SINGAPORE'S food safety watchdog plans to start testing pet food and livestock feed for melamine, the potentially harmful chemical behind several recent food recalls across Asia.

The Agri-Food and Veterinary Authority (AVA) said the tests would begin in the coming months, once scientists had finished examining 1,200 samples of China-made food and drink meant for humans.

"Now that we know there is a problem with milk and milk products, it is wise to continue scanning the horizon," said an AVA spokesman.

He added that all pet food in Singapore was "imported from AVA-approved establishments".

Veterinarians who spoke to The Straits Times said they had not seen any animals with diseases linked to melamine.

Over the last two weeks, 10 products — from crackers to yoghurt bars — aimed at humans had tested positive for the chemical, which was added to Chinese milk to help it pass quality tests.

The presence of melamine in human food came roughly 1½ years after it was discovered in China-made pet food sold in the United States.

Veterinary organisations reported over 100 animal deaths in a scandal that sparked a recall of more than 100 pet food brands in the US.

Since the most recent scandal broke three weeks ago, the China authorities had said they would step up checks on livestock feed.

Professor Ong Choon Nam, a toxicologist from the National University of Singapore's Yong Loo Lin School of Medicine, said melamine, if eaten by pets, could, in some cases, form potentially lethal kidney stones, but it could normally be excreted without a problem.

One local laboratory that tests for melamine on behalf of private food and feed companies has found 10 per cent of animal feed samples tainted with melamine.

The samples came from overseas suppliers and were potential product ingredients. They did not necessarily get to the shelves or make it into feed products.

Pacific Lab Services, owned by agricultural product and livestock company Zagro, said the contaminated samples were from overseas sources.

It would not specify if the offending items came from China, citing confidentiality clauses with its clients.

Though Pacific Lab, as a a private entity, does not report cases to the authorities, it advises its clients to reject the batch if it fails safety tests.

Demand for its melamine tests shot up following the China reports, peaking at 180 samples last month.

About 70 per cent of the samples were for human food, and the rest for livestock. Only one sample was found contaminated last month, a food product meant for human consumption.

EVEN if you eat eggs, meat or milk from an animal that has consumed melamine-tainted feed, you should be fine, according to experts.

The Straits Times spoke to a veterinarian, two food scientists, a toxicologist and a biologist who all say that melamine is highly unlikely to pass through the food chain to humans.

Because the man-made chemical cannot be broken down into simpler building blocks, it is unlikely to "spread" into the muscles or fat of animals, said Professor Ong Choon Nam, a toxicologist from the National University of Singapore's Yong Loo Lin School of Medicine.

Instead, melamine will pass out through the animals' urine or form potentially lethal kidney stones.

More toxic chemicals like mercury or lead, on the other hand, can be stored in lethal concentrations in fatty tissues, bones or teeth, said Ms Kalpana Bhaskaran, a lecturer in applied food science and nutrition at Temasek Polytechnic.

A United States Food and Drug Administration report last year found that a 60kg person would have to eat over 36kg of tainted pork, poultry or other foods containing melamine before getting sick.

While there is little scientific evidence available, doctors also say melamine theoretically should not enter the milk of cows, goats or humans.