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DR. W. H. CRAIB

For many reasons the health problems arising out of contamination of foodstuffs by fungal metabolites merit high priority in our research programmes today, for not only is the health of our livestock, poultry and domestic animals in question, but that also of all our peoples. More than that, since our public image abroad has recently again been tarnished by irresponsible persons overseas, one of them a recent visitor who should have known better, South Africa's efforts in this field are under the perpetual scrutiny of those who trade with us.

May I at the outset pay tribute once more to the noteworthy achievements of the Department of Agricultural Technical Services which, working in close collaboration with scientists of the CSIR, recently tackled the deadly menace of fungal contamination of certain of our cereal crops. This collaboration produced a combination of fundamental and applied research of outstanding merit. The work was undertaken by ourselves and for ourselves, and was effective in the extreme. It was triggered off by what might be called a crash programme to deal with an emergency. Great credit is due to all those persons who had both the insight and the foresight to make available at short notice the necessary funds. I refer particularly to the Oil Seeds Control Board.

It might well be inferred that the well-recognized disease in fishes, birds and animals known as aflatoxicosis has as yet not been described in human beings. Indeed, in a mycotoxin context our livestock, poultry and domestic animals appear to be far luckier than ourselves in so far as the safeguarding of health is concerned, protected as

they are by urgent and essential researches that might well be extended for the protection of man himself.

But our Department of Health has not neglected us. In its anxiety for our safety it has influenced the Government to shield us by as rigid and inflexible a regulation as it is possible to conceive. Dealing with the contamination of human foodstuffs by harmful substances, the law now quite categorically states, as from 16 June 1964: *No cereal, groundnut, or groundnut product, or other food intended for human consumption, may contain aflatoxin or any other fungus-produced toxin.*

To me personally, and for reasons not now in point, this regulation is an exceptionally exciting event. It is based upon a large and growing body of evidence to the effect that for certain fishes, birds and animals mycotoxins are not only highly dangerous and usually lethal, but are cancer-provoking as well.

So far as human beings are concerned, I am able to say that at the moment direct proof that aflatoxins are either harmful or cancer-provoking is not yet available, and continues to evade us. The entire civilized world is, however, on the alert, and the pessimists among us are bursting to shout: 'I told you so'.

*Mycotoxins in Man?*

All we can do at the moment, therefore, is to adopt the attitude that if mycotoxins are hazardous to certain fishes, birds and beasts, then it is sound policy to assume that man himself may not be immune, and to legislate accordingly.

But where does all this lead us?

*As citizens*, unaware of all we are eating, we would rather be safe than sorry, and naturally applaud the steps taken to protect us.

*As producers, manufacturers, processors or purveyors* of human foodstuffs, we have certainly been put on a spot from which doubtless we will continuously strive to extricate ourselves. In order to do so we must either prove that mycotoxins are not toxic to man, or ensure the quality of our wares.

*As medical men*, we have numerous questions to pose, to which we seek answers based upon fact rather than fancy. Moreover, as medical men we believe that in this country there are unique opportunities to provide just those answers, given the modest sums of money such research unfortunately requires but which are often so difficult to obtain.

And, lastly, *as scientists*, we want to know the truth, irrespective of how it is to be applied. For only by providing the truth can we extricate both our Government and ourselves from our present unhappy predicament.

It is in this context, namely the hazards of fungal metabolites to humans, that a symposium such as this is not only timely, but pregnant with opportunity to clarify, to inform and to advise.

In conclusion may I emphasize that what Dr. Quass has said is no overstatement. Anyone present who wishes to be fully informed of the facts of what is really a *very hot situation* should make every effort to be present tomorrow.

*How hot the situation is*, is proved by something Dr. van der Walt has just brought to my notice. He informs me that the Netherlands Government has adopted the policy that '*until the contrary is proved*, aflatoxin even in very small dosage shall be considered to be extremely harmful to man'. You can therefore appreciate how close is the scrutiny of our exported cereals by leading overseas importers, and that any cereal leaving these shores will, if significantly contaminated, do irreparable harm to our good name abroad.