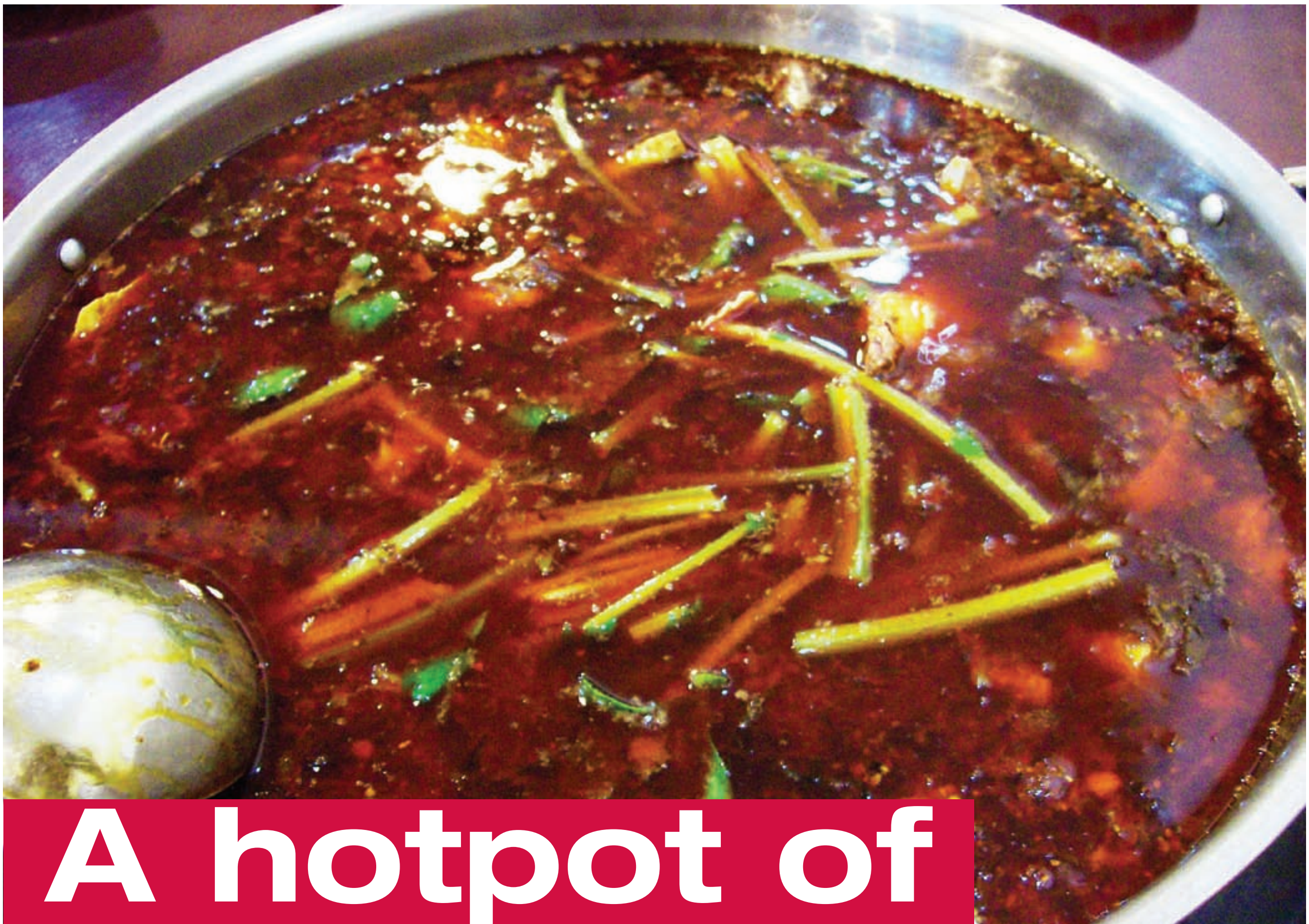
As Chinese consumers become increasingly concerned by food safety, they need the assurance of high-quality ingredients. This, argues **Peter Peverelli**, presents an irresistible opportunity for Western ingredients companies



A hotpot of opportunity

The famous Chongqing hotpot: hot from the chillis or a mix of chemicals?

'Lactic acid, pectin, sodium citrate, CMC, xanthan, propylene glycol alginate, guar gum, aspartame, acesulfame-K, citric acid, L-phenylalanine. . .'

This is not a product list of a food ingredients distributor, nor is it part of the catalogue of an Fi show, but the opening sentence of a news item posted on a Chinese website on 22 February this year. The journalist had copied it verbatim from the packaging of a dairy product purchased in his local supermarket. He knew that the modern urban dweller needs processed food to survive, but never realised that a dairy product, marketed as promoting health, could contain up to 11 different food additives.

Chemical hotpots

This is not an isolated article. Similar stories have been published in the Chinese media, attracting nationwide attention. One such incident involves the extremely popular 'hotpot'. The Chinese – and the expat community in China – love to go out for lunch or dinner at hotpot restaurants.

It is fun to sit around a steaming hotpot, dipping raw meat and vegetables in the boiling stock – it feels as if you are cooking for yourself at the table. However, an article in the *Anhui Business Daily* on 'chemical hotpots' in December 2010 led to intensive media attention about the way most restaurants make their stock: they simply

'The Chinese Ministry of Health is considering a ban on a popular flour bleaching agent in response to growing public concerns over the inappropriate use of chemical whitening agents'

add water to a ready-to-use concoction of ingredients, including chemical additives.

All this is happening as part of a growing awareness of food safety among Chinese consumers. A new labelling law that requires manufacturers to list all the ingredients has suddenly allowed consumers to see how many ingredients it takes to produce 'simple' food.

The appearance of ingredient listings on packaged foods has triggered a dialogue between consumers and the processing industry. Although Chinese consumers do not flatly oppose additives, they would like to learn more about their use, and how necessary each additive really is.

Tougher legislation

Apprehension about the excessive use of food additives has already led to stricter legislation. Last year, the Chinese Ministry of Health (MOH) issued a draft regulation prohibiting the use of flavours in certain foodstuffs, including infant formula and pure dairy products. A couple of months later, China's State Food and Drug Administration released a set of draft regulations banning the use of food additives in fresh fruit juices.

The most heated discussion in this respect is about bleaching agents for flour. MOH is considering a ban on a popular flour bleaching agent in response to growing public concerns over the inappropriate use of chemical whitening agents.

MOH is now working with the relevant government departments to research the policies on benzoyl peroxide (BPO) as a flour additive. The MOH approved the use of BPO in flour production in 1986, allowing up to 60 milligrams of BPO to be added to each kilogram of flour.

The big Chinese millers have welcomed this investigation. They argue that adding a bleaching agent increases their cost, but that it has become necessary as many consumers expect their flour to be white and shiny. The same applies to common flour-based foods like mantou, the popular steamed white bread. The leading millers believe they can meet these expectations using other means. This will make it easier to distinguish high-quality flour from inferior products. And these inferior flours are all too common in the marketplace – some local millers have been found to add up to 30% of pulverised lime to their flour as bleaching agent.

A food ingredients paradise

All these developments do not alter the fact that China is the world's largest single market for food ingredients. Insiders estimate the Chinese food additives industry currently represents 15% of the global turnover in this business. China is already a major production region for several important ingredients, as these annual production and export statistics from the major Chinese importer and distributor of food ingredients, Northern Sunlight, show:

Product	production	export
Citric acid	270 000	200 000
Xylose and xylitol	10 000	10 000
Potassium sorbate	10 000	beginning
Sodium benzoate	40 000	10 000
Saccharin	25 000	10 000
Ethyl maltol	1500	1200

Even with a large and growing domestic industry, China needs to import considerable volumes of ingredients. The following table shows the import volumes of selected food ingredients for the first nine months of 2010, and their growth compared to the same period of 2009:

Product	Import (MT)	Growth (%)
Gum arabic	3234	44.2
Pectinase	9706	-4.5
Agar	23 597	331.6
Starch sweetener (DE<20%)	1680	158.1
Starch sweetener (20% ≤DE<50%)	270	92.3
Yeast + rising agents	9700	29.1
Sorbitol	916	-22.4
Lactic acid + salts	1774	75.6
Lysine	13	
Lysine salts + esters	1674	-1.4
Vitamin A	40 376	-61.2
Vitamin B1	13 097	924
Vitamin B2	15 483	735
Vitamin D	10 966	-63.9
Vitamin B6	32 391	
Vitamin B12	662 476	67.4
Vitamin C	60 633	-86.5
Vitamin E	30 147	42.0
Other vitamins	11 988	-49.4
Flavours for beverages	21 492	-29.4
Other food flavours	21 561	-6.3
Caseine	8745	102
Gelatine	6397	33.2
Peptone	10 153	35.2
CMC	4766	69.3
Cocoa powder	3888	20.0

As the global food ingredients industry moves towards natural and functional ingredients, China is well placed to capitalise on the trend. It has abundant plant resources that can be used to develop a whole host of natural ingredients. These include antioxidants such as polyphenols,

Mantou, a traditional steamed bread, which most Chinese prefer to look white and shiny

sweeteners like stevia and liquorice extract and antibacterial agents such as allicin, as well as the natural pigments, spices and other natural extracts that are increasingly being favoured by the international market. Both Chinese and international players will need to invest in improving high-extraction technology to optimise the use of these natural resources.

The recent media furore has highlighted the growing market in China for a broad range of compound food ingredients, such as stock for hotpots that consist of a number of single ingredients – meat flavours, reaction flavours, taste enhancers, soy sauce powder, yeast extracts, various powdered and dried spices, preservatives and so on. Consumers simply dilute the mixture with water and, perhaps, add a few fresh ingredients themselves. This not only saves time and ingredient costs, but also allows users such as restaurants to assign preparation of the stock to less educated and, therefore, cheaper employees.

The same applies to compound flour improvers. Chinese producers of bread, biscuits and pastry would like premixes of flour, emulsifiers, enzymes, antioxidants and preservatives in the correct dosages.

So Chinese restaurant owners will order special compound flavours for their hotpots, and Chinese bakers will assign ingredient suppliers to prepare special premixes for their proprietary recipes. In that way, some of the burden of applying ingredients properly will be carried on to the suppliers of ingredients. This is a challenge that international suppliers should pick up.

From export to local production

The trend among international suppliers of food ingredients to move production to China has intensified recently, with companies adopting a variety of strategies for their operations within the country.

Many prefer to establish their own daughter companies, believing this is the best way to guarantee consistent quality. For example, Cargill has opened a new flavour plant in Zhejiang province, complementing the flavour application laboratory it established in Shanghai in 2007. The company says this will allow it to offer solutions ranging from flavour creation for beverage, dairy, confectionery and bakery applications, to manufacturing and supply.

Lonza, meanwhile, is setting up a new vitamin B3 manufacturing facility at its site in Nansha, Guangdong province. The company says this investment is designed to help meet growing market demand for the ingredient, fulfil its long-term customer commitments and defend its global position in the vitamin B3 market.

Another strategy is to acquire an existing Chinese company, as this provides immediate access to its existing client base. The Bühler Technology Group adopted this strategy by taking over the Chinese company Bangsheng Bio-Technology. Bühler believes Bangsheng, which focuses on flour improvement solutions for specialty flours, will open up additional opportunities in a market segment that looks set to grow in future.

The joint venture has become less popular among international investors in China because of the frequency of conflicts between the partners. However, a reliable Chinese partner still offers the quickest access to the complex Chinese market.

Tessenderlo Group is going down this route by investing in a new factory for the production of gelatine in Heilongjiang, the province bordering Siberia, through a joint venture with the Yang family. Tessenderlo holds 86% and the Yang family 14% of the shares in the company.

The production unit, which is already under construction, is expected to be operational by mid-2011. The fact that a European company is cooperating with a Chinese entrepreneurial family is unusual, but could prove a better foundation for forging a successful relationship than partnering with a state-owned enterprise.

Some suppliers are still trying to develop the Chinese market through local sales offices, such as US-based Kalsec, a private producer and marketer of natural extracts. It opened the doors of its new sales offices in Shanghai last year, and says this new office reflects its commitment to support customers locally and deliver spice and herb extracts, natural colours and natural antioxidants to food and beverage manufacturers in China.

For an established company like Kalsec, a local sales office could prove to be a better solution than going through all the legal, logistic and technical problems involved in setting up Chinese production facilities.

Whatever way western companies decide to set up operations in China, the potential rewards are huge. The gross value of the Chinese food industry in 2010 was RMB 6 trillion. Insiders expect it to continue to grow at the same pace as it has over the past few years, reaching RMB15 trillion by 2015. It seems inevitable that the demand for food ingredients will follow suit, ensuring that China will remain the world's top growth market for food ingredients. **IFi**

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Food, Health, Natural Ingredients (FiA, Hi, Ni) China is being held in Shanghai, China from 21–23 June.
For more information, visit www.fiasiachina.ingredientsnetwork.com