ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD

NEW MICROBIOLOGY DATABASE AND PREDICTIVE MODELS

Combase

1.   Members will wish to be aware of a new predictive microbiology database, now freely available on the internet, containing information on how bacteria behave in foods. The database, called Combase, has been developed as a joint venture by the Food Standards Agency, Institute of Food Research and US Department of Agriculture and brings together data generated by each of the parties, as well as data from the literature and other contributing organisations.

2.   Combase can be used by anyone interested in the microbial safety of foods as it allows them easy access to a large volume of data on bacterial growth, survival and death under various conditions of temperature, pH, water content and atmosphere. At present it contains around 20,000 growth and survival curves and 8,000 records containing growth rates. However, it is hoped that this will increase, as researchers and the food industry are being invited to submit any data they may have for entry on to the database.

Growth Predictor

3.   Accompanying Combase, the Food Standards Agency has also launched Growth Predictor, a package of models enabling predictions to be made about how bacteria may grow in foods under various conditions. The models are based on the same data as the previous predictive modelling software, Food Micromodel, which is no longer available. However, the models have been improved and contain new features. In the future, the intention is to develop a new set of models which will produce predictions based on all the data on Combase.

4.   Both Combase and Growth Predictor have been designed to provide those involved in food safety (such as researchers, the food industry and those involved in public health) with easily accessible information to assist with risk assessment and risk management.

5.   Further details can be found in the attached leaflet which was produced for the launch of Combase in June 2003 at the 4th International Conference on Predictive Modelling in Foods.

Secretariat
September 2003