

Food Adulteration – A National Problem

The magnitude of the adulteration of various items of food in Sri Lanka was revealed at a recent conference by Mr. P. J. Aiyar, WHO Consultant in Food Hygiene. The conference was held on the 15th of February at the Kandy Secretariat to discuss the implementation of the Food and Drugs Ordinance in Sri Lanka. Mr. Aiyar's current assignment in Sri Lanka relates to assisting the government to revise the existing food legislation, strengthening food analytical laboratories, conducting training programmes and workshops for Food Inspectors and laboratory personnel involved in food analysis, etc.

Mr. Aiyar said that 1,600 items of bottled and packeted food sold in Colombo during the years 1974, 1975 and 1976 had been tested and analysed. Nearly 60% of the food items like milk, vinegar, jams, chillie powder, turmeric powder, gingelly oil, coffee powder, etc. sold in the open market were adulterated with substitutes which were in many cases poisonous or otherwise injurious to health and thus were unfit for human consumption. Milk is often adulterated with water or some kind of powdered milk. Coffee powder contains a major percentage of roasted and powdered peanut shells. Vinegar was found to be adulterated with formic acid which is poisonous. Jam, supposed to be made of fruit and sugar, contained neither. It was a spurious material made out of agar (China grass) jelly, coloured with a toxic coal-tar dye, flavoured with artificial flavours and sweetened with an artificial sweetener, saccharin. Curry powder and turmeric powder contained sawdust and wheat flour respectively, and were also dyed with poisonous textile dyes.

During an interview with a representative of the National Science Council to discuss measures to combat the problem of food adulteration, Mr. Aiyar hastened to add that all types of adulteration are not poisonous. The various food additives like synthetic colours, flavours, emulsifiers, stabilizers, bleaching agents, anti-oxidants etc., which are now being increasingly used in processed food for improving their colour, flavour or texture, taste or keeping quality, pose still another grave problem. Extensive and increased use of such extraneous materials in food has caused great concern to the WHO and the FAO who have appointed Joint Expert Committees to investigate these matters and make suggestions regarding the safety or danger potentials connected with the use of such materials. Amongst the various food additives used, the hazards to health associated with the consumption

of coal-tar dyes have been widely recognised. Several of these coal-tar dyes, after prolonged consumption have been proved to be carcinogenic or to exhibit toxic symptoms. **Metanil Yellow** and **Rhodamine B**, which are two colouring materials extensively used in Sri Lanka, come under this dangerous category. Suitable legislation for controlling the use of such dangerous coal-tar dyes in food is an immediate must in Sri Lanka, and he added that the Ministry of Health is taking urgent action in the matter, on the advice of the WHO.

Ignorance, indifference and gullibility on the part of the consumer and greed on the part of unscrupulous manufacturers and traders of food contribute to the widespread prevalence of adulteration. Remedial measures suggested were :

- 1) educating the consumer, the trader and the manufacturer on the hazards to health consequent on consumption of adulterated food. This can be done through the usual mass media of the Press and the Radio.
- 2) revising the existing legislative measures (Act and Regulations) to suit the present day needs ; and
- 3) proper enforcement of the law by the Government and the local authorities, in the interest of the welfare of the public.

The Food and Drugs Act of 1949, currently enforced, empowers four separate authorities — the local bodies, the Director of Health Services, the Commissioner of Excise and the Principal Collector of Customs. This has however been ineffective because it makes no provision to confiscate stocks of adulterated items or to punish the manufacturers. The government, with the assistance of the WHO, is now actively engaged in revising and updating the food legislation. The local authorities should also play their part effectively by arranging frequent inspections, sampling, seizure of suspected stock and proceedings against offenders. The infra-structure for the enforcement machinery will have to be suitably geared to meet this grave danger which undermines the health of the nation. Concluding, Mr. Aiyar said that "The problem of food adulteration is one of national dimension. There should be greater awareness of the dangers of adulteration and a greater will on the part of the public to put a stop to this practise."



"I believe that the greatest possibilities for chemistry in relation to the well-being of man during the coming 100 years may lie in the study of systems involving proteins, nucleic acids and other macromolecules."

Linus Pauling