



新聞稿 PRESS RELEASE

Chinese University Sets Up Research Lab for Food Science

Can Chinese mushrooms lower cholesterol level and blood pressure? If so, can these medicinal agents be processed into tonics? How can technology upgrade quality control and hygiene in the manufacturing of traditional Chinese food items such as shrimp paste, sausages and fermented soya beans? Can a better diagnostic test for people allergic to seafood be devised by cloning the DNA in shrimps?

These are some of the projects now being conducted at the Research Lab for Food Science set up in October at The Chinese University of Hong Kong. Operated under the Department of Biology, it is the first of its kind established by a tertiary institution in Hong Kong to provide consultative service to the food industry here and abroad.

According to the Lab's director, Dr Kwan Hoi-shan, the Lab serves to coordinate existing food-related research at the Chinese University, and to stimulate further projects by providing the expertise and personnel. At the moment, the Lab is focusing on modernising the processing of traditional Chinese food, and using integrative biotechnology to develop mushrooms as health food products.

The largest on-going research project on food at the Chinese University is on mushrooms, a project headed by Professor Chang Shu-ting, an internationally recognised expert on this subject. There are several hundred kinds of mushrooms and some edible types are said to contain anti-cancer agents. An excellent source of protein, the technology is already available to produce high yield, high quality, "custom-made" strains for hot or cold climate. Not only can mushrooms grow from waste material such as tea leaves, fungal matter can also remove pollution from streams and waters.

The Lab has already won over \$1 million in grants to research into the breeding of edible mushrooms. Other related projects include analysing their exact medicinal and nutritional value, developing pre-mushroom fungal mycelium as health food, and monitoring the canning of mushrooms. A major US food corporation is sponsoring the Lab to develop natural pigments and other microbial products for use in foods.

The Lab's research agenda also includes a joint project with the University of California at Davis to identify the protein in shrimps that cause allergic reactions. Negotiations are also underway with a local manufacturer to modernise the processing of shrimp paste as traditional fermenting methods are being phased out with the retirement of experienced, elderly fermentation masters. Hong Kong is the largest shrimp paste producer in the world and exports over 90% of its production to overseas markets.