

## Preliminary Remarks

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The determination of enzyme activity has a wide range of application. In addition to the testing of enzymes used as reagents for the analysis of substrates (Section B), enzyme assays are of special importance in the biochemical and clinical fields (see p. 651), and in food (see p. 713) and agricultural chemistry (see p. 720).

This book does not contain a complete collection of all the methods which may be of interest to the research biochemist. Only those which give practical and useful information for the clinical laboratory, and the food and agricultural chemist are described in full. However, even with this limitation the selection cannot be complete. It is certain that in the course of time some of the methods will lose their importance and be replaced by others.

In certain cases, problems arise due to the type of sample. As far as these are known they are given in each case. In principle, all the methods are applicable to the previously mentioned fields. However, because of the different types of test material it is not always easy to apply a method which has been developed for either biochemical, physiological or clinical chemical studies to food and agricultural analysis and *vice versa*. The optimum conditions for measurements vary with the source of the enzyme (isoenzymes, refer to p. 9, 663 and 736), which, for example, was not considered in the older methods of food and agricultural chemistry.

Just as in the analysis of substrates the experimental material must be carefully prepared, in the determination of enzyme activity it is necessary to adhere to the optimum conditions for the measurements and to take into account interference due to other enzymes contained in the sample. Therefore, despite having the same basis for the assay, a method published, for example, for serum is not necessarily directly applicable to other experimental material.