being paid to its spiritual or energetic dimensions.

Meditation is being taught by western personal development gurus, who (with some exceptions) seem happier enough to either ignore advice on the diet or focus instead on their own brands of money-spinning supplements.

Last but not least, herbal medicine is being drawn away from the medical herbalist, who traditionally assumed a position of great import within local communities. Herbal medicines are now commonplace on the shelves of

the high street health store, pharmacy and Chinese herbalist-cum-clinic. But just how long will these products remain available?

Apart from this incremental dismantling of the traditions, there is another - more insidious - threat to these ancient traditions. It comes in the form of western-style regulation. Recognition that aristolochic acids in Chinese herbs may be a major risk factor in so-called 'Chinese herb nephropathy' and related, upper urothelial cancers has been the major trigger for regulation in Europe.

In 2004, a new European directive (law) was born as a means of regulating 'traditional herbal medicinal products'. It was intended as a simplified, drug licensing regime specifically for traditional herbal products that have had a long history of safe use, yet have been subjected to rigorous quality control to ensure the consumer gets a product of the highest quality. Called the Traditional Herbal Medicinal Products Directive (EC Directive 2004/24/EC) and often referred to under the abbreviation THMPD,<sup>4</sup> it has been sitting latent for some six years, awaiting its date of full implementation, 1st April, 2011. This seven-year transition phase has existed to give manufacturers and retailers time to get their products licensed under the directive.

The devastating problem for non-European herbal traditions, even those as large and well established as TCM and Ayurveda, is that for reasons of eligibility, technical difficulties or excessive cost, not a single, non-European traditional herbal product has yet been licensed under the traditional herbal registration (THR) scheme! And only a few months remain of the transition phase.

The reality is that the Directive has been structured so inappropriately for non-European traditions, it is almost impossible for a significant number of products from these traditions to get through the THMPD doorway.

### The ever-tightening noose of legislation

The THMPD makes patently clear its broad intentions, which are three-fold:

- Harmonisation of requirements on quality, safety and efficacy for herbal medicinal products;
- Improvement of pharmaco-vigilance for herbal medicinal products;
- Facilitation of free movement of safe, herbal medicinal products within the European Union.

While these objectives are generally laudable, they actually allude to some of the problems that are born out of the detail within the Directive. For example, when harmonisation occurs across diverse regulatory regimes, there is always a tendency to satisfy the lowest common denominator or the most cautious regulator.



When it comes to pharmacovigilance, the Directive simply abrogates responsibility to the main European Directive controlling conventional drugs (Directive 2001/83/EC) like Prozac, Lipitor and Avastin.

And what about the notion of 'safe herbal medicinal products'? Is this open slather to exclude any product that might have the slightest potential for causing an adverse effect, even if the risk is only theoretical or includes a minority sub-population that could be catered for by providing a contraindication on the product label? Or, what if the potential risk is infinitesimal by comparison with the known benefit?

Then, there is the unspoken element of the way in which the passage of the THMPD marks a fundamental regime change for herbal products in Europe. The vast majority of the herbal products from non-European traditions have been sold (safely) as food supplements.

#### References

- <sup>1</sup> Willie Smits website: <http://www.williesmits.nl>.
- <sup>2</sup> Jared Diamond. *The Rise and Fall of the Third Chimpanzee*. Vintage, London, 1991.
- <sup>3</sup> WHO Global Strategy on Diet, Physical Activity and Health: [http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy\\_english\\_web.pdf](http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf)
- <sup>4</sup> European Medicines Agency, Herbal Medicinal Products: [http://www.ema.europa.eu/ema/index.jsp?curl=pages/regulation/general/general\\_content\\_000208.jsp&murl=menus/regulations/regulations.jsp&mid=WC0b01ac05800240cf](http://www.ema.europa.eu/ema/index.jsp?curl=pages/regulation/general/general_content_000208.jsp&murl=menus/regulations/regulations.jsp&mid=WC0b01ac05800240cf).
- <sup>5</sup> ANH press release: ANH set to challenge EU

As of 1st April, 2011, many national regulators around Europe will no longer tolerate this situation, arguing that such products should be licensed as THRs. It seems to bother them very little that it's nigh on impossible to get them through the regulatory process, owing to their inherent complexity, born of thousands of years of experience (including science).

#### Going for a legal solution

In March, 2010, on behalf of Indian and Chinese interests that would be negatively impacted by the THMPD, the Alliance for Natural Health International (ANH-Intl) sought an opinion from a leading European barrister-in-law. The opinion came from a barrister at 11KBW, a London-based barristers' chamber of highest repute, with specialisation in the fields of both competition and human rights law, two key aspects affecting non-European, herbal products. The opinion made clear that the THMPD, in its present form, runs counter to some fundamental principles of European law.

Right at the forefront of the problems identified by the 11 KBW barrister were three key grounds: proportionality, transparency and fundamental human rights/discrimination. Detailed discussion of these grounds is outside the scope of this article but, suffice to say, it is the disproportionate impact against non-European, herbal medicinal products, the lack of adequate disclosure of the technical requirements for registration, and the human rights impacts of the Directive that are of prime issue.

With respect to the latter, it is of course not only consumers of Chinese, Ayurvedic and other non-European herbs that are impacted; it is also those whose business is dependent on the sale or distribution of these products, including practitioners of herbal medicine.

- <sup>6</sup> ANH press release: Chinese traditional medicine interests express grave concerns over European legislation, 19 May, 2010. <http://anh-europe.org/news/anh-press-release-chinese-traditional-medicine-interests-express-grave-concerns-over-european-l>
- <sup>7</sup> ANH press release: Why the ANH legal challenge on food supplements is a victory.

At a European level, ANH-Intl has already announced its intention to challenge the THMPD,<sup>5,6</sup> initially in the High Court in London for the purpose of gaining a reference to the European Court of Justice (ECJ). Rather than seeking to invalidate the Directive, the intention of such a challenge would be to force amendment of the THMPD to make it amenable to the non-European traditions for which it was intended, rather than it acting as a barrier to them.

The ANH is one of very few non-commercial organisations representing natural health interests that has previously and successfully taken a case to the ECJ (on vitamin and mineral food supplements).<sup>7</sup> With the support of key interests in two very large nations (China and India) that represent one-third of the world's population, the decision of the European Court will determine whether justice in Europe is truly fair, or whether it exists largely to foster European protectionism. To rule in favour of the latter would be to offer judgment contrary to stated principles of European law. This suggests reasonable grounds for optimism in a judicial review.

Even more relevant to the ultimate outcome will be whether western reductionism and pro-pharmaceutical interests will get it their way and restrict the 500-million-strong, European populace from ingesting products related to systems of medicine that have evolved over thousands of years in the East. These medical systems are built on foundations that are barely understood by the western medical establishment.

It remains to be seen whether judges, doctors, scientists, policy-makers, consumers and industry players can come together and see the bigger picture associated with non-European, holistic medical practices such as those of TCM and Ayurveda. It is in the interest of our species to respect, understand and protect these long-standing and continuously evolving medical systems.

Are you willing to play your part in the rescue bid?

For more information, please go to ANH Europe's Nuture Traditional Medicine Cultures campaign on our website.

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# Seaweed

## an alternative to salt in food and bread

Four years of government-sponsored research at the Centre for Food Innovation at Sheffield Hallam University has concluded that a particular wild seaweed can replace up to 50% of salt in manufactured foods<sup>1,2</sup> and, most recently, may also be an effective ingredient in the fight against obesity.<sup>3</sup>

Simon Ranger, MD of Seagreens, a leading seaweed supplier, believes a polarization may be taking place in food science between those who advocate using alginate, a sterile white powder manufactured from an extract of seaweed, and seaweed itself.

'The 'alginate' approach is conventional and still preferred by 'Big Pharma' producers and many food technologists. Yet its proposed use bears no relation to its natural and beneficial occurrence in seaweed and there are many in the food industry and retailing who want a new and natural approach,' he says.

'They hope the alginate will remove fats, but it may also remove valuable minerals. They even say it will "allow people to keep eating junk foods"! It would increase the fibre content of pies, burgers, cakes and other high-fat foods, yet they have no idea what effect such an unnatural level of alginate will have in the body. The Big Pharma companies are working on salt



replacements, too, and most of these are no better than the same old white powders.'

Unrefined sea salt and whole seaweed contain a natural balance of minerals and trace elements, more complex in their effects and benefits than the mineral-deficient, additive- and sodium-rich salts like sodium chloride in processed foods, which are linked to cardiovascular disease.

Ranger is demonstrating that human food seaweed has an equally useful role in salt replacement and obesity and is conducting a unique, wholefood approach to research through his non-profit Seaweed Health Foundation.

Seagreens website:  
[www.seagreens.com](http://www.seagreens.com)  
tel: 0845 0640040

#### References

- <sup>1</sup> Fairclough A, Cliffe DE. The potential for the use of Seagreens® wild wrack seaweed as a bacteriostat and its effect on shelf-life, Sheffield Hallam University, March, 2008.
- <sup>2</sup> Fairclough A, Mahadevan K. A replacement for sodium chloride in bread products, Sheffield Hallam University, February, 2010.
- <sup>3</sup> Hall AC et al. Seaweed (*Ascophyllum nodosum*) enriched bread is acceptable to consumers, Centre for Food Innovation, Sheffield Business School, May, 2010.