

DATA BASE COMPARISONS

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The title of this presentation may be misleading since the purpose is to announce plans to develop a diagnostic tool for evaluating the appropriateness of data base systems rather than to present new findings relative to data base comparisons. However, since many in the group have not heard the findings from an earlier study presented at the second meeting of this conference in 1977, those findings are being reviewed so that everyone will be aware of why a proposal is being made to develop a diagnostic tool.

In 1977, a project consisting of three rounds was conducted to evaluate a common menu involving breakfast, lunch, and dinner meals. The ranges for all nutrients resulting from analyses caused concern; however, the reasons for the differences were never identified. Some possible reasons for the differences could be related to coding of the menu, sources of nutrient data, portion sizes, data base loading and program algorithms. A fourth round involving hand calculation of the nutrients was never completed.

The current project is being undertaken to develop a diagnostic tool with features which will facilitate detection of various sources of error in nutrient analysis systems. Rather than concentrating on a typical menu, foods will be selected to evaluate a wide range of nutrients, various food groups and combination foods in recipes. Items will be included to evaluate data base updating and program calculations and accumulation. Every effort is being made to make the tool be as comprehensive as possible and suitable for continued use in the future.

Evaluation of the diagnostic tool will be the next phase of the project. During this phase, some individuals with experience in data base development and validation will be invited to analyze the tool. Any differences will be identified to determine the reasons for differences. After reasons for the differences have been identified, baseline data for the tool will be appraised. This phase is to evaluate the tool rather than the data bases. Periodic releases of the baseline data may be needed in the future as data for more foods and nutrients become available.

Numerous uses of the diagnostic tool are anticipated. Individual data base developers will have access to the baseline data for validation of data base loading and software. Existing systems could be appraised using the tool. Individuals, firms and agencies desiring to contract for services could utilize the tool to evaluate alternative systems under consideration. The tool is not intended as a threat to any reputable system and is being developed to promote accurate use of nutrient data as more adequate sources become available.

The project is being sponsored cooperatively by the University of Missouri and USDA. The results from this work are anticipated to be available in early 1981. Suggestions are welcomed regarding the features needed in the diagnostic tool.