
English Summary

EFFECTS OF MYCOTOXINS ON HEALTH

Iwan T. Budiarso

Non Communicable Diseases Research Centre Health Research and Development Board, Department of Health, Jakarta, Indonesia

In 1977 the joint conference of FAO, WHO and UNDP on mycotoxins held in Nairobi, Kenya, released a statement that mycotoxins are going to be a prevalent and potential disease entity in the coming decades, after all immunisable and infectious diseases are under control or eradicated, particularly in those developing countries in the tropics. Since the first outbreak of Turkey X disease in England (1960), the problem of mycotoxins and the prevalence of mycotoxicoses tend to be progressively increased.

The conference suggested that 7 kinds of mycotoxins are warranted to be investigated, those are: 1. Aflatoxins, 2. Zearalenone, 3. Ochratoxin A, 4. Trichothecenes, 5. Citrinin, 6. Patulin, and 7. Penicillic acid.

Among these 7 mycotoxins, the first 3 mycotoxins are most likely becoming a major problem in Indonesia which need an immediate investigation in relation to development of preventive measures. Aflatoxins were proved as hepatotoxic and hepatocarcinogenic agents. Zearalenone is known as a potent phyto-estrogen which may contaminate animal feed, and in turn the re-

sidue may accumulate in meat, milk, egg and their products. Chronic poisoning of estrogen caused hyperestrogenism in female and feminism in male animals. If infants and children consume those contaminated animal products during their growth period, what would be the result when they reach adult hood?

Kidney disease and kidney failure are increasing now-a-days. Health researchers and doctors generally related these diseases with cardiovascular diseases, high consumption of table salt, junk food etc., but they never realised that ochratoxin A can be an important factor in this episode. Ochratoxin A was proved as one of the cause of porcine nephropathy and Balkan nephropathy in Europe.

Indonesia is a tropical country which is very suitable for fungal growth. The human factors such as the traditional handling, storing, and transporting of post harvest agricultural products, as well as traditional handling, storage, and transporting of post harvest agricultural products, as well as the problem of hygiene may contribute to the contamination of mycotoxins, and in turn it may cause health hazard to human being.

Cermin Dunia Kedokt. 1995, 103: 5-10
ltb

ANTIBIOTICS RESIDUE IN COW'S MILK FROM SEVERAL CATTLE FARMS IN JAKARTA

Pudji Lastari, Janahar Murad

Pharmacies Research and Development Centre, Health Research and Development Board, Department of Health, Jakarta, Indonesia

The presence of antibiotic residue was examined in 120 samples of cow milk taken from 10 cattle farms in Jakarta. Two samples were taken from each farm each month for a period of 6 months. Out of the 120 samples examined, 27 (22.5%) contained antibiotic residue; 5 samples (4.2%) contained penicillins, 6 samples (5.0%) tetracyclines, 9 samples (7.5%) aminoglycosides and 7 samples (5.8%) macrolides.

Cermin Dunia Kedokt. 1995; 103: 15-8
Ssz

SELENOSIS IN CATTLE - ITS INFLUENCE ON HUMAN HEALTH

Haril Novriani

Health Research and Development Board, Department of Health, Jakarta, Indonesia

One of the attempts to improve the nutritional status of the people in this country is to increase their intake of animal proteins. Cattle and sheep are much used for their meat, so their health condition has an indirect effect on the health of the people consuming meat. Furthermore the development of industries and the increased use of Selenium, con-
(Bersambung ke hal 11)