

## DIETARY MANAGER WHO

Software package CIBM-048-S86

NUTRITION MONITORING SYSTEM

*changed name  
to Dietary*

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Brief description: The program allows the monitoring and development of both preventative and curative nutrition. Designed to be used on portable microcomputers for field research on the nutritional content of a meal. May be used worldwide for epidemiological studies, e.g., determining positive, significant correlations between suspected carcinogenic food components and the actual occurrence of a cancer. The local health authority should be contacted for the nutritional, narcotic, preservative and radioactive isotope content of a food for a particular country. The user will be allowed to change these values on the "food file." The nutritional values of a meal (or potential meal) may be compared to a national standard or to a criteria set up by the user. The user may set the criteria to specifically exclude certain food components from the diet. A nutritional history file will be kept and will allow the monitoring of seasonal variations in the nutrition. Printout of this "history file" will allow long term changes in eating habits to be studied.

Potential users: Dieticians, researchers, ordinary laymen and health care workers.

Fields of interest: Nutrition, medical research, social research.

- § This application program in the area of nutrition has been developed for DOS computers to run under DOS 2.1 or higher. It is available on 5-1/4" floppy diskette. Required memory is 512K.
- § The minimum hardware configuration required is 10 Megabyte hard disk. There is extensive external documentation. Source code not available.
- § Design is complete. The contributor would welcome collaboration and is available for user inquiries.

Software package CIBM-049-S86

STRONG COMPONENT HIERARCHICAL CLUSTERING

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Brief description: Generalizes single-linkage clustering, one of the most frequently used classification algorithms, to asymmetric distance (proximity or similarity) matrices. It is based on a sophisticated divide-and-conquer use of depth-first search developed by R.E. Tarjan and reported in Information Processing Letters, 17 (1983): 37-41. It has been successfully applied to clustering more than 3,000 U.S. counties using intercounty migration flows requiring less than a minute of CPU time (see Quality and Quantity, 19 (1985): 211-221). The source code will be published as algorithm 13 in the 1986 volume of Environment and Planning A.

Potential users: Data analysts with asymmetric distance matrices.

Fields of interest: Social and physical sciences.

- § This application program in the area of cluster analysis has been developed for ITEL/A5 in Ansi FORTRAN to run under HASP. It is available on 1600 bpi, ASCII/EBCDIC character set.
- § Distributed by contributor.
- § No user training is required. There is extensive external documentation. Source code is available.
- § The package is fully operational. It has been in use at 2 sites for approximately 3 years. The contributor is available for user inquiries.