

JULY 28, 1970

Commissioner Morris Hursh  
Department of Public Welfare  
5th Floor, Centennial Office Building  
St. Paul, Minnesota 55101

Assistant Commissioner Axel L. Peterson  
Department of Corrections  
Room 310, State Office Building  
St. Paul, Minnesota 55101

Dear Commissioner Hursh:

Dear Commissioner Peterson:

This report has been prepared at the request of Mr. C. G. Chapado (Director of Administrative Services, Department of Public Welfare).

In suggesting a study of actual, and a recommendation for desired, feeding levels in the institutions Mr. Chapado asked only:

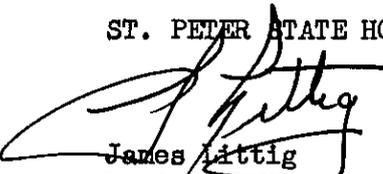
"That the study be logical and the recommendation based on fact."

It is hoped the material which follows meets that charge.

All resource material on which this presentation is based is available upon request.

Yours truly,

ST. PETER STATE HOSPITAL

  
James Littig  
Business Manager

70-SAR-INL

cc: Department of Administration - Commissioner Brubacher, Mr. LaVelle, Mr. Janisch  
Department of Corrections - Commissioner Keve, Mr. Melby  
Department of Public Welfare - Dr. Vail, Mr. Chapado, Mr. Peterson, Mr. Darling, Mrs. Karlins  
Division of Procurement - Mr. Vessey, Mr. Donicht  
House Appropriations Committee - Mr. Duncan  
Senate Finance Committee - Mr. Evenson  
All DPW Institutions - Medical Director and Administrator  
State of Wisconsin - Mrs. Keller and Mrs. Irwin

## PRELUDE

In recent years the adequacy of the food appropriation has become a matter of increasing concern. Recent sharp increases in the Cost of Living Index (and the resulting loss in purchasing power of the institution's food dollar) have further aggravated a perplexing problem and served to highlight the need for a break with the traditional method of providing funds for the provisions used in feeding residents.

It has been pointed out that the Veterans' Administration Hospital in Minneapolis is currently spending \$1.15 per patient per day on food. The question has been asked: "Are the residents in Minnesota's institutions any less deserving?" The question is legitimate and deserves a better answer than "This is Legislative intent and there is nothing further that can be done."

Residents in Minnesota's institutions should not be penalized simply because the cost of food increases. In a period of increasing prices and under the present per capita (a fixed amount per resident per day) method of determining the food appropriation, the institutions are forced to choose between reducing food quality, variety, or quantity (or a combination thereof) to remain within that "Magic" figure - the food appropriation.

Everyone involved in the care and treatment of residents has an obligation to try and improve the system.

WE MAY NOT SUCCEED - BUT WE MUST TRY.

### A QUESTION

An open question to our Senators and Representatives:

"When you vote on the food appropriation (currently computed on a fixed amount per resident per day), are you asking the institutions to establish and maintain a specific level of feeding or merely to "Live Within" the provision appropriation irrespective of the feeding level provided?"

A standardized level of feeding is not possible with the appropriation as it is now provided.

A contingent fund to provide supplemental funds, upon proper certification by the Department of Administration of increased prices and actual need, would permit the institutions to establish, and maintain, standardized levels of feeding while retaining their autonomy in preparing menus tailored to the likes and dislikes of their residents.

Contingent funds specifically for the food account have been established by several of our sister states.

## PROJECT WISCONSIN - A SYNOPSIS

The following is a "summing-up" of steps taken and data received in search for information on resident feeding levels in the various states:

1. In November of 1969 (at the request of DPW), the various institutions submitted information on the actual level of feeding provided in fiscal 1968/69 and our estimate of need to maintain that level of feeding in fiscal 1969/70.
  - A. We reported a \$0.8424 (per resident per day) level of feeding for 1968/69 and noted that during this period we had produced our own milk and a considerable amount of beef.
  - B. We suggested a \$0.75 (per resident per day) level of feeding for fiscal 1969/70 and added the comment that while this was not our desired level of feeding, it was probably the highest level the Department of Administration could approve.
  - C. Approval was received from the Department of Administration for a \$0.75 level of feeding for the last six months of fiscal 1969/70 with the proviso the increased expenditures be financed internally. Legislative intent for fiscal 1969/70 was \$0.70. This change provided a \$0.725 level of feeding for fiscal 1969/70 (six months at \$0.70 and six months at \$0.75).
2. While Legislative intent for fiscal 1970/71 is \$0.71, we have permission from the Department of Administration to feed at \$0.75. To my knowledge, the problem of financing has yet to be resolved.
3. Information taken from the U.S.D.A. food price index provided the following data:
  - A. With 1959 as a 'base' (100.0), the food price index for February of 1969 had increased to 119.3; an increase of just over 19 points in a ten year period.
  - B. By February of 1970, the food price index had increased to 130.6; an increase of 11.3 points in one year. Putting it another way, the food price index increased as much in the twelve months from February 1969 to February 1970 as it had in the six year period immediately preceding February 1969.
  - C. This increase (in the Cost of Living Index) reduced the purchasing power of our food buying dollar and, in effect, reduced the \$0.70 authorized by the Legislature for 1969/70 to \$0.6337 in purchasing power.

4. Information received from Mrs. Elizabeth Brewer (Dietitian, Minnesota Coronary Survey, University of Minnesota) in her letter of March 31, 1970 provided raw food costs in other institutions in Minnesota:

- A. University of Minnesota Hospitals - Between \$1.40 and \$1.45 per day.
- B. Veteran's Administration Hospital in Minneapolis - \$1.15 per day.
- C. Information from the American Hospital Association's H.A.S. reports for the three month period ending December 1969 follows:

	<u>Twin Cities</u>	<u>State</u>	<u>National</u>
Patient Food Service - D.C. per Meal	1.71	.99	1.60
Food + Supplies - D.C. per Meal	.81	.54	.81
Meals Served Per Man Hour	2.36	2.43	2.50
Cafeteria - D.C. per Meal	.31	.45	.76
Food + Supplies - D.C. per Meal	.13	.27	.45
Cafe Revenue per Meal	.49	.49	.64
Cafe Meals Served Per Man Hour	6.20	7.39	6.89
Total Meals Served Per Man Hour	3.17	3.34	3.34
Total Dietary D.C. per Meal	1.27	1.15	1.27
Total Meals Served per Pt. Day	4.43	4.48	4.30

5. Information has been gathered on:
  - A. The U.S.D.A. Cost of Living Index for food from 1949 through 1970.
  - B. The approved feeding level for residents in the institutions for the mentally ill since 1949.
  - C. Appendix A provides the following information:
    1. A graph plotting the CLI and approved feeding levels from 1949 through 1970.
    2. A chart showing the CLI by year, the approved feeding level per fiscal and calendar year.
    3. A cover sheet summarizing information found in Appendix A.
  - D. By extrapolation (assuming the proper relationship existed in 1949 between the U.S.D.A. Cost of Living Index for food and the approved feeding level), we arrive at an 'optimum' feeding level of \$0.938 for the calendar year of 1970.
    1. The approved level of feeding in calendar 1970 for institutions for the mentally ill is \$0.75.
6. Assuming the 'optimum' level of feeding was provided in 1949 when the CLI for food items was 100.0 and the approved level of feeding was \$0.58 (in institutions for the mentally ill), we have prepared Appendix B which shows:
  - A. The difference between the approved level of feeding and the 'optimum' level for each year from 1949 through 1970 appears on Chart B and Graph B.
  - B. Recent adjustments in the approved level of feeding (from 68¢ to 70¢ to 75¢) have not been sufficient to maintain the relationship which existed in 1968 when there was a \$0.164 difference between the approved level of feeding and the 'optimum' level (the difference for 1970, even at a \$0.75 level of feeding, has increased to \$0.188).
  - C. As pointed out in Item 5 - D, using this method the level of feeding which should be provided (in the institutions for the mentally ill) in 1970 is \$0.938.

7. Information was gathered from the Departments of Corrections and Public Welfare on the average resident population (in each of the various institutions) for each fiscal year from 1945 through 1969. Full details appear in Appendix C. Main points are:
  - A. The Department of Corrections had their greatest average population (2,943) during the fiscal year which ended June 30, 1959. Average population for the fiscal year which ended June 30, 1969 was 2,215.
  - B. The Department of Public Welfare had their greatest average population (16,961) during the fiscal year which ended June 30, 1957. Average population in the fiscal year which ended June 30, 1969 was 10,330.
  - C. The two departments combined had their greatest average population (19,848) during the fiscal year which ended June 30, 1959. Average population for the fiscal year which ended June 30, 1969 was 12,545.
  
8. Exact data on overall expenditures for food in the Departments of Correction and Public Welfare from 1949 through 1969 was not available. An approximation of this expense was made by using the approved level of feeding (see Appendix B) and the actual resident population (see Appendix C). Full particulars appear in Appendix D. Major points include:
  - A. In 1949 with an average resident population of 17,425 and an approved level of feeding of \$0.58 total estimated expenditures for food were \$3,688,872.
  - B. In 1969 with an average resident population of 12,545 and an approved level of feeding of \$0.69 total estimated expenditures for food were \$3,159,458.
  - C. In this period total average resident population dropped by 4,880; total estimated expenditures went down by \$529,414 while the approved level of feeding increased from 58¢ to 69¢.
  - D. If the 'optimum' level of feeding (see Appendix B) had been available by a 'marriage' in 1949 of the approved level of feeding and the Cost of Living Index for food items the approved level of feeding for 1969 would have been \$0.883 (rather than \$0.69) and overall expenditures for food in all Correctional and DPW institutions would have been increased by \$883,732.

9. In the material offered to date, the approved level of feeding in institutions for the mentally ill has been used. The same feeding level is not used at all DPW and Correctional institutions. The following information has been taken from September 29, 1969 minutes of the State Humane Practices Committee (page 3):

" . . . Food Budgets

Miriam Karlins read a memo from Conrad Peterson in reply to her memo for information on the food budgets for the prisons. He indicated that the per person per diem appropriation breakdown for the 1969-71 biennium allocated to the Department of Corrections, is as follows:

	<u>1969-1970</u>	<u>1970-1971</u>	
Prison (Stillwater)	77¢	78¢	Per
Reformatory (St. Cloud)	75¢	76¢	Person
Training School (Red Wing)	77¢	78¢	Per
Sauk Center	72¢	73¢	Diem
Camps	83¢	84¢	
MRTC (Lino Lakes)	90¢	91¢	

Mrs. Karlins will follow through with the Department of Administration regarding food costs. . . ."

- A. For this reason, the charts and graphs presented are not exact.
- B. The margin of error is not great and the basic points are valid.
- C. This difference in approved feeding level will be explored in further detail later in this presentation.
- D. It should also be noted these figures represent Legislative intent and do not reflect ~~the~~ per capita increase authorized by the Department of Administration.

10. In April (of 1970) information was received on the "Meal Pattern System" in use by the State of Wisconsin. Correspondence was initiated, and has continued, with Mrs. F. Keller, Chief - Food Service Section, Division of Business Management, Department of Health and Social Services, State of Wisconsin.
  - A. A copy of Mrs. Keller's (and Mrs. Irwin's) article titled: "A Meal Pattern System Coordinated For Different Institutions"; November 1, 1969 issue (Volume 43), Hospitals, J.A.H.A., pp 104-107 appears in Appendix E.
  - B. Mrs. Keller and Mrs. Irwin have sent a good deal of information on the "Wisconsin" feeding system; the steps taken to finalize the presentation which was made to, and accepted by, the 1969 session of the Wisconsin legislature; the system of checks and balances they are using; the problems encountered in implementation, and their pleasure in a system which enables all institutions to provide a specific level of feeding irrespective of variations in the price of food.
    1. Copies of their letters of April 7th, 23rd, and 28th, and of May 12th and 18th appear in Appendix F. There are other letters but these five are representative.
    2. Only a small portion of the information received from Wisconsin has been distributed in the nine (9) "Project Wisconsin" memos which have been mailed to keep all parties up-to-date.
    3. All material received from Wisconsin, gathered from other sources, ascertained from polling other states, and computed from this data will be turned over to the person you designate to 'carry' this study forward to the final presentation to the Department of Administration, and, if accepted there, to the Legislature.
    4. It should be understood this paper needs a great deal of additional work before such a presentation can be made.

11. With your permission an invitation was extended to, and accepted by, Mrs. Keller, Mrs. Irwin, and Mr. M. Lay (Budget Analyst, Department of Administration, State of Wisconsin) to come to St. Paul on Monday, May 4th to provide additional information on the Wisconsin model meal plan.
  - A. Representatives from the Departments of Administration, Corrections, Public Welfare, the Division of Procurement, the Senate Finance Committee, the House Appropriation Committee, the Minnesota Coronary Survey (University of Minnesota), the State Humane Practices Committee, and Dietitians, Chief Cooks, Accounting Officers, and Business Managers from various welfare institutions attended that meeting.
  - B. While the representation was wide the group was kept relatively small to serve as a "core" whose job was to evaluate the information received and take back what they learned to their respective departments.
  - C. The meeting lasted for approximately five hours and a comprehensive overview of the Wisconsin model meal plan was obtained.
  - D. One report distributed at this meeting was titled "Information Report - Meal Pattern Progress". This report, dated September 1969, summarizes Wisconsin's progress in implementing their new feeding plan. A copy of the report appears in Appendix G.
12. With apologies in advance to Mrs. Keller and Mrs. Irwin for errors of commission and/or omission, the following condensation of the "Wisconsin" meal pattern system is offered:
  - A. The recommendations of the USDA family food plan for moderate diets serves as a basis for the plan.
    1. Budgetary limitations during the Legislative process resulted in adoption of a feeding level which was 75% of the USDA moderate diet.
    2. Wisconsin has reduced the sex/age groups used by the USDA to six. Particulars on Wisconsin's sex/age groups appear in Mrs. Keller and Irwin's article (see Appendix E).
    3. Demographic data is gathered on each institution within their system to arrive at the number of residents in each sex/age group by institution.

12. A.

4. This information and data is used in arriving at the Central Office "Model Menu" which provides the dollar figure required to feed each sex/age group at 75% of USDA moderate level.
5. The need for special diets (and a computed cost for these diets), is built into each institution's projected budget.
6. The Central Office "Model Menu" serves as a guide for the institutions as it establishes basic nutritional levels and maximum dollar levels.
7. Each institution formulates their own menu for the budget period, taking into consideration patient preferences and special needs within their institution.
8. The "institution's" menu is returned to Mrs. Keller for comparison with the Central Office "Model Menu". The institution's proposed menu must equal or exceed the "Model Menu" nutritionally and it must not exceed the Central Office "Model Menu's" projected cost.
9. Once accepted the institution is assured of sufficient funds to maintain that level of feeding throughout the fiscal year.
  - A. The institutions are required to submit periodic reports to assure the feeding level (established by their own version of the model menu) has been, and is being, maintained.
10. The Wisconsin Department of Administration serves as a "watchdog" on the contingent fund established for reserve financing if food prices increase.
  - A. Factual data must be provided before additional funds are provided.
11. Through Wisconsin's EDP System a great deal of information is available to assist Dietitians and Cooks in the institutions. Some of the information provided is: Current portion cost of all food items per sex/age group; price information by case/pound/ounce on all types of raw food purchased; print outs on the institution's costs to date throughout the year; etc.
12. In short the institution must provide a level of feeding which meets an established standard and stay within a fixed dollar limit at the beginning of the budget period: (Refer to 12-A-8 and 9) and is assured to being able to maintain that level of feeding throughout the year no matter how sharply prices increase.

13. A telephone call was placed to Mrs. Keller on Friday, July 17, 1970 to obtain up-to-date information on the amount of financing required from the "Food Contingent Fund" for the 1969/70 fiscal year. That data follows:
  - A. For the period from July 1, 1969 through June 30, 1970 \$119,975 in supplemental financing from the "Food Contingent Fund" was provided so all institutions could maintain the level of feeding established at the beginning of the fiscal year.
  - B. March, April, May and June of 1970 were the months when the most supplemental financing was required from the "Food Contingent Fund".
  - C. During the 1969/70 fiscal year, \$65,740 in surplus commodities were received.
  - D. Mrs. Keller has promised to send their latest prices and additional information. That information will be forwarded to the person you designate.

14. To obtain a "grassroots" report on how well the Wisconsin model meal plan actually works we requested, and received, permission from Mrs. Keller for several Minnesota Dietitians and Chief Cooks to visit their counterparts at various Wisconsin institutions.
  - A. On May 7th, the Dietitian and Chief Cook from Rochester State Hospital and the Chief Cook from St. Peter State Hospital visited the Wisconsin Child Center in Sparta and the Mendota State Hospital in Madison.
  - B. On May 8th, Dietitians from the University of Minnesota, Glen Lake State Sanitorium, and St. Peter State Hospital visited the Northern Wisconsin Colony and Training School in Chippewa Falls.
  - C. These people were asked to file reports on their site visits. Copies of their comments appear in Appendix H.
  - D. In general their observations were:
    1. The Wisconsin model meal plan works well in providing the necessary funds to feed at specific nutritional levels without the Dietitians and Chief Cooks having to be concerned with the impact of increasing prices.
    2. Since the Wisconsin model meal plan is not completely computerized there is a good deal of paper work at the institutional level (in submitting reports) which the people who made the site visits hope can be eliminated if Minnesota adopts a similar system.

15. In the May 4th meeting (with Mrs. Keller, Mrs. Irwin, and Mr. Lay), it was pointed out there is a difference in purchasing methods between the States of Wisconsin and Minnesota. A question was raised regarding the validity of comparing Wisconsin's food costs with food costs in Minnesota if we were to adopt a similar program. In an attempt to answer this question, Appendix I was prepared and offers the following information:

- A. A February 1970 print out of Wisconsin food prices was received from Mrs. Keller.
- B. We selected 103 comparable items purchased by St. Peter State Hospital during the same period, noted the unit price, and purchase order number.
- C. The tabulated information (which appears in Appendix I) indicates Minnesota paid approximately 8% more for these 103 items than Wisconsin did.
  - 1. The finding is invalid to an unknown degree since we did not have quantity figures so a 'weighted' presentation could be prepared.
- D. A factor which may contribute to the cost variations is a difference in quality (i.e., grade) for similar items. Example: One state may purchase Grade B canned goods while the other purchases Grade C.
- E. It probably can be said there is no significant difference in food prices between the two states.

16. To provide the widest possible dissemination of the information which had been gathered, presentations were made to:

- A. All personnel who attended the fifth annual Humane Practice Institute at Madden's on May 8th.
- B. Dietitians, Chief Cooks, and representatives from the Department of Corrections who attended the State Dietary Meeting held in Cambridge on May 19th.

A copy of the minutes of this meeting can be found in Appendix J.

- C. Accounting Officers, Business Managers and representatives from the Department of Public Welfare who attended the Ah-Gwah-Ching meeting on May 21st.
- D. The following is the writer's summarization of comments in these meetings:

- 1. Increases in the daily food allowance have not kept pace with increases in the price of food. While the disparity has become more evident in the past 18 months, the fact is that our feeding program has been deteriorating since 1956. (See Appendix A).
- 2. The attitude that "Legislative Intent" is engraved on tablets of stone should be as dead as the dodo bird. We are paid to administer - and sound administration calls for disclosure of practices which are not in the best interests of the State or the residents we serve. This is the writer's opinion so don't blame anyone else.
- 3. The present system of establishing a fixed rate per patient per day for food places undue emphasis on staying within fixed dollar limits. In a period of sharply increasing prices, staying within the dollar limit is easy - as long as we can close our eyes to the menu being offered to the residents.
  - A. Reality says we will always have budget limits; but limits without an "escape valve" in the period experienced in the past eighteen (18) months calls for a series of choices - some bad - others worse.

16. D.

4. There was widespread agreement the food contingent fund established by Wisconsin was an excellent idea and Minnesota should consider establishing a similar fund.
  - A. Everyone understands rigid controls on such a fund would be necessary and ideally the fund would be under the jurisdiction of a body such as the Legislative Advisory Committee.
5. There was widespread agreement with the concept of 'tying' the institutions' food budgets to a nationally accepted standard such as the U.S.D.A. Family Food Plan.
  - A. This approach provides a system which should satisfy the institutions, the various Departments, and the Legislature as a clearly definable method of arriving at an appropriation for provisions which will keep abreast with changes in the cost of living.
6. Considerable concern was expressed over the numerous reports required from Wisconsin institutions (see Item 14-D-2); the feeling being that Dietitians and Chief Cooks would be spending more of their time making out reports than they could devote to basic duties.
7. Concern was also expressed over the possible loss of autonomy in preparing their menus by the Dietitians and Chief Cooks.
8. In short, the feeling seemed to be: "Sounds great! Let's go for a similar system which provides flexibility, autonomy, sufficient funds to maintain a standard level of feeding and keeps additional paperwork to a minimum."

17. The Dietitians and Chief Cooks who attended the Cambridge meeting asked to complete a ten item "Provisions Allowance Questionnaire". A copy of that questionnaire will be found in Appendix K.

A. Question six (6) reads:

"The Legislative appropriation for this biennium calls for a 70¢ level of feeding in 1969/70 (75¢ the last six months by Department of Administration directive if we can finance that level) and 71¢ for 1970/71 (75¢ if we can finance it).

Assume we will be permitted to feed at the 75¢ level for the period from January 1, 1970 through June 30, 1971 and the necessary additional funds will be provided.

Now - please indicate the per capita rate you feel is necessary for each year of the 1971/73 biennium to provide a nutritionally sound diet which would permit the quality, quantity, and variety you would like to provide.

For 1971/72 \_\_\_\_\_

For 1972/73 \_\_\_\_\_

Remarks: "

- B. Of the 22 replies received for 1971/72 the lowest request was for \$0.85, the highest was for \$1.10, and the average was \$0.9254.
- C. Of the 22 replies received for 1972/73 the lowest request was for \$0.85, the highest was for \$1.30, and the average was \$1.011.
- D. Many replies indicated the need for a contingent fund to provide supplemental financing if food prices increase during the biennium.

17. E. The questionnaires have been retained and are available for further study. They contain many thoughtful comments and suggestions from the group who possess first hand knowledge on the feeding level being provided, and the impact of increasing prices on the diet we are able to provide.

F. Question four reads:

"Reality says that we all must be concerned with costs. As Dietitians and Chief Cooks your primary concern should be with nutritional levels (including quality, appearance, and quantity of the food we offer) and your secondary concern should be cost. Do you feel the present per capita rate permits you to keep these in the proper order? Elaborate."

1. The following reply is representative of the comments received:

"No. Cost is now our primary concern, then how we can spend it in the wisest way. If we can satisfy basic nutritional demands we then consider a few items to provide variety or improve the quality of the diet."

18. The Accounting Officers and Business Managers who attended the Ah-Gwah-Ching Meeting were asked to complete question six (6) of the "Provisions Allowance Questionnaire" (see Appendix K and item 17).
- A. In response to the question: "...Please indicate the per capita rate you feel is necessary for each year of the 1971/73 biennium..." the following information was received:
1. Of the 21 replies received for 1971/72 the lowest request was for \$0.85, the highest was for \$1.25, and the average was \$0.978.
  2. Of the 21 replies received for 1972/73 the lowest request was for \$0.87, the highest was for \$1.35, and the average was \$1.04.
- B. Nearly every reply indicated a immediate need for a contingent fund to provide supplemental financing in food prices increase.

19. Information was received from Wisconsin which compared the cost of the Wisconsin feeding plan with similar plans in other states. That information appears in Appendix L.
  - A. Pennsylvania - for 1966/67 - lowest cost per day reported - \$0.7698; highest - \$1.87.
  - B. California - for 1968 - lowest cost per day reported - \$0.7445; highest - \$1.10.
  - C. Ohio - for 1968 - lowest cost per day reported - \$0.96; highest - \$1.743.
  - D. Ohio - for 1969 - lowest cost per day reported - \$0.927; highest - \$2.208.
  - E. The type of institutions Ohio has reported on appear to be similar to Gillette Children's Hospital.

20. A "OUT-STATE PROVISION ALLOWANCE QUESTIONNAIRE" was prepared and sent to the Budget Director (Department of Administration) in each of the other 48 states. Wisconsin was excluded from the survey as we have information on their feeding program. A copy of the questionnaire appears in Appendix M.

A. Replies were received from 33 states and are still coming in.

B. All replies have been retained - along with the supporting material which accompanied many of the answers.

21. The following information has been gleaned from the questionnaires which were returned.

Institutions For The Mentally Retarded (See Appendix N)

A. 23 states reporting. Massachusetts and Colorado's replies were received after the chart was typed and their information was added to the bottom of the report with out reranking previously typed material.

1. 1967/68 - 18 states reporting - 9 were feeding at a higher rate than Minnesota. High daily rate - \$1.39; low - \$0.37; Minnesota - \$0.68.

2. 1968/69 - 20 states reporting - 13 were feeding at a higher rate than Minnesota. High daily rate - \$1.51; low - \$0.38; Minnesota - \$0.68.

3. We overlooked including a question about institutional farm operations. This item may be a significant factor in several states who have reported daily food expenditures which are lower than other states.

Institutions For The Mentally Ill (See Appendix O)

B. 33 states reporting. Colorado's reply was received on July 16th and added to the bottom of the report without reranking previously typed material.

1. 1967/68 - 26 states reporting - 12 were feeding at a higher rate than Minnesota. High daily rate - \$2.17; low - \$0.48; Minnesota \$0.68.

2. 1968/69 - 30 states reporting - 18 were feeding at a higher rate than Minnesota. High daily rate - \$2.30; low - \$0.52; Minnesota \$0.68.

3. We overlooked including a question about institutional farm operations. This item may be a significant factor in several states who have reported daily food expenditures which are lower than other states.

Correctional Institutions (See Appendix P)

- C. 27 states reporting. Colorado's reply was received on July 16th and added to the bottom of the report without reranking previously typed material.
1. 1967/68 - 22 states reporting - 10 were feeding at a higher rate than Minnesota. High daily rate - \$1.50; low - \$0.29; Minnesota - \$0.73.
  2. 1968/69 - 23 states reporting - 13 were feeding at a higher rate than Minnesota. High daily rate - \$1.50; low - \$0.32; Minnesota - \$0.73.
  3. We overlooked including a question about institutional farm operations. This item may be a significant factor in several states who have reported daily food expenditures which are lower than other states.

Youth Facilities (See Appendix Q)

- D. 22 states reporting. Colorado's reply was received on July 16th and added to the bottom of the report without reranking previously typed material.
1. 1967/68 - 17 states reporting - 10 were feeding at a higher rate than Minnesota. High daily rate - \$1.40; low - \$0.53; Minnesota - \$0.79.
  2. 1968/69 - 19 states reporting - 11 were feeding at a higher rate than Minnesota. High daily rate - \$1.88; low - \$0.51; Minnesota - \$0.79.
  3. We overlooked including a question about institutional farm operations. This item may be a significant factor in several states who have reported daily food expenditures which are lower than other states.

Institutions Not Otherwise Classified - (See Appendix R)

- E. Information was also received on the daily food costs in hospitals for Alcoholic Rehabilitation, Cerebral Palsy, Chronic Disease, Crippled Children, Nursing Homes, Charity Hospitals, Diagnostic Centers, Residential Centers, Receiving Hospitals, Schools for the Deaf & Blind, Soldiers Homes, Social Service Institutions, and T. B. Sanatoriums.
1. No attempt at ranking has been made.

22. Information was requested, and received, from the Department of Public Welfare on the sex-age distribution of "In-Hospital" residents as of February 28, 1970. A copy of that report appears in Appendix S.

A. From the basic information we calculated:

1. Overall totals for each sex/age group.

Distribution of males and females within each sex/age group - by number

2. The percentage of total population for each sex/age group.

A. Percentage distribution by age group to the overall group total for both males and females.

B. Percentage distribution of males and females within each age group.

23. From the information mentioned in Item 22 (Appendix S) we then calculated by institution the following information:

A. Overall totals for each sex/age group.

B. The percentage of total population for each sex/age group.

1. Percentage distribution by age group to the overall group total for both males and females.

2. Percentage distribution of males and females within each age group.

C. These calculations provided population characteristics by sex/age group for each DPW institution as of February 28, 1970.

D. Details for each institution appear in Appendix T.

24. We received from the Department of Public Welfare estimated resident populations for each institution for the 1971/73 biennium. A copy of that information appears in Appendix U.

A. Since these are preliminary estimates there may be several changes before the final presentation is made.

25. Using information from items 23 & 24 (and Appendices S & U) we calculated anticipated resident populations, by DPW sex/age groups, for each institution in the Department of Public Welfare for the years 1971/72 and 1972/73. This information appears in Appendix V.
  - A. These projections are based on the assumption the population 'make-up' within institutions will not differ significantly from actual population characteristics revealed by Appendix T.
26. Information was requested, and received, from the Department of Corrections on the population in their institutions, information on the age of the residents, and projected populations for the 1971/73 biennium. This information can be found in Appendix W.
27. The data in item 26 (Appendix W) was received in a form which necessitated percentage calculation of the sex/age distributions. This information appears in Appendix X.
28. Using information from items 26 & 27 (and Appendices W & X), we calculated anticipated resident populations for the Department of Corrections for the 1971/73 biennium using USDA sex/age groups. These projections appear in Appendix Y.

29. A new approach to the daily appropriation for residential feeding should:
- A. Be logical and based on fact.
  - B. Be uniform in application so it is fair to all.
  - C. Be based on nationally recognized nutritional standards.
  - D. Be sufficiently flexible to cover special situations and provide local autonomy in formulating menus tailored to institutional likes and dislikes.
  - E. Provide for readily accessible data on:
    - 1. Changes in the cost of living.
    - 2. Population changes in the institutions.
    - 3. Information on the level of feeding actually provided compared with established standards.
  - F. Contain reserve financing so the established standard of feeding can be maintained if food prices increase.
    - 1. Safeguards so the reserve financing can be used only on certification by the appropriate state agency that the funds are needed.
    - 2. A reporting mechanism which is sufficiently responsive so 'reserve' funds can be provided as needed during the fiscal year.
  - G. Provide all of the above with an absolute minimum of additional paper work.

30. The Consumer and Food Economics Research Division, Agricultural Research Service, United States Department of Agriculture, periodically issues a report titled:

"Cost of Food at Home, Estimated for Food Plans at Three Cost Levels"

A copy of the report for March, 1970 - CFE (Adm.) - 256 - can be found in Appendix Z.

- A. It is suggested this report serve as a base point in determining future residential feeding levels for all of Minnesota's institutions.
1. Use of this report would satisfy conditions A (Be logical and based on fact); B (Be uniform in application so it is fair to all); and C (Be based on nationally recognized nutritional standards) of item 29 which set forth conditions to be met in establishing a new approach for residential feeding standards.
31. The USDA report uses 20 sex/age groups. Taking into consideration the population characteristics brought out in items 23 and 27 and Appendices T and X; and for convenience, we are suggesting the sex/age groups be reduced to six (6) as follows:
- A. Group One - Zero through five years, girls and boys.  
1. USDA Groups: Children - under 1 year, 1-3, and 3-6
- B. Group Two - Six through eleven years, girls and boys.  
1. USDA Groups: Children 6-9, girls 9-12, boys 9-12
- C. Group Three - Twelve through nineteen years, girls.  
1. USDA Groups: Girls 12-15 and 15-20
- D. Group Four - Twelve through nineteen years, boys.  
1. USDA Groups: Boys 12-15 and 15-20
- E. Group Five - Twenty years and over, women.  
1. USDA Groups: Women 20-35, 35-55, 55-75, 75 and over
- F. Group Six - Twenty years and over, men.  
1. USDA Groups: Men 20-35, 35-55, 55-75, 75 and over

32. We then computed the daily food cost by sex/age group for each of the three cost levels shown in the March 1970 report "Cost of Food at Home, Estimated for Food Plans at Three Cost Levels" (See Appendix Z).

A. Calculations can be found in Appendix AA.

B. Computed costs for the Low Cost Plan were:

Group One	-	\$0.5779
Group Two	-	.9253
Group Three	-	1.0652
Group Four	-	1.2324
Group Five	-	.8699
Group Six	-	1.0075

C. Computed Costs for the Moderate Cost Plan were:

Group One	-	\$0.7338
Group Two	-	1.1924
Group Three	-	1.3655
Group Four	-	1.5904
Group Five	-	1.1134
Group Six	-	1.3028

D. Computed Costs for the Liberal Plan were:

Group One	-	\$0.8631
Group Two	-	1.4359
Group Three	-	1.6348
Group Four	-	1.9055
Group Five	-	1.3383
Group Six	-	1.5883

- E. Appendix AB provides the information shown above on one table for "At-A-Glance" comparison.
- F. We are suggesting the Moderate Cost Plan serve as the point from which all food computations be made.
- G. The information contained in this department of Agriculture report is released periodically and it could serve, either by itself, or in combination with the Cost-Of-Living Index, as a 'check-point' so feeding standards could be maintained and funds from reserve financing (Food Contingent Fund) be provided as needed.
  - 1. This would satisfy condition F set forth in Item 29:
    - "F: Contain reserve financing so the established standard of feeding can be maintained if food prices increase.
      - 1. Safeguards so the reserve financing can be used only on certification by the appropriate state agency that the funds are needed.
      - 2. A reporting mechanism which is sufficiently responsive so 'reserve' funds can be provided as needed during the fiscal year."
- H. Use of this USDA report would also satisfy:
  - 1. Item 29 - D:
    - "Be based on nationally recognized nutritional standards."
  - 2. Item 29 - E:
    - "Provide for readily accessible data on:
      - 1. Changes in the cost of living. . . ."

Page 26

33. Item 25 reads in part:

"using information from items 23 & 24 (and Appendices S & U) we calculated anticipated resident populations, by DPW sex/age groups, for each institution in the Department of Public Welfare for the years 1971/72 and 1972/73. This information appears in Appendix V."

- A. An item 31 we proposed six sex/age groups rather than those used by the Department of Public Welfare in their statistical presentation as shown in Appendix V.
- B. To convert the projections contained in Appendix V to the proposed six sex/age groups (see item 31) it was necessary to prepare Appendix AC.
- C. Appendix AC serves as our "model" showing projected resident population by institution (as estimated by the Department of Public Welfare) and our projections of the population characteristics.
- D. The information contained in Appendix AC will be used in all cost projections made from this point forward.

34. Utilizing the dollar information found in Appendix AA for the Moderate Cost Plan  
and

the projected populations for each Department of Public Welfare institution, by the six sex/age groups found in Appendix AC (we combined this information to arrive at the actual request for food monies for the 1971/73.

Detailed computations appear in Appendix AD.

- A. Summarizing the information from Appendix AD we show the following per resident per day food needs for each DPW institution:

<u>Institution</u>	<u>Averaged Food Cost Per Resident Per Day</u>	
Ah-Gwah-Ching	\$1.186	both years
Anoka	1.237	both years
Brainerd	1.282	both years
Cambridge/Lake Owasso	1.288	both years
Faribault	1.284	both years
Fergus Falls	1.238	both years
Gillette	1.203	both years
Glen Lake/Oak Terrace	1.182	both years
Hastings	1.236	both years
Moose Lake	1.229	both years
Rochester	1.235	1971/72
	1.236	1972/73
St. Peter (SPSH/MVSAG/MSH)	1.254	both years
Willmar	1.253	both years

SEE APPENDIX  
AD FOR COM-  
PUTATIONS

- B. Calculations are on March 1970 food costs - and would have to be adjusted in the manner previously described if prices increase or decrease during the biennium.

35. Utilizing the dollar information found in Appendix AA for the Moderate Cost Plan  
and

the projected populations for each Department of Correction institution, by six sex/age groups found in Appendix AC we combined this information to arrive at the actual request for food monies for 1971/73.

Detailed computations appear in Appendix AE.

A. Summarizing the information from Appendix AE we show the following per resident per day food needs for each Correctional institution:

<u>Institution</u>	<u>Averaged Food Cost Per Resident Per Day</u>
Minnesota Correctional Institution for Women	\$1.122 both years
Minnesota Home School	1.422 both years
Minnesota Reception-Diagnostic Center	1.432 both years
Minnesota Reception-Diagnostic Center- B Building	1.502 both years
Minnesota State Prison	1.329 both years
St. Croix Camp	1.550 both years
State Reformatory for Men	1.350 both years
State Training School	1.505 both years
Thistledeew Forestry Camp	1.441 both years
Willow River Camp	1.366 both years

SEE APPENDIX AE FOR  
COMPUTATIONS

B. Calculations are on March 1970 food costs - and would have to be adjusted in the manner previously described if prices increase or decrease during the biennium.

36. The daily food cost for employees taking meals would be computed in the same manner:
  - A. Nearly all employees would fall into Group Five (Women, 20 and over) and Group Six (Men, 20 and over).
  - B. Daily rates from the Moderate Cost Plan (page 25, Item 32-C) for Groups Five and Six would be used in arriving at the amount required for each employee.
  - C. If the employee is taking less than full maintenance the appropriate adjustment would be made in determining the food cost.
  
37. Employee maintenance charges are due for revision.
  - A. The Department of Public Welfare Institutions Policy Manual (item 7447) indicates maintenance charges were last revised March 1, 1962.
  - B. It is suggested that maintenance charges be reviewed and updated to reflect current costs.

38. Some problem areas exist:

A. 'Traditional' relationships will be affected:

1. Item nine (page five) points out differences which exist in the present per person per diem food appropriation for various institutions.
2. Application of the criteria set forth in this proposal will provide an increase in the per person per diem food appropriation for every institution.
3. However, a certain amount of 'compression' will take place and the percentage of increase will not be the same for every institution.
4. Those institutions presently receiving the higher per person per diem food appropriations will find other institutions catching up, and in some cases surpassing, their 'new' per person per diem rate.
5. Item twenty-nine (page twenty-two) reads in part:

"A new approach to the daily appropriation for residential feeding should:

- A. Be logical and based on fact.
  - B. Be uniform in application so it is fair to all.
  - C. Be based on nationally recognized nutritional standards. . . ."
- A. This approach appears to be logical, based on fact and nationally recognized nutritional standards, and, as presented, is uniform in application. Those institutions now receiving the higher per person per diem food appropriation may question the fairness of the result.
  - B. It is recommended this matter be referred to the Dietitian Supervisor for review and further study if necessary.
  - C. Wisconsin faced this problem and achieved concensus before making their presentation to the Legislature.

B. "Area" price differences.

1. There are distinct differences in the delivered price of food items such as milk and fresh fruits and vegetables depending on the location of the institutions.
2. The present system thus creates an anomaly in that it permits those institutions who receive favorable milk and/or fresh fruit and vegetable bids to feed at a higher level than those institutions who must pay higher prices for these items.
3. Wisconsin built an adjusting factor into their system to compensate for this price differential. It is recommended a similar adjusting factor become an integral part of the Minnesota program.
4. This matter should be referred to the Dietitian Supervisor for specific recommendations.

C. Special Diets.

1. To this point all residents in the six sex/age groups have been shown needing the same diet. There is a continuing need for 'special' diets (i.e., bland, soft, low fat, salt free, etc.). Financing must be provided for the added cost of these diets.
2. Historical experience will provide a benchmark in determining the number and type of special diets in use. An adjusting mechanism must be provided to compensate for sharp changes in the number of diets in use during the fiscal year.
3. The cost of all special diets in common use can be determined by the Dietitian Supervisor by using price information from the "Cost of Food at Home, Estimated for Food Plans at Three Cost Levels" (see appendix Z).
4. Each institution would use the special diet costs for the appropriate number of residents in formulating their food budgets.
5. Wisconsin uses a similar approach and it appears to be working well.

D. Computerization

1. It has been said computers can help solve your problems if they are mathematical, if they are repetitive, if they involve volumes of work, and if immediate answers are required.
2. Using computers as tools in food management is discussed in the following articles:
  - A. Computer Recipes In Quantity Food Production, April 16, 1967, Volume 41, HOSPITALS, J.A.H.A.
  - B. On Food Management - Computer: Fiend or Friend?, FOOD MANAGEMENT
  - C. Mathematics 'N Menus, April 1967, FOOD MANAGEMENT
  - D. How Hospitals Share Computers, April 1967, FOOD MANAGEMENT; reports on such a system in Minnesota
  - E. Computer-Assisted Menu Planning Provides Control of Food Service, August 16, 1969, Volume 43, HOSPITAL, J.A.H.A.
  - F. Portion Control Saves Money and Labor, August 16, 1969, Volume 43, HOSPITALS, J.A.H.A.
  - G. Forecasting Production Demand In The Dietary Department, September 16, 1969, HOSPITALS, J.A.H.A.
  - H. Recipe And Ingredient Control by Computer, September 16, 1969, HOSPITALS, J.A.H.A.
  - I. Copies of these articles have not been included. The articles provide information on uses of the computer in large scale feeding systems and the advantages which can be realized by a judicious blend of man and machine.
  - J. Computers should be used to the extent they provide supplemental data without taking the food service personnel away from their major responsibility in seeing that the residents receive nutritionally adequate meals which are varied, tasteful, attractive, and designed to meet local likes and dislikes.
  - K. It is recommended this area be referred to the Dietician Supervisor for further study.

39. It is recommended a Dietitian Supervisor be employed to work for the Departments of Correction and Public Welfare. Some of the duties of this person would be to:
- A. Smooth out 'rough edges' in this proposal before it is presented to the Department of Administration.
  - B. If the concept is acceptable (to the Department of Administration) continue refining, improving and polishing the proposal until it is ready for consideration by the Legislature.
  - C. Update all cost figures with latest possible prices just prior to the Legislative presentation.
  - D. Study and recommend solutions to the problems pointed out in item 39.
  - E. Update food costs during the biennium to facilitate prompt certification of funds from the Food Contingent Account if prices increase.
  - F. Refine the proposal so it provides maximum local autonomy in formulating menus and a minimum of additional paper work at the institutional level.
  - G. Serve as a consultant to Dietitians and Chief Cooks in the institutions.
  - H. Study the desirability of 'convenience foods':
    - 1. A committee was formed in 1968 to study this matter. The committee is no longer active.
    - 2. Preliminary findings seemed to indicate an overall savings could be realized if sufficient food monies were available for convenience foods. The savings would come about through salary savings as an increased use of convenience foods reduced the number of food service personnel needed to 'turn out' meals.
    - 3. If the funds noted in items 32, 34, and 35 become available, convenience foods could again be considered and the use of these foods should be given further study.

40. Item 29 (page 22) reads in part:

"A new approach to the daily appropriation for residential feeding should:

E. Provide for readily accessible data on: . . .

3. Information on the level of feeding actually provided compared with established standards. . .

G. Provide all of the above with an absolute minimum of additional paper work. . ."

A. At the present time Dietitians and Chief Cooks are asked to send in a copy of their weekly menu.

B. The institutions also provide daily statistical reports on resident population and this information is codified by statistical sections of DPW and Corrections.

C. To provide factual information on the level of feeding actually provided the institutions would be asked to provide information on the amount of each food item served.

1. This information would be added to the weekly menus forwarded to the Central Offices.

A. Example: The weekly menu might now show the noon meal on Wednesday would offer roast beef as the entree.

The new report to Central Office would add the number of pounds of beef actually served.

2. The Dietitian Supervisor would have available the weekly menu, the amounts of food actually served, and (from the statistical section) a breakdown on the number of residents actually served.
  - A. The Dietitian Supervisor would take random selections of the weekly menus and evaluate them to see if the institution is providing the level of feeding they should. Not every institution would be studied each week.
  - B. Since the institutions would have no idea of which menu would be selected for study, there would be no opportunity to "dress up" a given weekly menu.
  - C. The results of that study would be used by the Dietitian Supervisor in working with the institution towards achieving the established feeding standards.
3. Information from these "random" checks would also be provided, as often as necessary, to the Department of Administration as verification the established feeding levels are being provided.
4. This procedure would add less than 15 minutes a week to the institution's "paper work" and still would provide an accurate check on the overall feeding levels.

41. At this point, the following question may cross the reader's mind:

"Why not use the USDA low-cost rather than the moderate cost plan?"

The following material which follows has been taken from the March, 1965, issue of the Family Economics Review, Consumer and Food Economics Research Division, Agricultural Research Service, United States Department of Agriculture:

USDA FOOD PLANS AND COSTS - TOOLS FOR  
DERIVING FOOD COST STANDARDS FOR USE IN PUBLIC ASSISTANCE

The USDA family food plans and their costs, or modifications of them, are used in developing food cost standards by many public assistance agencies. The plans as priced by USDA are easily adapted to this use.

Separate plans are presented for individuals with different nutrient needs--infants, boys and girls, and men and women of different ages, and pregnant and nursing women. Each plan is a guide for estimating amounts of foods from 11 food groups to buy in a week to provide nutritious and satisfying meals. By adding amounts of foods for individuals, a food plan for a family of any given size and composition can be developed.

Less Costly Diets Often Short in Nutrients.

The public assistance agency responsible for setting a food cost standard should know what effect this food allowance is likely to have on the nutritional quality of the diet. If the standard is to be a reasonable measure of basic needs for a good diet, it should be as high as the cost of the low-cost plan. Of families spending at even this level, many will have poor diets. The agency that sets its food cost standard as low as the cost of the economy plan should recognize that almost one-half of the families that spend this amount for food are likely to have diets that fall far short of nutrient needs.

Studies show that many U.S. families spend less for food than is needed for the low-cost or even the economy plan. Out of every 10 nonfarm families in a 1955 study of household food consumption, 2 spent less than the amount needed for the low-cost plan and 1 spent less than enough for the economy plan.

Among the families studied that spent the amount needed to buy foods in the low-cost plan, about 25 percent chose diets that met dietary allowances as recommended by the National Research Council. Another 25 percent chose diets that furnished less than two-thirds of the recommended amounts for one or more nutrients. Of the families spending at the economy plan level, only about 10 percent used foods that furnished recommended amounts of all nutrients and over 40 percent used foods providing less than two-thirds of their needs for one or more nutrients. On the other hand, about half of the families spending the amount needed for the \*moderate cost plan used foods that provided recommended amount of all nutrients and only 5 percent fell below two-thirds of recommended amounts.

#### Food Management Counseling Indicated.

When food money allowances are as low as the cost level of the economy plan, the need for counseling on food management is clearly indicated. The homemaker must use her food money with great skill if she is to provide her family with a good diet. She may need to adjust her family's food patterns somewhat and learn to use some economical foods that are new to her.

The economy food plan was developed as a guide for the counselor helping the homemaker to furnish her family the foods they need at very low cost, hopefully for a short period of time. In such a plan it is impossible to include the amounts of meat, eggs, and more expensive vegetables and fruits that surveys show are chosen even by very low income families. Instead, nutrient needs are met by using more of the less costly foods--dry beans, flour, cereals and baked goods, and potatoes.

Menus for the economy plan include only the least costly items in the food groups. Little variety is possible, but meals can be palatable and satisfying. A small serving of an inexpensive meat can be included only two or three times a week, with small amounts of meat in casseroles or other mixed dishes at one meal on the other days. Eggs are served twice and dry beans two or three times a week. Potatoes are included twice a day, along with two servings of other low cost vegetables or fruits. Special attention should be given to including the less expensive dark green vegetables frequently. Heavy use of cereal, bread, and other baked goods--10 to 15 servings a day for men--is important in meeting nutrient needs at the cost level of this economy plan.

\*Material taken from Family Economics Review

42. To provide comparative information on the USDA low-cost vs the moderate cost plans the per institution daily cost per resident has been computed for two institutions from the Department of Public Welfare and one institution from the Department of Corrections. Detailed computations appear in Appendix AF.

A. Comparative costs follow:

<u>Institution</u>	1971/72	1971/72
	Projected Cost Per Resident Per Day <u>USDA Low Cost Plan</u>	Projected Cost Per Resident Per Day <u>USDA Moderate Cost Plan</u>
Minnesota State Prison	\$1.0280	\$1.329
Faribault State Hospital	.9975	1.284
St. Peter State Hospital (SPSH, MVSAC, MSH)	.9733	1.254

B. These three institutions are all receiving a per resident per day food allowance which is significantly lower than the amount needed to provide a feeding level equal to the USDA low-cost plan.

43. The average cost per resident per day from appendices AD (DPW institutions) and AE (Correctional institutions) and the projected resident populations in the institutions from appendices U and W have been used in determining the total food cost for each institution and for each department. Our computations for 1971/72 and 1972/73 appear in Appendix AG.
  - A. Projected cost for the biennium is \$2,538,945 for the Department of Corrections, \$8,418,006 for the Department of Public Welfare and a total of \$10,956,951 for all institutions.
  
44. Numerous references have been made about the "Food Contingent Fund". If the Legislature accepts the desirability of providing a specific level of feeding it is essential a food contingent fund be established.
  - A. In a period of increasing prices established feeding standards can only be maintained if additional financing is available.
  - B. Rigid controls on this fund are recommended. The fund could be under the jurisdiction of the Legislative Advisory Committee who would 'release' funds on certification of need by the Department of Administration.
  - C. The USDA sources previously mentioned will provide a recognized source of cost (i.e., food price) information. The Department of Administration, by periodic review of this information could certify to the Legislative Advisory Committee an increase in food prices and the need for supplemental financing to maintain established feeding levels.
    1. The Department of Administration, would also take into consideration changes in resident population in the various institutions which might decrease, or increase, the need for supplemental financing.

45. The Legislature should be asked:

"Do you want the institutions to provide a specific level of feeding or do you want them to remain within the appropriation for food irrespective of the feeding level provided?"

- A. A recommendation was requested - it has been made. The Legislature can:
1. Remain with the present system and add some "magic" cents per day figure to the present per capita rate.
  2. Accept the concept and adopt the USDA moderate cost plan as the desired feeding level for residents.
  3. Accept the concept and adopt the USDA low cost plan as the desired feeding level for residents.
  4. Accept the concept and adopt a point somewhere between the USDA low cost and moderate cost plans as the desired feeding level for residents.

THE CHOICE IS THEIRS!

**APPENDICES**

APPENDIX A

1. U.S.D.A. food price index figures are from The Consumer Price Index, U.S. Department of Labor, Bureau of Labor Statistics.
2. Minnesota feeding levels (food expenditures per resident per day) are graphed and charted only for the institutions for the mentally ill. Some difficulty was encountered in obtaining this information on the other institutions and this task remains to be done.
3. A glance at the graph indicates that:
  - A. In 1956 the two lines were close for the first time since 1949.
  - B. There has been no decline in the U.S.D.A. food price index since 1960.
  - C. Since 1960 the feeding level has changed from 63¢, to 68¢, to 70¢ (Legislative intent - 72½¢ actual), to 75¢ and has been losing ground this entire period.
4. Assuming the proper relationship existed in 1949 (between the U.S.D.A. food price index and the Minnesota feeding level for residents) then by extrapolation we arrive at a 'proper' feeding level of 1970 of \$0.938.
  - A. Calculations:
$$\begin{array}{rcl} (58¢/100 & = & X¢/161.7) \\ (100X¢ & = & 58¢ \times 161.7) \\ (100X¢ & = & 93.786) \\ ( X & = & \$0.93786) \end{array}$$
5. Authorization has been received to feed at \$0.75 per resident per day, a difference of \$0.188 per resident per day from the extrapolated figure noted in item four.

CHART FOR APPENDIX A

<u>U.S.D.A. Food Price Index</u>	<u>Allowed Feeding Level* Fiscal Year Ending June 30</u>	<u>Approved Feeding Level* Calendar Year Beginning January 1</u>
1949 - 100.0 (35-39 base-170.9)	49 .58	1949 .58
1950 - N.A. (35-39 base-166.9)	1949/50 .58	1950 .58
1951 - 109.9	1950/51 .58	1951 .58
1952 - 115.0	1951/52 .58	1952 .58
1953 - 113.1	1952/53 .58	1953 .58
1954 - 113.1	1953/54 .58	1954 .58
1955 - 110.6	1954/55 .58	1955 .60
1956 - 109.2	1955/56 .62	1956 .62
1957 - 112.2	1956/57 .62	1957 .62
1958 - 118.2	1957/58 .62	1958 .62
1959 - 119.0	1958/59 .62	1959 .62
1960 - 117.6	1959/60 .62	1960 .625
1961 - 121.3	1960/61 .63	1961 .63
1962 - N.A. (57-59 base-102.5)	1961/62 .63	1962 .63
1963 - 130.1	1962/63 .63	1963 .63
1964 - 132.1	1963/64 .63	1964 .63
1965 - 133.6	1964/65 .63	1965 .63
1966 - 136.2	1965/66 .63	1966 .63
1967 - 140.7	1966/67 .63/.68	1967 .68
1968 - 145.5	1967/68 .68	1968 .68
1969 - 152.3	1968/69 .68	1969 .69
1970 - 161.7	1969/70 .70/.75	1970 .75
1971 - ?	1970/71 .75	

\* Per Resident, Per Day

## APPENDIX B

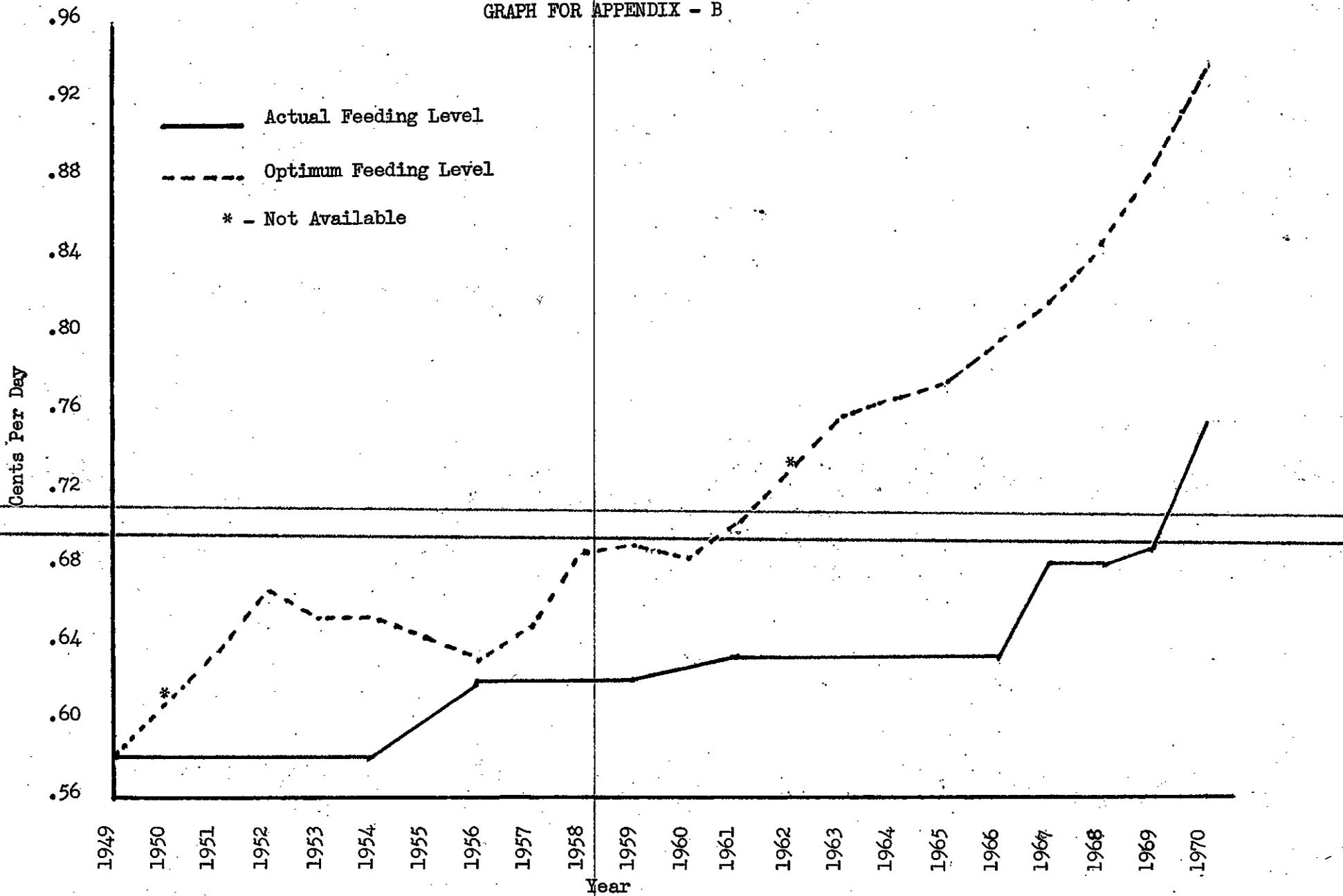
1. U.S.D.A. food price index figures are from The Consumer Price Index, U. S. Department of Labor, Bureau of Labor Statistics.
2. Approved feeding level figures were obtained from the Department of Public Welfare, and are for the institutions for the mentally ill only.
3. In preparing Chart B and Graph B the following assumption was made:
  - A. The 'optimum' level of feeding was provided in 1949 when the CLI was 100.0 and the approved level of feeding was \$0.58.
  - B. A one (1.0) point change in the CLI should be accompanied by a \$0.0058 change in the approved level of feeding to maintain the same relationship.
4. The difference between the approved level of feeding and the 'optimum' level as determined by the method noted in item three (3) has been computed and graphed.
5. By 1963 this 'difference' had grown to \$0.125. Since that time the approved level of feeding has changed from 63¢ to 75¢ and, in spite of this increase in the approved level of feeding, the difference between the approved and 'optimum' levels has grown to \$0.188 (for 1970).
6. Increases in the approved level of feeding which do not contain a mechanism for adjusting the feeding level when the CLI increases are self-defeating.

CHART FOR APPENDIX B

1949 is used as the 'base'; the Cost of Living Index was 100.0, and the approved feeding level was \$0.58. Calculations for the 'optimum' feeding level are on the basis of a \$0.0058 change in feeding level for every one (1.0) point change in the Cost of Living Index.

<u>Year</u>	<u>January 1st Cost of Living Index</u>	<u>Optimum Feeding Level</u>	<u>Approved Feeding Level</u>	<u>Difference</u>
1949	100.0	\$ .58	\$ .58	\$ .00
1950	N.A.	?	.58	?
1951	109.9	.637	.58	.057
1952	115.0	.667	.58	.087
1953	113.1	.656	.58	.076
1954	113.1	.656	.58	.076
1955	110.6	.641	.60	.041
1956	109.2	.633	.62	.013
1957	112.2	.651	.62	.031
1958	118.2	.686	.62	.066
1959	119.0	.690	.62	.070
1960	117.6	.682	.625	.057
1961	121.3	.704	.63	.074
1962	N.A.	?	.63	?
1963	130.1	.755	.63	.125
1964	132.1	.766	.63	.136
1965	133.6	.775	.63	.145
1966	136.2	.790	.63	.160
1967	140.7	.816	.68	.136
1968	145.5	.844	.68	.164
1969	152.3	.883	.69	.193
1970	161.7	.938	.75	.188

GRAPH FOR APPENDIX - B



APPENDIX C

1. Population figures were received from the Departments of Correction and Public Welfare.
  2. The Department of Corrections had their greatest average population (2,943) during the fiscal year which ended June 30, 1959. Average population for the fiscal year which ended June 30, 1969 was 2,215.
  3. The Department of Public Welfare had their greatest average population (16,961) during the fiscal year which ended June 30, 1957. Average population in the fiscal year which ended June 30, 1969 was 10,330.
  4. The two departments combined had their greatest average population (19,848) during the fiscal year which ended June 30, 1959. Average population in the two departments for the fiscal year which ended June 30, 1969 was 12,545.
  5. The Department of Corrections average population dropped 728 residents (24.7%) from 1959 to 1969.
  6. The Department of Public Welfare average population dropped 6,631 residents (39.1%) from 1957 to 1969.
  7. The two departments combined average population dropped 7,303 residents (36.8%) from 1959 to 1969.
- 
-

(1) AVERAGE DAILY RESIDENT POPULATION  
MINNESOTA STATE INSTITUTIONS

Fiscal Years Ending June 30, 1945-1969

	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Mentally Ill:																
Anoka	1,372	1,368	1,341	1,328	1,308	1,022	1,082	1,142	1,209	1,134	1,149	1,154	1,113	1,082	1,064	1,085
(Anoka Tb.)	-	-	-	-	-	-	-	-	(420)	(417)	(401)	(332)	(253)	(209)	(196)	(182)
Fergus Falls	1,934	1,892	1,860	1,847	1,864	1,950	1,974	1,950	1,935	1,876	1,922	1,917	1,859	1,824	1,817	1,852
Hastings	1,075	1,093	1,087	1,051	1,014	1,026	843	917	917	943	981	994	1,000	961	956	940
Moose Lake	953	971	971	996	1,004	1,062	1,133	1,213	1,231	1,259	1,289	1,279	1,283	1,250	1,217	1,140
Rochester:																
Mentally Ill	1,569	1,626	1,600	1,558	1,576	1,603	1,624	1,694	1,770	1,782	1,768	1,734	1,718	1,711	1,660	1,642
S.M.R.M.R.O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. Peter:																
Mentally Ill	2,174	2,183	2,209	2,235	2,264	2,345	2,369	2,351	2,184	2,214	2,233	2,216	2,200	2,153	2,123	2,111
M. S. H.	-	-	-	-	-	-	-	-	248	255	255	244	246	249	244	239
Minnesota Valley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Willmar	1,406	1,427	1,433	1,397	1,387	1,451	1,391	1,413	1,416	1,460	1,483	1,432	1,391	1,396	1,333	1,233
Sandstone	-	-	-	-	-	-	351	430	429	439	454	447	441	438	381	-
Institutions for Mentally Retarded:																
Brainerd	-	-	-	-	-	-	-	-	-	-	-	-	-	20	81	147
Cambridge	1,059	1,060	1,054	1,063	1,070	1,077	1,076	1,068	1,066	1,065	1,072	1,180	1,356	1,432	1,716	1,897
Lake Owasso	-	-	-	-	-	-	-	-	-	-	-	76	90	99	106	104
Faribault	2,502	2,463	2,464	2,606	2,762	2,794	2,804	2,838	3,099	3,125	3,160	3,164	3,142	3,107	3,033	3,096
Owatonna	101	297	355	375	356	338	322	309	321	343	332	338	325	317	313	313
Shakopee	-	-	-	-	-	-	-	-	29	29	29	29	29	29	28	28
A.D.D., St. Cloud	-	-	-	-	-	-	-	-	-	-	47	60	72	67	62	56
Sauk Centre Home for Children	-	-	-	-	-	-	-	-	87	87	88	*	-	-	-	-
Gillette State Hospital	152	152	171	149	164	191	201	184	185	161	160	151	139	133	134	125
Braille and Sight Saving School	109	102	118	122	136	126	97	102	134	124	120	116	114	108	101	94
School for the Deaf	242	242	233	232	240	254	200	204	266	252	254	245	230	233	262	262
Glen Lake State Sanatorium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Sanatorium	-	-	-	-	-	-	-	-	-	-	-	28	53	86	144	174
Tb. only	-	-	-	-	-	-	-	-	230	204	NA	NA	142	123	117	72
Children's Center	-	-	-	-	-	-	-	-	-	-	18	17	18	14	13	13
Minn. Residential Treat. Center	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oak Terrace Nursing Home	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ah-Gwah-Ching Nursing Home	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training School for Boys	356	379	312	266	284	282	274	295	336	342	378	374	404	456	474	394
Home School for Girls	231	231	228	215	178	118	125	142	152	173	172	170	187	194	238	236
Reformatory for Men	668	723	746	792	876	927	1,024	922	860	924	837	856	867	858	838	816
Reformatory for Women	50	48	47	38	46	50	48	48	49	46	55	52	46	48	53	58
Minnesota State Prison	896	829	834	867	896	944	959	999	1,000	1,039	1,110	1,090	1,166	1,258	1,279	1,287
Y.O.C., St. Cloud	-	-	-	-	-	-	-	-	-	-	-	-	70	70	79	87

\* On December 15, 1955 the 53 children in Sauk Centre were transferred to Lake Owasso Children's Home. Sauk Centre closed and Lake Owasso opened.

	1961	1962	1963	1964	1965	1966	1967	1968	1969
<b>Mentally Ill:</b>									
Anoka (2)	1,023	995	982	910	840	771	675	599	563
(Anoka Tb.)	(153)	(130)	(93)	(60)	(41)	(32)	(32)	(8)	-
Fergus Falls	1,835	1,729	1,511	1,389	1,303	1,159	981	777	632
Hastings	896	786	681	676	651	589	461	349	378
Moose Lake	1,079	1,006	934	907	878	858	838	776	658
<b>Rochester:</b>									
Mentally Ill	1,544	1,421	1,244	1,095	920	736	649	640	654
S.M.R.M.R.C.	-	-	-	-	-	-	-	-	-
<b>St. Peter:</b>									
Mentally Ill	1,993	1,848	1,745	1,588	1,398	1,235	1,044	688	376
M. S. H. (3)	245	244	230	201	186	150	143	138	143
Minnesota Valley	-	-	-	-	-	-	-	-	188
Willmar	1,114	959	811	793	769	791	792	766	676
Sandstone	-	-	-	-	-	-	-	-	-
<b>Institutions for Mentally Retarded:</b>									
Brainerd	479	650	906	945	1,149	1,294	1,290	1,246	1,205
Cambridge	1,883	1,872	1,811	1,825	1,747	1,569	1,483	1,360	1,235
Lake Owasso	112	126	126	125	122	124	123	112	118
Faribault	3,089	3,055	2,936	2,839	2,691	2,640	2,539	2,355	1,996
Owatonna	314	299	256	211	179	149	155	164	155
Shakopee	28	30	29	29	27	28	29	28	26
A.D.D., St. Cloud	52	52	29	-	-	-	-	-	-
Sauk Centre Home for Children	-	-	-	-	-	-	-	-	-
<b>Gillette State Hospital</b>	125	125	126	110	112	108	105	94	78
Braille and Sight Saving School (4)	94	91	87	87	88	86	100	98	89
School for the Deaf	270	270	265	267	287	283	297	278	270
Glen Lake State Sanatorium	-	161	137	97	79	57	47	51	51
State Sanatorium	220	225	-	-	-	-	-	-	-
Tb. only	64	45	-	-	-	-	-	-	-
Children's Center	15	23	24	-	-	-	-	-	-
Minn. Residential Treat. Center	-	-	17	28	52	52	51	45	43
<b>Oak Terrace Nursing Home</b>	-	73	157	253	287	294	303	301	317
Ah-Gwah-Ching Nursing Home	-	294	371	422	422	422	427	469	479

(1) All averages are for days open during any year.

(2) Anoka Tb. figures in parentheses are included in Anoka totals.

(3) St. Peter figures in 1945-1952 included Minnesota Security Hospital.

(4) Averages for Braille & Sight Saving do not include summer school.

SOURCES: Biennial Report State Division of Public Institutions  
Biennial Report Public Welfare  
"Total Patient Days and Average Daily Population" for individual fiscal years.

AVERAGE DAILY RESIDENT POPULATION  
MINNESOTA STATE INSTITUTIONS

Continuation of Page 2

	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
Training School for Boys	389	362	380	353	346	325	363	322	243
Home School for Girls	249	254	259	200	158	162	171	163	169
Reformatory for Men	841	918	918	809	790	773	696	698	680
Reformatory for Women	59	63	65	54	51	50	46	59	56
Minnesota State Prison	1,184	1,169	1,057	983	998	975	904	890	860
Minnesota Residential Treatment Center (Lino Lakes)				118	189	175	183	195	207

Appendix C

Recap of Average Daily Resident Population  
Minnesota State Institutions

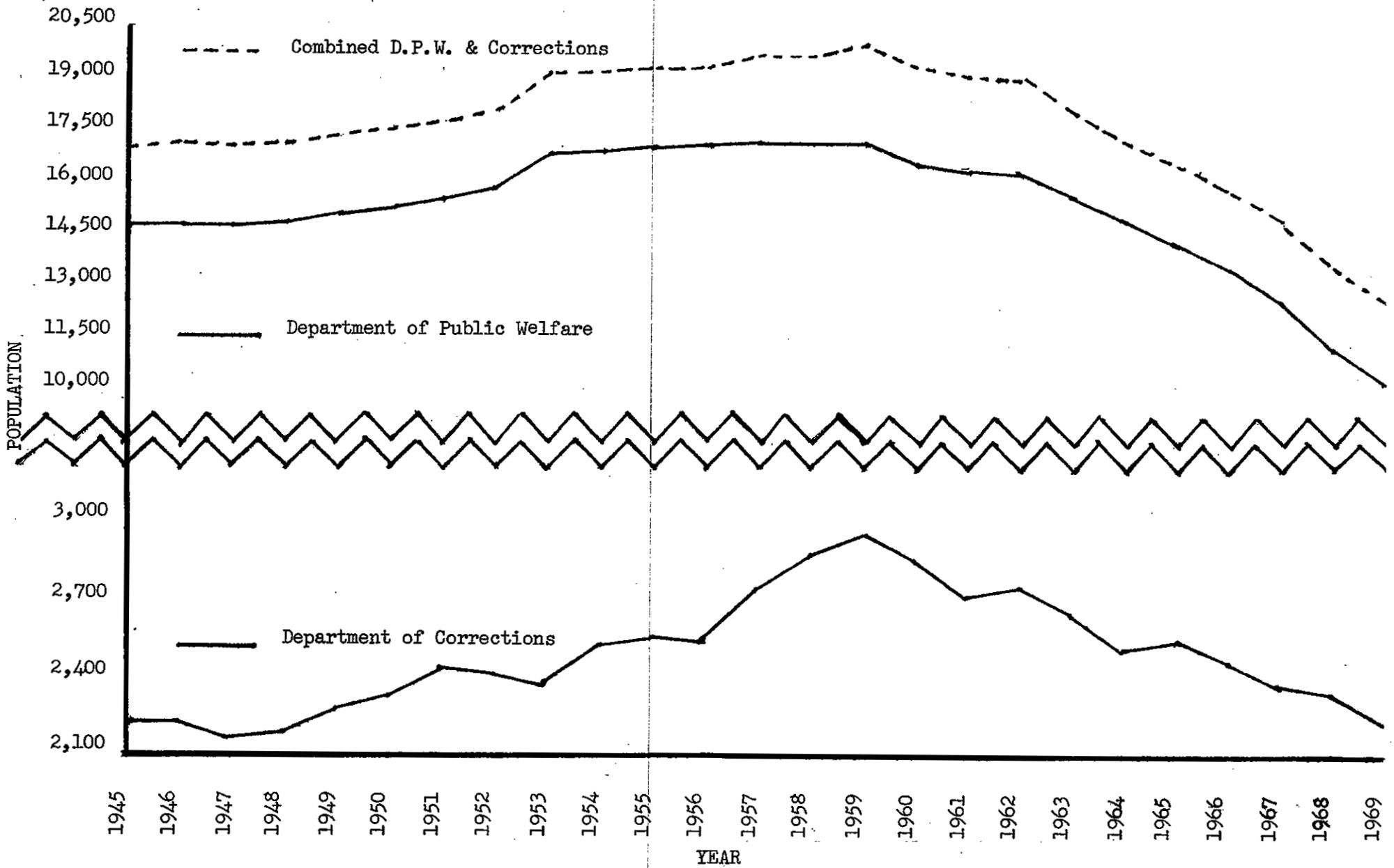
	<u>DPW</u>	<u>Corrections</u>	<u>Combined</u>
1945	14648	2201	16849
1946	14876	2210	17086
1947	14896	2167	17063
1948	14959	2178	17137
1949	15145	2280	17425
1950	15839	2321	17560
1951	15467	2430	17897
1952	15815	2406	18221
1953	16756	2396	19152
1954	16752	2531	19283
1955	16814	2553	19367
1956	16821	2539	19360
1957	16961 **	2740	19701
1958	16832	2881	19713
1959	16905	2943 *	19848 ***
1960	16623	2865	19488
1961	16474	2722	19196
1962	16379	2766	19145
1963	15415	2679	18094
1964	14797	2517	17314
1965	14187	2532	16719
1966	13395	2460	15855
1967	12532	2363	14895
1968	11334	2327	13661
1969	10330	2215	12545

\* Highest Year Corrections

\*\* Highest Year DPW

\*\*\* Highest Combined Total

GRAPH FOR APPENDIX - C



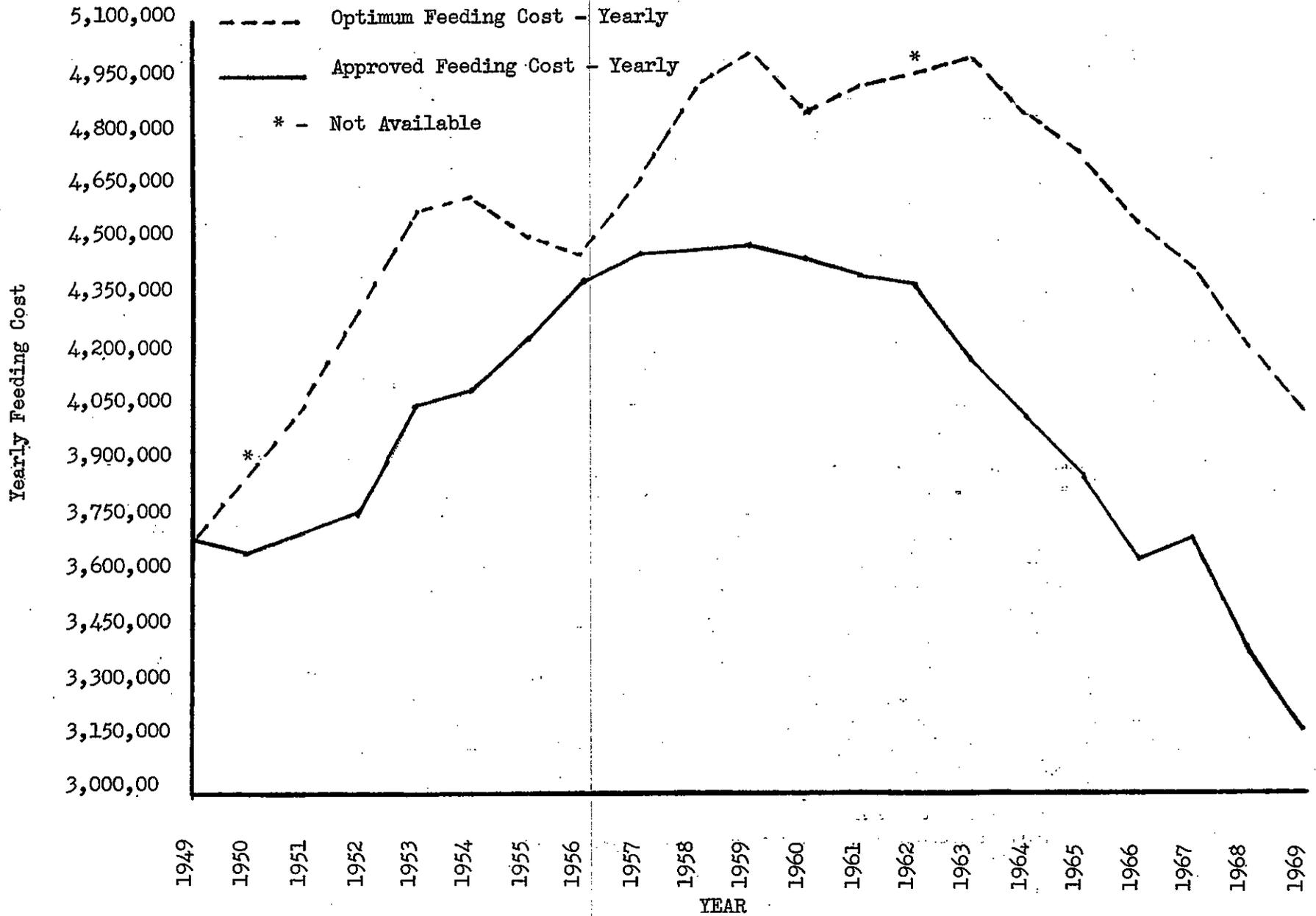
APPENDIX D

1. Exact data on overall expenditures for food in the Departments of Correction and Public Welfare from 1949 through 1969 was not readily available from these offices or from the State Auditor:
2. An approximation of overall expenditures for food was made by using the approved level of feeding (see Appendix B) and the actual resident populations for each year (see Appendix C).
3. In 1949 with an average resident population of 17,425, and an approved level of feeding at \$0.58, total estimated expenditures for food were \$3,688,872.
4. In 1969 with an average resident population of 12,545, and an approved level of feeding at \$0.69, total estimated expenditures for food were \$3,159,458.
5. If the 'optimum' level of feeding (see Appendix B) had been available (by a 'marriage' in 1949 of the approved level of feeding and the Cost of Living Index for food items), the approved level of feeding for 1969 would have been \$0.883 rather than \$0.69.
  - A. Total expenditures for food in 1969 would then have been \$4,043,190 - an increase of \$883,732 over the \$3,159,458 figure which appears in item four (4).
  - B. Comparing 'optimum' expenditures with authorized expenditures it can be said that in 1969 we were permitted to feed our residents at a level comparable to 78% of that level offered residents in 1949 (\$3,159,458/\$4,043,191).
6. Expenditures for 1969 were based on CLI of 152.3 as of January 1, 1969; our July 1970 issue of The Consumer Price Index shows a CLI figure of 164.4 - an increase of 12.1 points.
  - A. The following information has been obtained by utilizing the conversion method shown in Appendix B (item 3-B) which states that for every one (1.0) point change in the CLI there should be a corresponding \$0.0058 change in the approved level of feeding:
    1. CLI change - 12.1 points as noted above.
    2.  $12.1 \times \$0.0058 = \$0.070$ .
    3. Change in approved level of feeding = \$0.06 (see the chart in Appendix A).
    4. Overall loss in purchasing power from January 1, 1969 to July 1, 1970 = \$0.01 (1.33% of \$0.75).
    5. In short, we have lost purchasing power in spite of the fact the approved level of feeding was increased to \$0.75.

CHART FOR APPENDIX D

	<u>Total Population</u>	<u>Approved Feeding Level</u>	<u>Col. One Times Col. Two</u>	<u>Optimum Feeding Level</u>	<u>Col. One Times Col. Four</u>	<u>Difference Col. Five Minus Col. Three</u>
1949	17425	.58	3,688,872.50	.580	3,688,872.50	-- 0 --
1950	17160	.58	3,632,772.00	-	-	-
1951	17498	.58	3,704,326.60	.637	4,066,924.90	362,598.30
1952	17784	.58	3,775,187.52	.667	4,341,465.65	566,278.13
1953	19152	.58	4,054,478.40	.656	4,585,754.88	531,276.48
1954	19283	.58	4,082,211.10	.656	4,617,121.52	534,910.42
1955	19367	.60	4,241,373.00	.641	4,531,200.16	289,827.16
1956	19360	.62	4,393,171.20	.633	4,485,286.08	92,114.88
1957	19701	.62	4,458,336.30	.651	4,681,253.12	222,916.82
1958	19713	.62	4,461,051.90	.686	4,935,938.07	474,886.17
1959	19848	.62	4,491,602.40	.690	4,998,718.80	507,116.40
1960	19488	.625	4,457,880.00	.682	4,864,438.66	406,558.66
1961	19196	.63	4,414,120.20	.704	4,932,604.16	518,483.96
1962	19145	.63	4,402,392.75	-	-	-
1963	18094	.63	4,160,715.30	.755	4,986,254.05	825,538.75
1964	17314	.63	3,992,262.12	.766	4,854,083.78	861,831.66
1965	16719	.63	3,844,534.05	.775	4,729,387.13	884,853.08
1966	15855	.63	3,645,857.25	.790	4,571,789.25	925,932.00
1967	14895	.68	3,696,939.00	.816	4,436,326.80	739,387.80
1968	13661	.68	3,399,949.68	.844	4,219,937.44	819,987.76
1969	12545	.69	3,159,458.25	.883	4,043,190.78	883,732.53
1970		.75		.938		

GRAPH FOR APPENDIX - D



APPENDIX E

1. "A Meal Pattern System Coordinated for Different Institutions"; appeared in the November 1, 1969 issue (Volume 43), of Hospitals, J.A.H.A., pp 104-107.
2. The co-authors are:

Frances N. Keller

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Division of Business Management  
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State of Wisconsin

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State of Wisconsin

research has been concerned with formulation of a set of rules for examining alternative solutions without having to examine every one. This set of rules is called an "algorithm."

#### IMPLEMENTING COMPUTER PROGRAMS

Implementation of computer-assisted menu planning requires adequate data on nutrient content of raw and cooked food, minimum daily allowances, raw food costs, and production costs. Nutrient data are currently estimated from statistical averages. There is no information related to the variation in nutrient content with soil, climate, storage, and other condi-

tions. Brown<sup>5</sup> has summarized the data limitations of full-scale implementation of computer-assisted menu planning.

All programs to date have used only raw food costs as the data base. A study just completed at the University of Florida has estimated, for the first time, the production costs per unit serving in a hospital kitchen.<sup>6</sup> Thus, although the mathematical problems associated with menu planning have been solved, additional work in dietetics and nutrition is needed before implementation of computer programs can progress and their full value can be assessed.

Supervision of food production

is critical to ensuring the validity of the data. If the cooks add raw food to taste, both nutrient and cost data will be in error. Standardized recipes must be followed. ■

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5. Brown, R. M. Dietary allowances and nutrient data hospital menu planning. Tech. Report CP-88002, Computer Sciences Center, Southern Methodist University, Feb. 1968.
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ELEVENTH IN A SERIES OF 13 ARTICLES

# A meal pattern system coordinated for different institutions

by ELEANOR R. IRWIN and FRANCES N. KELLER

**P**LANNING of food requirements is an essential responsibility of dietary management. A diet plan that meets established nutritional standards can be accomplished within a wide range of costs depending on the variety and the amounts of foods selected. How to attain patients' and residents satisfaction with the meals served, at a cost that management can support, was the challenge that stimulated the development of the meal pattern system used by the Food Service Section, Division of Business Management, Wisconsin Depart-

The authors relate how a meal pattern that presents a nutritional level for different sex-age groups at a restricted cost is used to coordinate meal plans and budgets in Wisconsin state institutions. The first nine articles in this series on computer-assisted dietary services appeared in the September and October issues of the Journal, the 10th article appears on page 102, and the last two articles will appear in the November 16 issue. The series is based on the American Hospital Association's Institute on Electronic Data Processing in Support of Hospital Dietary Services, held March 24-27, 1969.

ment of Health and Social Services, for all the state institutions: eight correctional institutions, three hospitals for the mentally ill, a children's treatment center, three institutions for the mentally retarded, and one child care institution.

The meal pattern system presents a nutritional level of feeding at a specified cost for individuals in various sex-age groups. It functions as a management tool for food-service administrators in implementation and evaluation of their feeding programs. In past operation of the various state institutions, the budget allotments for food tended to be influenced mostly by experience records. The quest for a nutritional bench mark by which to measure each institution's budget led to the development of the meal pattern system.

The use of a computer for processing the data has enabled successful budgeting. This computer program does not write menus, however. Menu items are unarrayed in the sense that food items such as flour, sugar, and ground beef are used in specific groups as described by USDA food plans.<sup>1,2</sup> To date, assignment of food items to menus and to recipes has been a manual function.

The budget presentation of the meal pattern is one part of the total system and was the first part to be adapted for the computer. Other parts currently being developed manually are purchasing requirements for various contract periods, menus, standardized rec-

ipes, and daily kitchen production and distribution sheets.

#### THE MODEL MEAL PATTERN

The recommendations of the USDA family food plans<sup>1,2</sup> are the basis for the model meal pattern. The food plans are guides for estimating quantities of food from specific food groups necessary to provide adequate meals for individuals in various sex-age groups at specified cost levels.

The model pattern contains a desirable selection of foods for a 28-day period. The food items chosen and the frequency of serving them provide nutritious and appetizing menus and patient satisfaction at a reasonable cost. The choices of foods and the amounts adequately meet the USDA recommendations, and state purchasing practices provide the foods at costs lower than those indicated by the USDA plans.

The model covers six sex-age groups: children under seven, children seven to 12, females 13 to 19, males 13 to 21, females over 19, and males over 21. The recom-

mended serving sizes of each food item for each sex-age group are representative of the current experience of the state institutions and alert the food service supervisors to the nutritional needs of mixed clientele.

The food items are divided into 12 food groups, each given a code number, as follows:

01. Meat, poultry, and fish.
02. Milk, cheese, and ice cream.
03. Eggs.
04. Fats and oils.
05. Bread and cereals.
06. Dark green and deep yellow vegetables.
07. Citrus fruits and tomatoes.
08. Other fruits and vegetables.
09. Dried beans, peas, and nuts.
10. Potatoes.
11. Sugars and sweets.
12. Miscellaneous, which includes coffee, spices, and food colorings.

Thus the model meal pattern defines food items, serving sizes, and frequency of serving over a 28-day period for one person in each of the six sex-age groups. To establish the model pattern for each

institution, then, it is necessary to apply the institution's resident population distribution figures to the model by computer.

#### COMPUTER CALCULATIONS

The computer calculates as-purchased weights for each food item for each sex-age group. It converts as-purchased weights to nutritional equivalent weights for each food item and each food group, the cost per nutritional pound in each food group, and the total cost of all food for the 28 days. The factors for the conversions are the *kitchen ready factor*<sup>3</sup> and the *food equivalent factor*.<sup>4</sup>

Because serving sizes are listed as "cooked weight" or as "served weight," a conversion factor to kitchen ready weight is required for meats, cooked cereals, dried fruits, dehydrated foods, and so forth. For example:

$$\begin{aligned} &\text{As-purchased weight} \\ &\div \text{Prepared weight} \\ &= \text{Kitchen ready factor} \\ &\text{or 1 lb. beef round with bone} \\ &\div 0.73 \text{ lb. cooked round} \\ &= 1.37 \end{aligned}$$

One picture  
is worth  
a thousand  
words.



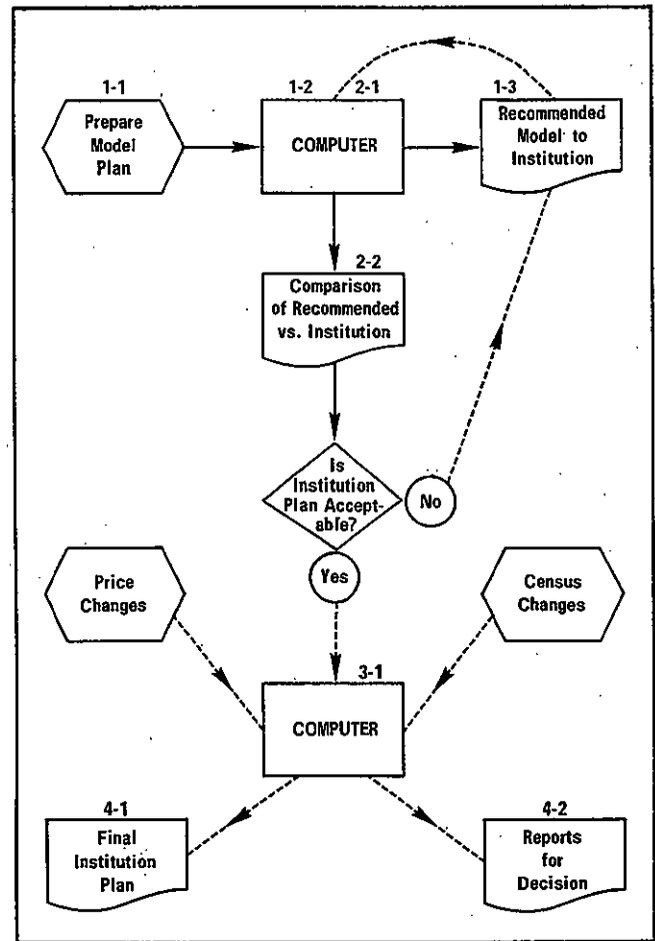
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## BUDGETING PROCESS FOR THE MEAL PATTERN SYSTEM

STAFF OF THE Food Service Section, Division of Business Management, act as middlemen for data processing and dietary departments in Wisconsin's state institutions.



Next,  
As-served weight

× Kitchen ready factor  
= Kitchen ready weight  
or 4 oz. × 1.37 = 5.48 oz.

The kitchen ready weight or the as-purchased weight is necessary for calculation of cost. In addition, a food equivalent factor is applied to the kitchen ready weight or the as-purchased weight to determine the relative nutritional contribution of a food to its food group. The food equivalent factor converts as-purchased weights to a

common denominator within a food group.

Food groups are assigned appropriate common denominators. To illustrate, in the milk group, the as-purchased pounds of cottage cheese, ice cream, nonfat dry milk, and so forth are converted to the calcium equivalent of liquid milk.<sup>5</sup> For example:

Calcium in nonfat dry milk  
÷ Calcium in liquid milk  
= Nonfat dry milk equivalent factor

or

5933 milligrams  
÷ 535 milligrams = 11

Next,  
Weight of nonfat dry milk  
× Equivalent factor  
= Milk group equivalent weight

or

2 lb. × 11 = 22 lb.

Each equivalent pound in the milk group represents 535 milligrams of calcium. To determine the cost of 535 milligrams of calcium from selected foods, the equivalent cost per pound for the food group is calculated as follows:  
Total cost of food group

÷ Total equivalent pounds in food group  
= Equivalent cost per pound

### BUDGETING FOR FOOD PLAN

For comparison of actual usage at each institution with the recommendation in the model meal pattern, each institution's storeroom issues are translated into the terms used in the model and printed alongside the model plan on com-

### the authors

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puter print-out. Print-outs are sent to all the institutions.

Each institution's food usage plan is considered acceptable for budget presentation for the next two years if it compares favorably with the model plan in nutritional contributions and costs. Comparisons are made of the following:

1. Equivalent pounds within a food group are required to be equal to or above those of the model.

2. Equivalent cost per pound within a food group is required to be equal to or below that of the model.

3. Total cost of all foods is required to be equal to or below that of the model.

The food service administrators can make changes within these criteria. They are not required to follow the same selections as those in the model meal pattern. Each institution's plan is approved for budget presentation if it meets the comparison criteria, and this plan is understood to be the meal pattern guide for the next two years.

The budgeting process is depicted in the figure\* on page 106. The process begins (refer to 1-1 in the figure) in the Food Service Section, Department of Health and Social Services. The plan is key-punched and routed to the computer (1-2). Then the food plan list is forwarded to the institution (1-3). Next the institution's changes are key-punched and submitted to the computer (2-1), and a comparison list is forwarded to the Food Service Section for editing (2-2). If the editing discloses that the institution's plan is not acceptable (1-3), steps 2-1 and 2-2 are executed again, and this procedure is repeated until an acceptable plan is processed. Then the institution plan and changes in prices and in census are submitted to the computer (3-1). A final report of the institution plan is run with the current prices (4-1), and store-room and other summary reports are produced (4-2). The input in the final reports is used for analytical reports.

The Food Service Section, Division of Business Management, whose responsibility is that of planning and advising, also acts

\*Contributed by Carl Sam, data processing specialist, Division of Business Management, Wisconsin Department of Health and Social Services.

as a middleman for data processing and dietary departments. Direct communication to data processing by means of teleprocessing equipment at each institution would be desirable.

#### BENEFITS OF MEAL PATTERN SYSTEM

The computer-assisted meal pattern system has provided an accurate and efficient method for realizing these objectives:

1. Defining nutritional standards by sex and age.

2. Forecasting food requirements for many separate institutions.

3. Projecting an overall budget plan for a two-year period.

4. Providing an adjustable plan for changes in census and in food prices.

5. Allowing for flexibility in the use of favorite recipes and menus (important because there are many long-stay residents in state institutions).

6. Forecasting problems "before the fact" to facilitate more effective management.

7. Providing good-quality food at the most economical possible cost.

8. Performing the processes with a minimum of administrative costs and data processing time.

The system, since it involves management approval for budget allotments, is a tool for administrators. Anyone interested in the patients and institutional residents can review the plan of feeding item by item. Each expenditure is documented. A specified level of nutrition is assured regardless of prices. An accurate and immediate information system is available for decision making.

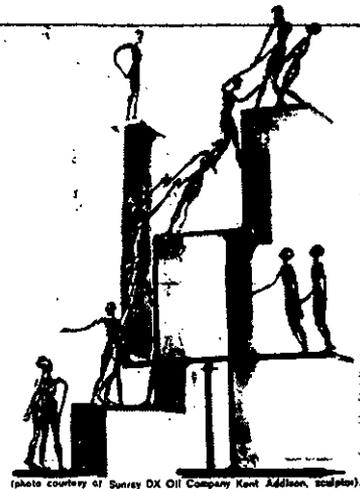
Architects and food facilities consultants have used the food requirement totals as a basis for planning storage and refrigeration in the remodeling of one dietary department and in the construction of another. Quantities of food to be purchased can be estimated quickly for long-term contracts, such as the canned goods contract for one year. It is expected that updating of prices and census on all institution plans will be necessary as often as six times a year—a frequency that coincides with the period of the meat contract.

Food service administrators are developing standardized recipes and written production and distribution sheets in order to follow their budget patterns more accurately. Several institutions have made plans to use an ingredient room for better production control. Future plans also include development of a computer-assisted model pattern for modified diets and testing of each phase of the system in order to develop a procedures manual. As more parts of the system are tested and proved, more of the procedures now done manually can be done by the computer. ■

#### REFERENCES

1. Cofer, E., Grossman, E., and Clark, F. Family Food Plans and Food Costs. USDA Home Economics Research Report, No. 20, 1962.
2. Family Food Budgeting for Good Meals and Good Nutrition. USDA Home and Garden Bull. No. 94, Jan. 1964.
3. Food Buying Guide for Type A School Lunches. PA-270, Rev. Jan. 1946.
4. Watt, B. and Merrill, A. Composition of Foods. USDA Agriculture Handbook, No. 8, Dec. 1963.
5. Peterkin, B. B. Food Selection for Good Nutrition in Group Feeding. USDA Home Economics Research Report, No. 35, 1968.

# OPEN



your MIND  
your HEART  
your HAND  
to the MENTALLY ILL

support your  
**MENTAL  
HEALTH  
ASSOCIATION**



APPENDIX F

1. The additional information and data referred to in these letters is available and supplemental information will be forwarded upon request on these individuals who will receive a copy of this report.
2. The entire 'package' of material we have gathered will be made available to that person appointed to continue the research and polish the presentation which will be made to the Department of Administration.
3. During the "question and answer" meeting held on Monday, May 4th, a question was raised about the amount of computer time required to establish and maintain the feeding program. Mrs. Keller's letter of May 12th provides that information.



State of Wisconsin \ DEPARTMENT OF HEALTH & SOCIAL SERVICES

DIVISION OF BUSINESS MANAGEMENT  
WILSON STREET STATE OFFICE BUILDING  
MADISON, WISCONSIN 53702

April 7, 1970

Mrs. Carol Smith, Dietitian  
St. Peter State Hospital  
St. Peter, Minnesota

Dear Mrs. Smith:

Mrs. Charlotte Wroblewski wrote asking that we send some information to you regarding our food costs and budget.

Last year for the first time the budget request for 19 of our institutions, including Mental Hospitals, was based on a food plan which met USDA standards for 6 sex and age groups. I am enclosing a copy of an article which may explain this meal pattern concept.

We have a different plan (food commodities) for each institution. This plan is applied to population makeup in age and sex groups of the institution to arrive at nutritional level and cost level. Enclosed please find one plan which is only a model (a standard). Exhibit A.

Also enclosed please find the updating of prices for various contract periods. The plan is the same--prices vary. Exhibit B.

In addition, we have now the modified diet plans on data processing. With such statistical data we were able to sell the meal pattern idea and money required to support the program.

We would be happy to explain the total program in depth. We know it sold the increased costs of feeding in our institutions.

Good luck.

Sincerely yours,

*Frances Keller*  
(Mrs.) Frances Keller  
Chief, Food Service Section

DIVISION OF BUSINESS MANAGEMENT

FK:ie

cc: Mrs. Charlotte Johns Wroblewski



State of Wisconsin \ DEPARTMENT OF HEALTH & SOCIAL SERVICES

DIVISION OF BUSINESS MANAGEMENT  
WILSON STREET STATE OFFICE BUILDING  
MADISON, WISCONSIN 53702

April 23, 1970

Mr. Jim Littig  
St. Peter State Hospital  
St. Peter, Minnesota 56082

Dear Mr. Littig:

Eleanor and I are looking forward to meeting you and other committee members on Monday, May 4, 1970.

We will arrive on North Central Flight 467 arriving in Minneapolis-St. Paul at 9:41 A. M.

A meeting is arranged with Mr. Tiss tomorrow in order to assure continuity in materials presented.

In order to utilize our time to your advantage, I have outlined various types of information which we will make available. Please let us know which subjects have highest priority. Refer to attached listing. We will be prepared to explore any of the subjects in depth.

If you wish additional information of any type, let us know.

Sincerely,

*Frances M. Keller*

(Mrs.) Frances Keller  
Chief, Food Service Section

DIVISION OF BUSINESS MANAGEMENT

FK:ie

Enclosures

- A. Organization Chart - Wisconsin Department of Health and Social Services.
- B. Meal Pattern Evolution in Wisconsin.
- C. Total Meal Pattern System.
  - 1. Schematic drawing of total system.
  - 2. Information Report of Meal Pattern System.
- D. Meal Pattern Plan for Budget.
  - 1. Article which appeared in Journal of American Dietetic Association.
  - 2. Complete description of the plan.
  - 3. Sample of Model vs. Institutions Plan.
  - 4. Pound Conversion Chart for Pricing.
- E. Budget Process in Wisconsin.
- F. Department of Health and Social Services Complete Process.
- G. Food Budget-Cost Comparisons.
  - 1. ~~The 1968-69 Operating Budget compared to 1969-71 and effect of food price increase on the plan.~~
  - 2. Meal Cost Comparison Chart. Budget 1967-69, Experience 1967-68, Budget Meal Pattern 75%, July 1969 Meal Pattern, and USDA Low Cost.
- H. Reference Material.
  - 1. Handbook 35.
  - 2. Nutritional Calculation.
- I. Benefits of Computer Assisted Management Programs.
- J. Future Additional Machine Generated Programs.



State of Wisconsin \ DEPARTMENT OF HEALTH & SOCIAL SERVICES

DIVISION OF BUSINESS MANAGEMENT  
WILSON STREET STATE OFFICE BUILDING  
MADISON, WISCONSIN 53702

April 28, 1970

MEMORANDUM

TO: Mr. Jim Littig  
St. Peter State Hospital  
St. Peter, Minnesota 56082

FROM: Eleanor Irwin *E.I.*

SUBJECT: PROJECT WISCONSIN

Your memos dated April 24th have arrived. Thank you.

Enclosed are materials which you requested concerning sex-age groups and costs of the model plans:

1. Meal Cost by Sex-Age Group for Winnebago State Hospital for January and February 1970.
2. Sex-Age Groups used by Wisconsin.
3. Food Plans for Institutions (Moderate, Low, 50% and 75% pound level taken from USDA reference, USDA Bulletin 94, January 1964).
4. \*Food Plan at Moderate Cost (USDA Home and Garden Bulletin 94, January 1964).
5. Seventy-five % Plan--Pounds per person for 28 days. (Comparison of Wisconsin model plan with USDA recommended pounds in each food group.)

EI:ie

Enclosures

\*Our 1971-73 Budget Request will use recommendations of the most current reference, "Food Selection for Good Nutrition in Group Feeding," USDA Home Economics Research Report No. 35, 1968.



State of Wisconsin / DEPARTMENT OF HEALTH & SOCIAL SERVICES

DIVISION OF BUSINESS MANAGEMENT  
WILSON STREET STATE OFFICE BUILDING  
MADISON, WISCONSIN 53702

May 12, 1970

Mr. Jim Littig  
Business Administrator  
St. Peter State Hospital  
100 Freeman Drive  
St. Peter, Minnesota 56082

Dear Mr. Littig:

At your Monday, May 4, Committee Meeting regarding Project Wisconsin, Mr. Duncan asked for information on programming and data processing time for the budget meal pattern.

Mr. Carl Sam, Data Processing Specialist, Division of Business Management, provided the following information:

A. Development Stage.

1. Data Processing Specialist - Communications with Dietitian and understanding the terminology and needs. 40 hours
2. Data Processing Specialist - Writing programs. 80 hours
3. Key Punch Operator - Key punch time, loading, etc. 60 hours  
180 hours

B. Continuing Program.

- |   | <u>Bi-Monthly</u> | <u>Yearly</u> |
|---|-------------------|---------------|
| 1. Key Punch Operator - Update Programs       | 16 hours          | 96 hours      |
| 2. Machine Operator - Update Programs         | 4 hours           | 24 hours      |
| 3. Machine Time on Model 20 - Update Programs | 1½ hours          | 9 hours       |

The timely comprehensive information provided by the computerized system is an excellent tool for management which was not possible prior to the development of this program.

The small expense involved in such a program could be offset many times by savings resulting from a change in policies in purchasing quality

Mr. Jim Littig  
St. Peter State Hospital  
St. Peter, Minnesota 56082

commodities as a result of the timely adequate information.

If further information is needed related to data processing, please feel free to contact Mr. Carl Sam.

Good luck.

Sincerely,

*Frances Keller, n.e.*  
(Mrs.) Frances Keller  
Chief, Food Service Section

DIVISION OF BUSINESS MANAGEMENT

FK:ie

Enclosures

P.S. Current prices of various food plans will follow as soon as we have them available.

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State of Wisconsin \ DEPARTMENT OF HEALTH & SOCIAL SERVICES

DIVISION OF BUSINESS MANAGEMENT  
WILSON STREET STATE OFFICE BUILDING  
MADISON, WISCONSIN 53702

May 18, 1970

Mr. Jim Littig  
Business Administrator  
St. Peter State Hospital  
100 Freeman Drive  
St. Peter, Minnesota 56082

Dear Mr. Littig:

We enjoy reading your daily bulletins. It would appear your group readily understands the requirements of an adequate food service operation. Necessary supplies must be available to make our plan or any plan work. We have increased our inventories to take care of this problem.

Enclosed please find the institutions updated prices for May and June.

In addition, a copy of the updated meal pattern for Mendota is included. At the end of each of the 12 food groups you will find the average cost per equivalent pound which can be applied to the pounds required for each sex and age group.

If we can provide any additional information or answer questions, feel free to contact us.

Sincerely,

*Frances Keller*

(Mrs.) Frances Keller  
Chief, Food Service Section

DIVISION OF BUSINESS MANAGEMENT

FK:ie

Enclosures

APPENDIX G

1. This report, obtained from Mrs. Keller, provides information on Wisconsin's progress in implementing their meal pattern system.

## INFORMATIONAL REPORT - MEAL PATTERN PROGRESS

September 1969

### General.

The meal pattern system is a systematic approach to money, meals and management. It provides the basis for a food budget. Once the system is in operation, it can provide: (1) quality food at the most economical cost, (2) a plan which meets the nutritional and psychological needs of all persons under care, (3) identification of food cost increases, (4) information on deviations from the food plan, (5) a basis for better decision making with more information and updated information, (6) cost comparison analysis of various food products, and (7) internal controls.

### Present Status of the Meal Pattern System.

#### A. The Plan (Programmed for Computer).

The institutions have developed their 75% plan for patients which meets the nutritional needs and budget level as indicated by Mr. Schmidt. (At present, Central Colony has conformed to cost but has not completely conformed to our nutritional level.)

This plan was the basis for the 1969-71 budget request. Money was allocated on the 75% plan using January 1969 prices for all food items.

#### 1. Computer Program for Computing Case Prices to Pound Prices.

A program was developed to compute cost of cases of food into cost per pound of food. With a computer program, all items must be expressed in terms of cost per pound.

As a result of this program we are better able to compare prices and to determine the most economical purchase.

This program provides price per pound of all food commodities and forms the basis for updating meal patterns of 25 institutions, farms and camps.

#### 2. Modified Diets Plan.

Plans have been prepared for modified diets and programmed for computer application. A comparison of the model plan to the institution plan has not been made yet due to lack of computer time.

B. The Controls (Schedule Operations).

1. Food Block for 13 Weeks.

A food block using computer application was developed for each institution. This indicates quantity of food item to be used per time and forms for equal distribution throughout the 13 week period. This forms the basis for menu planning and daily requisitions. The institutions have been trained in use of the food blocks.

2. Food Estimates for Purchase.

Forms for use in determining food requirements have been developed, distributed, and used for canned goods, groceries, frozen foods, and meat items. This forms a better basis for determining requirements and evaluating the institution requests.

We hope computer time will be available soon to reduce man hours at the institutions in routine calculations.

It appears the Food Service Administrators have received this tool as a great help in determining food requirements.

3. Weekly Menu.

All institutions have submitted one week's menu based on the 75% plan. All menus were evaluated by the Food Service Section and most were approved. A few menus were poorly planned and were returned to the institutions for revision.

All institutions have had numerous training sessions in good menu planning and a rating form has been in use by institutions for several years. This is one of the institutions' weakest areas.

4. Standardized Recipes.

A minimum of one recipe from each institution was submitted for review of form. Institutions have participated in training workshops presenting the use of form, calculations and standardization of recipes numerous times.

Many institutions are in the process of developing and testing recipes. This is a slow process. A computer program and a central recipe file would reduce labor hours in this tedious calculation.

This is another of the institutions' weakest areas.

5. Daily Production Demand.

Training sessions have been given on preparation of this daily production demand. Some institutions have them in use; others do not.

This is one of the most important steps for control.

6. Daily Requisitions.

Institutions are presently ordering food from the stores two to three times weekly since stores are closed Saturday and Sunday. We are considering a system which would give us 28 day issues and, ultimately, daily issues. Consideration is being given to use of requisition forms rather than a storeroom report for the evaluation process.

C. Operations.

1. Ingredient Room.

For good control in quality food preparation and cost control, an ingredient room where one person is assigned to weighing ingredients for daily recipes is necessary.

The institutions have been encouraged to set up an ingredient room. However, none has been established to date.

2. Food Preparation.

It is not possible at present to obtain the highest quality food products due to lack of trained staff and lack of standardized recipes. Emphasis has been placed on training of production staff by Food Service Section with programmed cook trainer material. Not all institutions have participated.

3. Food Service and Distribution.

With numerous outlying serving areas, it is difficult to provide high quality food. Future plans include a system which will provide for less time between food preparation and service.

D. Evaluation of Food Plan.

A manual evaluation form has been available to the institutions for several years. The meal pattern was related to food issues as indicated on storeroom report. This does not provide adequate information since number of days and number of meals varies from the meal pattern.

Alternative systems are being developed presently.

Conclusion.

Progress is slow both in the meal pattern system for all institutions and the pilot project at Winnebago due to lack of adequate staff and staff hours both at the institution level and our office.

Lack of computer time from our data processing section has delayed the program. At present the delays are in the areas of: (1) updating institution census, (2) updating prices as new contracts become in effect, (3) developing modified diet meal patterns to provide a complete patient food plan, and (4) developing new programs for food requirements, production distribution demand and standardized recipes for better control.

Future progress is dependent upon: (1) labor hours available at both Food Service Section and Institutions, (2) labor turnover in supervisory positions in the institutions, (3) Food Service Administrator positions at the institutions filled with trained staff, and (4) data processing time.

APPENDIX H

1. The reports which follow were prepared by:

- A. Mrs. Margaret Kienzel, Dietitian, Glen Lake State Sanitorium.
- B. Mrs. Patricia Hoehn, Coronary Dietitian, St. Peter State Hospital.
- C. Mrs. Maxine Gustafson, Dietitian, and Mr. Siskoff, Chief Cook both from Rochester State Hospital.
- D. Mr. James Kruger, Chief Cook, St. Peter State Hospital.

DEPARTMENT St. Peter State Hospital

Date: May 13, 1970

TO : Mr. James Littig  
Business Manager

FROM : Margaret Kienzel, Dietician  
Glen Lake State Hospital

SUBJECT: Trip to Chippewa Falls, Wisconsin

This is a 1400 bed institution for the mentally retarded individual. Our meeting was with the Dietician, Mrs. Marian Walsdorf. She has the title of Food Service Administrator.

Mrs. Walsdorf feels that the 'Wisconsin Plan' is working quite well, but it is still relatively new and there are constant problems to be worked out. It is quite apparent that the management and success of the project are largely dependent on the Central Office Staff - Mrs. Keller and Mrs. Irwin.

Examples:

1. Evaluations of meal prices are made every two months in Madison.
2. If extra money is needed, the institution contacts the Central Office with the necessary information and Mrs. Keller and Mrs. Irwin approach the "Board of Emergency".
3. If there is a question where a certain food would be placed in the 12 categories in this institutions storeroom, they wire Madison for the proper category. It is very important to have all institutions using the same categories for all items.

Some of the advantages of the system are:

1. Good records of inventory and food usage. (This entails considerably more book work for the storeroom staff. A new position was created for a man to take care of the accounting in the Food Service, and to prepare reports to be sent to Madison.)
2. Flexibility of funds available. The administrator of the institution said he was in favor of it because they no longer have so many fiscal problems.

Disadvantages are:

1. Increased work and records.
2. More rigid control over menu in some cases, particularly Modified Diets. The therapeutic dietician said that the "Model Runs" set up for the modified diets were not adapted to the general diet, and did not contain foods that they wanted to use. They hope to see improvement in this area. At this time, they must conform exactly to the "model plan" for modified diets sent out from Madison.

DEPARTMENT St. Peter State Hospital

DATE: May 13, 1970

TO : Mr. James Littig  
Business Manager

FROM : Margaret Kienzel, Dietician  
Glen Lake State Hospital

SUBJECT: Trip to Chippewa Falls, Wisconsin - Page Two

I asked about the amount of training required before starting the system in the institutions.

Training sessions were scheduled in three areas: North, Central, and South Wisconsin. They consisted of five separate days of workshop activity, with additional work done between sessions by the participants.

Question about method of ordering canned goods:

The order for one year's supply is calculated in August. It comes into Waupun warehouse in December and January. Amounts needed for February 1 to following January 31 are estimated. They are requisitioned from the warehouse on a monthly basis, usually.

The contract for canned goods lists standard and fancy as grades on quality.

Meat contract - Mrs. Walsdorf gave me a copy of the meat contract which Mr. Donicht has asked me to obtain if possible. It has been forwarded to him.

DEPARTMENT St. Peter State Hospital

DATE: May 13, 1970

TO : Mr. James Littig  
Business Manager

FROM : Pat Hoehn, Coronary Dietician  
St. Peter State Hospital

SUBJECT: Trip to Chippewa Falls, Wisconsin

I.B.M. Meal Pattern Plan based on Nutritional Standards as get up by USDA seems to be well accepted at the Northern Wisconsin Colony and Training School, Chippewa Falls, Wisconsin. Mrs. Walsdorf, Food Service Administrator, and her staff initiated the plan at the institution. They started operating under the program in July of 1969, but due to inventory shortages, they were not in full swing until January of 1970. The special diets are just now being incorporated.

As explained by Mrs. Walsdorf, the model plan was prepared by Mrs. Francis Keller and Mrs. Eleanor Irwin, Dieticians, Central Office, and then presented to various hospitals at five, one-day training sessions. Each institution took the model plan (computer print-out) and modified it according to their desires. These were sent in and run through the computer until a working model for each institution was acceptable as far as cost and nutritional requirements are concerned.

This particular institution was set up to operate on a cost of \$0.2698 per patient per meal in January, 1969. However, due to the rising cost of food, the institution was operating at \$0.289 per patient per meal in January of 1970.

This plan appears to me to provide budget flexibility. After the model plan is set up and approved, for a set nutritional level at a given time, this level is then maintained regardless of the cost. The Model Plan itself is evaluated every two months and adjustments are made for fluctuations in food costs. This plan also takes into consideration the need for additional money for special diets and nourishments. If food prices increase, there is an Emergency Fund which can be appealed to for additional funds so that the nutritional level of feeding remains constant.

At Northern Wisconsin Colony, they are setting up a thirteen week (four seasonal) cycle menu. The planning of this menu seems greatly simplified due to the I.B.M. meal pattern. This pattern provides the amount of each food item available for use in a twenty-eight day period; therefore, it gives a definite guide to follow in making out the menu. However, some difficulty was experienced in writing their special diets according to the models set up. Mrs. Walsdorf and her therapeutic dietician

DEPARTMENT St. Peter State Hospital

DATE: May 13, 1970

TO : Mr. James Littig  
Business Manager

FROM : Pat Hoehn, Coronary Dietician  
St. Peter State Hospital

SUBJECT: Trip to Chippewa Falls, Wisconsin - Page Two

felt the modified diet plans were too rigidly controlled and should be more adapted to the regular menu. Items which they normally included in their diets were not listed, therefore not budgeted, and could not be used. They also found some variances with the kitchen ready factors.

I was impressed with the quantity control that this program provided in this institution. The size servings are specified by USDA standards for sex-age groups. To simplify servings, they have combined the six age-sex groups into three groups--Children, Girls, and Boys. Each day they receive a patient count by buildings and serving groups. This information is then used by the food production manager in setting up a daily production sheet. From this census, and the serving portion size guide he can determine exactly what must be prepared for and sent to each area in keeping with the model nutritional level and cost.

Ordering under this meal pattern plan is also simplified; as the figures (lbs.) required for twenty-eight days can be taken directly off the computer print-out. It seems that there would not be the pressure of ordering to meet a monetary figure. Also, it appeared to me that less time would be spent in revising orders. However, it would be necessary that the food orders arrive when needed, to stay within this model plan.

For the above reasons, I feel that this is a workable plan and that it would be adapted for use in the State Institutions of Minnesota.

DEPARTMENT St. Peter State Hospital

DATE: May 13, 1970

TO : James Littig  
Business Manager

FROM : Maxine Gustafson, Dietician  
Mr. Siskoff, Chief Cook  
Rochester State Hospital

SUBJECT: Trip to Sparta and Madison, Wisconsin

In brief, those working with this plan stated they liked it. It insured that no steps be forgotten.

They did feel that there was little flexibility and that changes in patient population caused some difficulty. It seemed to be a great amount of detail work.

The Wisconsin plan does allow them to serve much more variety and more expensive foods. One of their staff people did state that perhaps this was a mistake since many of their patients could not afford to eat this well when they went home. In fact, she couldn't on her salary.\*

None of them varied their servings for the age-sex group. They averaged them.

\*Both facilities were much better staffed than our department at Rochester.

DEPARTMENT St. Peter State Hospital

DATE: May 13, 1970

TO : Mr. James Littig  
Business Manager

FROM : Mr. James Kruger  
Chief Cook  
St. Peter State Hospital

SUBJECT: Trip to Sparta and Madison, Wisconsin

Thursday, May 7, Mrs. Gustafson, Mr. Siskoff, and I visited the Wisconsin Children's Treatment Center at Sparta, Wisconsin. We met with Mr. Krues, Business Manager and Mr. Dickman, Food Service Administrator. We discussed the "Wisconsin Food Plan". They (Krues and Dickman) were very pleased with the plan and endorsed it fully.

We asked how they handled the various "sex-age group" they had at their institution, how they served the different quantities to each. They said they averaged the quantities over-all, and made no attempt to serve each group individually.

We asked about the delivery plan they had for supplies, and what they did about late deliveries, non-deliveries, etc. They said they had no such problems. The state of Wisconsin has a central warehouse that distributes the non-perishables, and this has eliminated that problem.

One of the few problems they had encountered was the food needs for off campus activities. They had to stick strictly to the menu as far as the food provided for these activities. The Recreational Therapy Department did not like this especially, but this was the only way it could be handled.

The institution received day old bakery products from the local merchants. This was not figured against the "Meal Plan", but was used as an extra bonus and used for treats in some cases.

We toured the kitchen facilities, and found them old, but apparently in good shape, and the building well lighted and newly painted, but the location was in a basement as so many of the old kitchens are. What impressed us most was that while the "Center" only has a capacity of 90 beds, they had a staff of seven cooks, and the Chief Cook was making \$815 a month and wasn't at the top of his wage scale. He was anticipating a \$40 a month raise in July, and said they got a \$35 or \$40 raise every year. His top wage was over \$900 a month. The staffing pattern and wage pattern put Minnesota's to shame, it seemed to us.

DEPARTMENT St. Peter State Hospital

DATE: May 13, 1970

TO : Mr. James Littig  
Business Manager

FROM : Mr. James Kruger  
Chief Cook  
St. Peter State Hospital

SUBJECT: Trip to Sparta and Madison, Wisconsin - Page Two

We then went to Mendota State Hospital at Madison and talked to Miss Gundlach, the Food Service Administrator there. Miss Gundlach was very enthusiastic about the "Plan", and felt it was excellent.

She did say that it took a lot of preparation to set the plan in operation. It took something like a year for her to do the necessary paper work, but that once it was put in operation it worked fine. She said it did take a while to correct any errors that one had made in calculating the needs of the institution.

They also supplemented the "Plan" with rhubarb, apples, and asparagus that were still being raised there at the institution, although technically they were no longer farming.

They also receive a hedge by purchasing the milk from one of the prisons that have a large dairy herd. We asked Miss Gundlach how they handled the various sex-age groups as far as distribution and she said they averaged it out among the entire institution. They felt it was the only way they could handle it. Miss Gundlach also said it was nearly impossible to meet the nutritional standards, in some cases, unless they were given supplemental medication. (For instance the amount of iron needed by women).

We toured the kitchen facilities and found them to be modern and up-to-date. They were anticipating some new equipment and remodeling, but in general they seemed to have a fine facility. We were especially impressed by the large number of coolers and freezers they had. We were also impressed by the many personnel in their kitchen. This was a 550 bed institution and the staffing and wages were much better than Minnesota's. Besides a large staff of cooks, bakers, and butchers they had three laborers assigned to the kitchen to clean it and one maintenance man to keep things in repair.

DEPARTMENT St. Peter State Hospital

DATE: May 13, 1970

TO : Mr. James Littig  
Business Manager

FROM : Mr. James Kruger  
Chief Cook  
St. Peter State Hospital

SUBJECT: Trip to Sparta and Madison, Wisc. - Page Three

On the way back to Minnesota we discussed what we had seen and heard, and some of our conclusions were as follows:

1. We felt that the plan was more complicated than it would have to be. The sex-age groupings didn't seem to have much purpose.
2. The plan seemed quite rigid, we wondered if we wouldn't lose all flexibility as far as menu planning.
3. There would have to be a strict delivery schedule maintained something we haven't had and can't get with some vendors.
4. All recipes would have to be standardized and followed very strictly.
5. There would be more paperwork for the culinary departments to take care of.
6. It would be a relief not to have to worry about rising costs of food, to have the automatic raises in allowance built in.

APPENDIX I

1. Wisconsin food prices were taken from a February 1970 print out furnished by Mrs. Keller.
2. Minnesota food prices for the 103 comparable items were taken from the purchase orders indicated.
3. A 'weighted' presentation would have provided more accurate information but this information was not readily available.
4. In a few cases where the case sizes purchased varied, it was necessary to convert the prices (by taking the cost per ounce) to arrive at a valid comparison.
5. Taking these limitations into consideration, the study indicated that Minnesota paid 108.417% more than Wisconsin did for the items listed.

FOOD COST COMPARISON

<u>ITEM</u>	<u>WISCONSIN PRICE</u>	<u>MINNESOTA PRICE</u>	<u>MINNESOTA PURCHASE ORDER NUMBER</u>
Beef Chucks Standard	\$ 0.4800	\$ 0.5075	0-44943
Beef Rounds U.S. Standard	.5800	.6525	0-44943
Loins Pork Reg. No. 1 8-14	.6325	.7119	0-44943
Pork Rst Bonl S Butt 4/6 lb. Port	.8500	.8100	0-44998
Pork Bacon Slab Regular	.6750	.5775	0-44943
Frankfurters Regular Contract	.5500	.5273	0-44986
Bologna All Meat Reg.	.5500	.5020	0-44943
Salomi Reg Contract	.6000	.6800	0-44943
Chicken Fryers	.3450	.3744	0-41755
Turkey Roast	.4300	.4624	0-41755
Tuna Cnnd Sld Brn 13 oz. Cn Gd Cntr	10.9700 cs.	13.0700 cs.	0-44747
God Frozen Fillet 2-4 oz.	.3650	.3850	0-41330
Haddock Frozen Fillet 2-4 oz.	.5850	.5600	0-41330
Perch Frozen Ocean 4 oz.	.3950	.4050	0-41330
Ice Cream Mix	1.6050 gl.	1.6800 gl.	ALP-23355
Cheese Cottage	.2200	.2000	ALP-23928
Milk Non Fat Dry Slds Grd A 50 lb.	.2725	.2790	0-44481
Fresh Eggs Large 24 or Doz. Form	.5800	.4800	ALP-23928
Froz Eggs Whites 30 lb.	.2650	.2700	0-50996
Froz Whole Eggs 30#	.3850	.3800	0-50996

<u>ITEM</u>	<u>WISCONSIN PRICE</u>	<u>MINNESOTA PRICE</u>	<u>MINNESOTA PURCHASE ORDER NUMBER</u>
Cherries Red Canned Sr Pitted #10	\$ 7.6200	\$10.1500	0-30503
Cranberries Fresh	.1350	.3000	ALP-23930
Cranberry Sauce U.S. Fancy #10	7.5700 cs.	7.9500 cs.	0-29068
Fruit Cocktail Cnd Syrup #10	6.2100 cs.	6.6500 cs.	0-44493
Fruit Cocktail Diet Cnd	4.8400 cs.	4.4500 cs.	0-44459
Juice Pineapple 46 oz.	3.5200 cs.	3.3900 cs.	0-44459
Onions Fresh White 50# bag	.0600	.0900	ALP-23930
Peaches Sliced Cnd Syrup #10	4.6150 cs.	5.3000 cs.	0-29068
Peaches Halves Cnd Syrup #10	4.7050 cs.	5.9900 cs.	0-32884
Peaches Halves Diet Cnd	4.7100 cs.	4.7100 cs.	0-29684
Peaches Dried 25 lb.	.6000	.7000	0-27023
Peaches Frozen Sweet 30 lb.	.2450	.1750	0-26496
Pears Halves Cnd Syrup #10	6.4100 cs.	6.4300 cs.	0-44493
Pears Halves Diet Cnd	5.8400 cs.	5.4500 cs.	0-44459
Pineapple Crushed Cnd Syrup #10	6.5100 cs.	6.3200 cs.	0-29684
Peas Cnd #10	4.0400 cs.	4.1500 cs.	0-44459
Peas Frozen 2½ lb.	.1550	.1400	0-46153
Pickles Dill Whole Gal 35/40	4.6900 cs.	5.4500 cs.	0-29796
Pickles Sweet Mixed glas	6.9900 cs.	8.1500 cs.	0-29716
Prunes Dried Low Moisture 25 lb.	.6300	.2570	0-43293
Sauerkraut Cnd #10	3.0100 cs.	3.7500 cs.	0-29068
Watermelon	.0700	.0550	ALP-23930
Vegetable Mixed Cnd #10	3.8400 cs.	4.3900 cs.	0-29068
Beans Kidney Dr 100 lb.	.1235	.1240	0-43263
Beans Lima Dry 100 lb.	.1333	.1105	0-43263
Beans Navy Dry 100 lb.	.0933	.0875	0-43263
Peanut Butter Smooth 32 oz.	.3663	.3300	0-47537
Potato Idaho Baking Fresh	.0750	.0331	0-37516
Potato Irish Slices Dehyd.	.4330	.3500	0-25776
Potato Chips	.4166	.3700	0-46593
Jelly Apple #10	7.0200 cs.	7.5000 cs.	0-27771
Jelly Currant #10	9.7000 cs.	9.8500 cs.	0-27771
Jelly Grape #10	9.6000 cs.	7.6000 cs.	0-27771
Molasses Sugar Cane #10	8.0300 cs.	8.9500 cs.	0-46371
Syrup Sugar & Maple 5 gal.	1.4800 cs.	1.9300 cs.	0-46371
Baking Powder Red Star 10 lb.	.1725	.1500	0-47537
Cocoa 100 lb.	.2900	.3350	0-46731
Flavoring Maple Extract 1 qt.	2.0500 cs.	4.5000	0-44693
Flavoring Vanilla Extract 1 qt.	2.4200 cs.	3.7500 cs.	0-44693

<u>ITEM</u>	<u>WISCONSIN PRICE</u>	<u>MINNESOTA PRICE</u>	<u>MINNESOTA PURCHASE ORDER NUMBER</u>
Salad Oil Mix Beg. 5 Gal.	\$ 1.2900 cn.	\$ 1.8000 cn.	0-47537
Salad Dressing	1.1700 gl.	1.2300 gl.	0-45294
Shortening All Purpose 50 lb. tin	.1830	.1675	0-30533
Whip Topping Base Rich Froz	.3958	.3700	0-46153
Cereal Bran Flakes Kellogg 1 oz.	5.3200 cs.	5.2000 cs.	0-44409
Cereal Corn Flakes Kellogg 1 oz.	1.1800 cs.	1.1700 cs.	0-44409
Cereal Dank Whole Wheat	.1075	.1158	0-44437
Cereal Rice Krispies Klg.	1.3500 cs.	1.8000 cs.	0-46837
Cereal Wheat Oata 50 lb. bag	.0950	.1050	0-44437
Cereal Wheaties (100 count)	2.5000 cs.	2.5600 cs.	0-44409
Cornstarch 100#	.0750	.0860	0-46731
Crackers Graham 2 lb. box	.2150	.2690	0-41860
Crackers Soda 2 lb. box	.1890	.2080	0-41861
Macaroni Elbow 10#	.1280	.1445	0-42552
Noodles Chow Mein #10	3.2300 cs.	3.4500 cs.	0-44459
Noodles Egg Fine 10 lb.	.2150	.2050	0-42552
Spaghetti Elbow 10 lb.	.1333	.1445	0-42552
Apricots Diet Canned	2.0500 cs.	4.9500 cs.	0-44459
Broccoli Frozen Spears 2 lb. pack	.2775	.2500	0-46153
Carrots Fresh med.	.1205	.0960	ALP-23930
Pumpkin Canned #10	3.6200 cs.	3.5500 cs.	0-29068
Spinach Canned #10 whole leaf	3.5100 cs.	3.7500 cs.	0-29068
Squash Winter Frozen Cooked	.1250	.1250	0-46153
Juice Grapefruit Canned Unsw.	3.7300 cs.	3.7900 cs.	0-29068
Juice Orange Canned Unsw.	3.3800 cs.	4.7200 cs.	0-29068
Juice Tomato Canned	3.0500 cs.	2.8900 cs.	0-29068
Tomato Fresh	.3300	.2600	ALP-23930
Tomato Canned #10 Whole	4.4400	4.2500	0-29068
Tomato Catsup #10	4.6900	5.7300	0-44493
Tomato Puree 12% Solids	4.7600	5.2500	0-44493
Tomato Chili Sauce #10 Canned	7.1200	7.9500	0-44459
Apples Vacu Dry Nug	.9200	.7270	0-27060
Apples Vacu Dry Sl	1.0000	.8430	0-27060
Beans Green Frozen 20 lb.	.1950	.1600	0-46153
Beets Canned Diced #10	2.1500 cs.	2.4500 cs.	0-29068
Brussel Sprouts Froz 2½ lb.	.3304	.2450	0-46153
Cabbage Fresh (white)	.0875	.0800	ALP-23930
Corn W K Canned #10	3.4200	3.1700	0-29684
Corn Cream Canned #10	5.9200	4.4000	0-44459
Cauliflower Froz	.2240	.1950	0-46153

<u>ITEM</u>	<u>WISCONSIN PRICE</u>	<u>MINNESOTA PRICE</u>	<u>MINNESOTA PURCHASE ORDER NUMBER</u>
Gelatin Plain 1 lb.	\$ .8558	\$ 1.0800	0-41392
Sugar White Granulated	.1149	.1095	0-45078
Sugar Powdered Confection	.1249	.1145	0-45078
Sugar Golden Medium Brown	.1249	.1145	0-45078
	<u>\$225.2005</u>	<u>\$244.1564</u>	

$$\frac{\$244.1564}{\$225.2005} = 108.417\%$$

A factor which may contribute to the cost variations is a difference in quality (i.e., grade) for similar items. Example: One state may purchase Grade B canned goods while the other purchases Grade C.

APPENDIX J

1. The following is a copy of the minutes of the business meeting of Dieticians and Chief Cooks from Minnesota State Hospitals held at the Cambridge State Hospital on May 19th.

Present: George Nordmark, Brainerd	Ruth Osberg, Gillette
Agnette Duncan, Cambridge	Ernest Melby, Corrections
Elma Stoffel, "	Mary Jane Hartman, "
Maureen Whalin, "	Carol Smith, St. Peter
Jeannette Kirby, Glen Lake	Jim Kruger, "
Charles Romportl, "	James Littig, "
Margaret Kienzle, "	Pat Hoehn, "
Leonard Larson, Fergus Falls	Joyce Knott, Willmar
Stanley Federickson, "	Maxine Gustafson, Rochester
Leo Noren, Moose Lake	Mr. Siskoff, "
Alice Sadowsky, Anoka	Jennifer Walters, Faribault
Bob Tex, "	Enes Robertshaw, "
Marge Hoagland, "	Betty Harkins, "
Dorothy Bridges, "	

The meeting was called to order at 10 a.m. by Mrs. Maureen Whalin, Chairman.

Mr. Stocking, Administrator at Cambridge State Hospital, welcomed the group to the hospital and described the institution as to type of patients and census figures.

Prior to the meeting, all members of the Dietary Committee had received by mail a comprehensive file of information on the "Wisconsin Plan" for determining the food budget in Wisconsin institutions.

In relation to the Wisconsin Plan, Mr. James Littig, Business Manager at St. Peter State Hospital, opened the meeting by presenting a "Provisions Allowance Questionnaire" for all to fill out. A discussion of the questions followed the period when each person answered the questions independently to determine the general trend of the group.

The questions were concerned with:

1. Whether a nutritionally adequate diet has been provided in the past 18 months, and the menu variety allowed
2. If a comparison of the menu with nationally recognized standards was made and a record kept

Dieticians & Head Cooks Mtg.

3. How the maintenance of nutritional levels is affected by cost permitted
4. Necessity for changes in menus to compensate for rising costs of food
5. An indication of what each person felt would be an adequate daily cost for food in 1971-72 and 1972-73
6. How you would present this cost figure and support it with objective facts
7. Need for a plan which will represent the needs and wishes of a majority of institutions
8. Whether further efforts should be made to continue work on "Project Wisconsin"

Mr. Littig gave a background of the steps taken preliminary to the study of the Wisconsin Plan, and cost comparisons with various institutions. He stated that the main objective, whatever the method, was to obtain enough money so that dieticians and cooks could provide an adequate diet without stringent cost restrictions.

There was a discussion of the contribution of surplus commodities to our food supply. The value today was estimated to be one-half of what it was two to three years ago. There is the possibility of further decline in years to come.

Brief reports were made about trips to Wisconsin institutions by Pat Hoehn, Jim Kruger, Maxine Gustafson, Mr. Siskoff and Margaret Kienzle. These reports had been previously circulated to the committee.

It was pointed out that there are differences in various institutions. For example: Number of modified diets required, and use of nourishments as dictated by the Medical Staff of the hospital.

A motion was made by Ernest Melby that we establish a feeding level based on United States Department of Agriculture modified cost level figure, and provide for a contingency fund to provide for price fluctuations. Motion seconded by Mildred Wieners. Motion passed.

Following the lunch break, there was a short meeting concerning salaries for Dietary Department employees. A list of salary proposals and present salaries for Wisconsin was discussed.

The meeting was adjourned at 2:15 p.m.

Mrs. Margaret S. Kienzle, Secretary

APPENDIX K

1. The "Provisions Allowance Questionnaire" was used at the State Dietary Meeting and the Accounting Officer and Business Managers meeting to arrive at information from those people who are intimately concerned on a day-to-day basis with the feeding level being provided.
2. The questionnaires have been retained and are available for further study.
3. In response to question six (6) which reads:  
". . . Please indicate the per capita rate you feel is necessary for each year of the 1971/73 biennium. . . ."
  - A. Dietitians and Chief Cooks suggested an average of \$0.9254 for 1971/72 and a average of \$1.011 for 1972/73.
  - B. Accounting Officers and Business Managers suggested an average of \$0.978 for 1971/72 and a average of \$1.04 for 1972/73.
  - C. Many replies indicate a definite need for a contingent fund to provide supplemental financing if food prices increase during the biennium.

PROVISIONS ALLOWANCE QUESTIONNAIRE

Your name and title \_\_\_\_\_

Your institution \_\_\_\_\_

- - - - -

1. Do you feel you have been providing a nutritionally adequate diet the past 18 months (since January 1, 1969)? Have you offered as much variety as you would have liked?
2. Do you regularly compare your menu with any of the nationally recognized standards of nutrition (example, those used by the USDA)? If your answer is yes, how often do you make these comparisons and which 'diet level' are you providing?

3. Have you kept a record of these comparisons which could be used to support a claim to the Legislature that we do feed at a specific level?
4. Reality says that we all must be concerned with costs. As Dieticians and Chief Cooks your primary concern should be with nutritional levels (including quality, appearance, and quantity of the food we offer) and your secondary concern should be cost. Do you feel the present per capita rate permits you to keep these in the proper order? Elaborate.
5. Food prices have increased during this 18 month period. Have you made any changes in your menu to compensate for these increases? If your answer is yes, please give a brief summary of the changes. If necessary continue on the back of this sheet.
6. The Legislature appropriation for this biennium calls for a 70¢ level of feeding in 1969/70 (75¢ the last six months by Dept. of Administration directive if we can finance that level); and 71¢ for 1970/71 (75¢ if we can finance it).

Assume we will be permitted to feed at 75¢ for the period from January 1, 1970 through June 30, 1971 and the necessary additional funds will be provided.

Now - please indicate the per capita rate you feel is necessary for each year of the 1971/73 biennium to provide a nutritionally sound diet which would permit the quality, quantity, and variety you would like to provide.

For 1971/72 - \_\_\_\_\_

For 1972/73 - \_\_\_\_\_

Remarks:

7. Assume you are making the presentation to the House and Senate finance committees for food allowances in the Departments of Public Welfare and Corrections for 1971/73. Justify the level of feeding you have proposed in question six. Keep in mind "I think" and "I feel" statements will probably carry little weight. Your presentation should be logical and to the point. Continue your presentation on the back of this sheet.

Questionnaire - Page 3

8. Do you feel we can 'sell' your plan to the Legislature if it is not accepted by all the institutions?
9. If your answer to number eight is no provide specific recommendations how we can achieve acceptance (of your approach) so the Legislature will recognize the request represents the wish of a distinct majority (if not all) of the institutions.
10. You have all be provided information on "Project Wisconsin". It is an approach which may, if it is generally accepted by the institutions be accepted by the Department of Administration for ultimate consideration by the Legislature. Do you feel efforts along this line should be continued or dropped?

THAT IS ALL!

THANKS FOR YOUR HELP!

APPENDIX L

1. This information was obtained from Mrs. Keller.
2. Pennsylvania - for 1966/67 - lowest cost per day reported - \$0.7698; highest - \$1.87.
3. California - for 1968 - lowest cost per day reported - \$0.7445; highest - \$1.10.
4. Ohio - Child Caring Institutions - for 1968 - lowest cost per day reported - \$0.96; highest - \$1.743.
5. Ohio - Child Caring Institutions - for 1969 - lowest cost per day reported - \$0.927; highest - \$2.208.

SELECTED SERVICES STATISTICS FOR WELFARE FEDERATION CHILD CARE INSTITUTION

January Through December 1968 and 1969

		Capacity	Number of Meals Served	Food Cost Per Meal
<u>GENERAL CHILD CARE INSTITUTIONS</u>				
Cleveland Christian Home . . . . .	1969	50	51,693	44.6 ¢
	1968	50	57,200	40.4 ¢
Jones Home of Children's Services* . . . . .	1969	45	54,604	40.2
	1968	45	50,805	38.5
Parmadale* . . . . .	1969	240	293,003	30.9
	1968	240	280,951	32.6
<u>SPECIALIZED CHILD CARE INSTITUTIONS</u>				
Training Schools				
Marycrest* . . . . .	1969	70	84,333	33.9
	1968	70	76,521	31.5
Residential Treatment Centers				
Beech Brook . . . . .	1969	36	60,830	32.9
	1968	30	59,325	28.5
Bellefaire* . . . . .	1969	108	178,173	52.0
	1968	108	182,495	45.0

		Capacity	Number of Meals Served	Food Cost Per Meal
Children's Aid Society* . . . . .	1969	36	74,761	33.6 ¢
	1968	36	70,780	33.7 ¢
Residential Homes for Adolescents				
Carmelita Hall* c/ . . . . .	1969	16	6,243	34.1
	1968			
St. Anthony Home* . . . . .	1969	50	43,924	49.0
	1968	50	52,934	45.4
Institutions for Health Problems				
Health Hill Hospital for Convalescent Children* . . . . .	1969	50	32,086	67.6
	1968	50	42,426	58.1
Rosemary Center* . . . . .	1969	40	55,875	34.3
	1968	40	58,229	32.0
<u>TOTAL FOR 11 INSTITUTIONS</u>	1969	735	935,525	39.1 **
	1968	734	946,388	37.3 **

\* A Red Feather Agency of the Community Chest  
c/ New Facility Data for Last Four Months, 1969

\*\* Average food cost per meal

Comparison of cost level of our State 75% Plan with cost plans from other States.

Dept. of H & SS  
 Institutions Food Plans  
 (Based on Jan. 69 Prices)  
 (Meat Prices were Dec. 68)

Pennsylvania  
 1966-67  
 Moderate Cost Plan

California  
 1968  
 Moderate Cost Plan

<u>Institutions</u>	<u>Actual Cost/Meal</u>	<u>Actual Cost/Meal</u>	<u>Actual Cost/Meal</u>
Northern	\$.2673	Mental Hospt.	Mental Hygiene Inst.
Southern	.2521	\$.2733-.6233	Regular Food \$.2767
Central Colony	.2293		Modified Dts. .3118
Children's Treatment	.2230	Mentally Rtd.	Nursesey .2482
Mendota	.2658	\$.2566-.5433	
Winnebago	.2530		Corrections Inst.
Central State Hospital	.2909	Geriatric	Girls & Boys
Child Center	.3048	\$.3300	\$.2700-3666
Prison	.2908		Adult
Reformatory	.3051	Youthful Cent.	\$.2700
Home for Women	.2409	\$.3533-.4366	
Wisc. Correctional Inst.	.3028		
School for Girls	.2641	Correctional	
Wales	.3117	\$.3333	
Kettle Moraine	.3088		
Black River Camp	.3357		
Lincoln Boys School	.3088		
Correctional Camps			
McNaughton	.3013		
Gordon	.3095		
Flambeau	.3095		
Union Grove	.2623		
Walworth	.2623		
Oregon Farm	.2623		
Thompson	.2623		
Winnebago Farm	.2623		

APPENDIX M

1. The questionnaire which follows was mailed to the Budget Director (Department of Administration) in each of the other 48 states (Wisconsin was not included as we have information on their feeding system).
2. Replies were received from 33 states and are still trickling in.
  - A. Only one follow-up letter was sent out. With an additional follow-up letter and/or a telephone request, it may be possible to obtain this information from the remaining 15 states.
3. In several cases where we had questions on the data received, telephone calls were placed to the person who filled out the report to clarify the information.
4. Many states sent along a wealth of information on their feeding program. While that information will not be included in this presentation, it is available and should be studied, by the person you assign to complete this research.

OUT-STATE PROVISION ALLOWANCE QUESTIONNAIRE

Name of State \_\_\_\_\_

Name and Title of Person Completing Questionnaire \_\_\_\_\_

- - - - -

1. Is your raw food appropriation (for each type of institution within your system) computed on a per capita basis (so much per patient per day)?
2. If you use a method other than per capita we would appreciate receiving information on the method and criteria in use.
3. Do you have a "Contingent Fund" available so the level of feeding approved by your Legislature can be maintained in a period of increasing prices?

Questionnaire - Page 2

4. If your answer to question three was yes, how is this approach working? How many additional dollars were required in fiscal 1967/68 and 1968/69 to maintain the approved level of feeding?
5. If your answer to question three was no, do you feel a "Contingent Fund" of this type is needed in your system?
6. Please provide actual cost figures (cost per meal, or cost per patient day) for raw food for each type of institution in your system for the fiscal years of 1967/68 and 1968/69.
7. Please provide the same information for the raw food cost level approved by your Legislature for the fiscal year of 1969/70 (and 1970/71 if this information is available).

Your assistance is greatly appreciated. Any additional information and/or comments you wish to add will be very helpful.

Thank you!

APPENDIX N

1. This appendix covers institutions for the mentally retarded.
2. Twenty-three states reporting. Massachusetts and Colorado's replies were received after the chart was typed and their information was added to the bottom of the report without re-ranking previously typed material.
3. 1967/68 - 18 states reporting - 9 were feeding at a higher rate than Minnesota. High daily rate - \$1.39; low - \$0.37; Minnesota - \$0.68.
4. 1968/69 - 20 states reporting - 13 were feeding at a higher rate than Minnesota. High daily rate - \$1.51; low - \$0.38; Minnesota - \$0.68.
5. We overlooked including a question about institutional farm operations. This item may be a significant factor in several states who have reported daily food expenditures which are lower than other states.
  - A. We have verified, by telephone calls, the existance of institutional farm operations in Montana, South Carolina, and at Redfield in South Dakota.

HOSPITALS FOR THE MENTALLY RETARDED

Costs are per patient day

	<u>1967-68</u>	Rank <u>Order</u>	<u>1968-69</u>	Rank <u>Order</u>	<u>1969-70</u>	<u>1970-71</u>
*Arizona	.78	5	.84	5/6	.87	.90
Connecticut	1.39	1	1.51	1		
District of Columbia			.67	15	.67	
Florida	.71	7/8	.74	10/11		
Idaho	.68	9/10/11	.68	12/13		
Iowa - see appendix A-1			.742	9		
Kansas	.978	2	1.00	2	.999	1.02
Louisiana	.93	3	.90	4	1.11	1.11
Maine	.71	7/8	.74	10/11		
*Maryland - see appendix A-1	.637	12			.649	
Minnesota	.68	9/10/11	.68	12/13	.725	.75
Montana	.398	15	.478	17		
New Jersey	.61	14	.64	16		
North Carolina	.72	6	.75	8		
Ohio			.673	14	.736	
Oregon - see appendix A-1					.633	.633
South Carolina	.37	16	.38	18		
South Dakota - see appendix A-1	.68	9/10/11	.84	5/6		
Texas - see appendix A-1	.613	13	.795	7		
Washington	.84	4	.99	3		
Wisconsin - see appendix A-1					.79	

1967-68 16 states reporting - 8 were feeding at a higher rate than Minnesota  
 1968-69 18 states reporting - 11 were feeding at a higher rate than Minnesota  
 1969-70) Because of the number of states not reporting the cost for these  
 1970-71) fiscal years, rank order has not been assigned.

The cost figures as shown on this report may not include dollar figures on items such as surplus commodities, dairy herds, fresh garden crops, etc. which may exist at some institutions. This information was not passed on to us in our survey, therefore this report shows only appropriated figures.

\*Massachusetts - reported late, .66 .73  
 \* Colorado therefore does not .75 .84  
 appear in rank order

HOSPITALS FOR THE MENTALLY RETARDED

APPENDIX - A - 1

<u>STATE</u>	<u>NAME OF INSTITUTION</u>	<u>1967-68</u>	<u>1968-69</u>	<u>1969-70</u>	<u>1970-71</u>
Iowa	Glenwood		.765		
	Woodward		.72		
Maryland	Henryton	.612		.658	
	Rosewood	.662		.641	
Oregon	Fairview			.623	.623
	Columbia			.643	.643
South Dakota	Custer	.88	1.15		
	Redfield	.48	.53		
Texas	Abilene	.626	.669		
	Austin	.612	.702		
	Travis	.618	.674		
	Mexica	.604	.653		
	Denton	.608	.648		
	Lufkin	.612	.654		
	Richmond		.789		
Wisconsin*	Central Colony			.705	
	Northern Colony			.865	
	Southern Colony			.799	

\*January - February 1970 prices - same level of feeding - population varies and prices differ in each locality

These states listed more than one institution = these costs were averaged for use in alphabetical listing.

APPENDIX O

1. This appendix covers institutions for the mentally ill.
2. Thirty-three states reporting. Colorado's reply was received on July 16th and added to the bottom of the report without reranking previously typed material.
3. 1967/68 - 26 states reporting - 12 were feeding at a higher rate than Minnesota. High daily rate - \$2.17; low - \$0.48; Minnesota - \$0.68.
4. 1968/69 - 30 states reporting - 18 were feeding at a higher rate than Minnesota. High daily rate - \$2.30; low - \$0.52; Minnesota - \$0.68.
5. We overlooked including a question about institutional farm operations. This item may be a significant factor in several states who have reported daily food expenditures which are lower than other states.
  - A. We have verified by telephone calls the existance of institutional farm operations in South Carolina and South Dakota.
  - B. Maine (Augusta) has a farm operation but the proceeds from that operation serves as a "offset" against appropriated funds received.
  - C. Virginia does not conduct farm operations at their institutions.

HOSPITALS FOR THE MENTALLY ILL

Costs are per patient day

	<u>1967-68</u>	<u>Rank Order</u>	<u>1968-69</u>	<u>Rank Order</u>	<u>1969-70</u>	<u>1970-71</u>
Alaska - see appendix B-1			1.54	2		
Arizona	.94	4	.90	9	.94	1.40
Arkansas	.60	19	.66	19/20/21/22		
California	.794	9	.846	12		
Connecticut	2.17	1	2.30	1		
Florida	.75	10/11	.78	14/15		
Georgia			.738	17	.777	
Illinois	.798	8	.855	11		
Indiana	.814	7	.875	10		
Iowa - see appendix B-1			.79	13		
Kansas	.924	5	.99	5	.981	1.04
Louisiana	.66	13	.63	25	.69	1.05
Maine	.49	23	.52	28/29		
Maryland - see appendix B-1			.645	15	.621	
Massachusetts			.66	19/20/21/22	.73	
Michigan*	.65	14	.96	6/7		
Minnesota**	.68	12	.68	18	.725	.75
Missouri	.644	16	.628	26		
Nebraska	.999	3	1.068	3	1.31	
Nevada***	1.15	2	.93	8		
New Jersey	.615	21	.64	23		
New York	.63	20	.66	19/20/21/22		
North Carolina	.90	6	.96	6/7		
Ohio			1.05	4	1.71	
Oregon - see appendix B-1					.641	.641
South Carolina	.53	22	.56	27		
South Dakota	.48	24/25	.74	16		
Texas - see appendix B-1			.642	17	.66	19/20/21/22
Utah	.636	18	.636	24		
Virginia	.48	24/25	.52	28/29		
Washington	.75	10/11	.78	14/15		
Wisconsin - see appendix B-1					.86	
Colorado - reported late, therefore does not appear in rank order.	.87		.90			

HOSPITALS FOR THE MENTALLY ILL - continued

Costs are per patient day

1967-68	25 states reporting - 11 were feeding at a higher rate than Minnesota
1968-69	29 states reporting - 17 were feeding at a higher rate than Minnesota
1969-70)	Because of the number of states not reporting the cost for these
1970-71)	fiscal years, a rank order has not been assigned

The cost figures as shown on this report may not include dollar figures on items such as surplus commodities, dairy herds, fresh garden crops, etc. which may exist at some institutions. This information was not passed on to us in our survey, therefore this report shows only appropriated figures.

\* Stated various costs due to Federal supplements - took highest cost quoted

\*\* A study of private hospitals in Minneapolis reported as follows:

1968-69	- \$2.26
1969-70	- \$2.46
1970	- \$2.65 first five months

\*\*\* Does not include dairy products

HOSPITALS FOR THE MENTALLY ILL

APPENDIX - B-1

<u>STATE</u>	<u>NAME OF INSTITUTION</u>	<u>1967-68</u>	<u>1968-69</u>	<u>1969-70</u>	<u>1970-71</u>
Alaska	Psychiatric Inst.		1.44		
	Harborview Mem.		1.65		
Iowa	Cherokee		.975		
	Clarina		.747		
	Independence		.768		
	Mt. Pleasant		.669		
Maryland	Crownsville	.714		.599	
	Eastern	.678		.616	
	Clifton T. Perkins	.566		.635	
	Springfield	.634		.638	
	Spring Grove	.635		.616	
Oregon	Oregon State			.633	.633
	East Oregon			.665	.665
	Dammasch			.625	.625
Texas	Austin	.635	.653		
	San Antonio	.648	.691		
	Terrell	.664	.642		
	Wichita Falls	.669	.673		
	Rusk	.694	.674		
	Big Spring	.602	.623		
	Kerrville	.58	.667		
Wisconsin *	Mendota			.84	
	Winnebago			.88	

\* January - February 1970 prices - same level of feeding - population varies and prices differ in each locality.

These states listed more than one institution - these costs were averaged for use in alphabetical listing.

APPENDIX P

1. This appendix covers correctional institutions.
2. Twenty-seven states reporting. Colorado's reply was received on July 16th and added to the bottom of the report without reranking previously typed material.
3. 1967/68 - 22 states reporting - 10 were feeding at a higher rate than Minnesota. High daily rate - \$1.50; low - \$0.29; Minnesota - \$0.73.
4. 1968/69 - 23 states reporting - 13 were feeding at a higher rate than Minnesota. High daily rate - \$1.50; low - \$0.32; Minnesota - \$0.73.
5. We overlooked including a question about institutional farm operations. This item may be a significant factor in several states who have reported daily food expenditures which are lower than other states.
  - A. We have verified by a telephone call the existence of an institutional farm operation in South Carolina.

**CORRECTIONAL INSTITUTIONS**

Costs are per patient day

	<u>1967-68</u>	<u>Rank Order</u>	<u>1968-69</u>	<u>Rank Order</u>	<u>1969-70</u>	<u>1970-71</u>
Alaska	1.50	1	1.50	1		
Arizona	.78	9	.84	9	.78	.99
Florida	.62	17	.66	17/18		
Georgia			.66	17/18	.75	
Indiana	.88	6	.836	10		
Iowa - See Appendix C-1			.908	6		
Kansas	1.041	2	1.056	3	1.068	1.086
Maine - See Appendix C-1	1.00	4	.89	7		
Maryland - See Appendix C-1	.65	14			.62	
Massachusetts			.63	19	.73	
Michigan*	.70	11	.72	14		
Minnesota - See Appendix C-1	.73	10	.73	12/13	.76	.77
Missouri**	.945	5	.941	4		
Montana	.491	20				
Nebraska	.825	7	.825	11	.939	
Nevada***	.798	8	.918	5		
New Jersey	.63	16	.70	15/16		
New York	.59	19	.59	20		
North Carolina	.69	12	.73	12/13		
Oregon - See Appendix C-1					.533	.533
South Carolina	.29	21	.32	22		
South Dakota	.64	15	.88	8		
Texas	.616	18	.581	21		
Virginia	.67	13	.70	15/16		
Washington	1.02	3	1.08	2		
Wisconsin****					.983	

\* States various cost, supplemented by farm surplus - took highest cost quoted.

\*\* Automated food service stock control \$1.11 per ration (1day).

\*\*\* Does not include dairy products.

\*\*\*\* Jan. - Feb. 1970 prices - same level of feeding - population varies & prices differ in each locality.

Colorado - Reported late, therefore does  
not appear in rank order 1.08

1.11

CORRECTIONAL INSTITUTIONS - continued

Costs are per patient day

1967-68 21 states reporting - 9 were feeding at a higher rate than Minnesota  
1968-69 22 states reporting - 12 were feeding at a higher rate than Minnesota  
1969-70) Because of the number of states not reporting the cost for these  
1970-71) fiscal years, a rank order has not been assigned

The cost figures as shown on this report may not include dollar figures on items such as surplus commodities, dairy herds, fresh garden crops, etc. which may exist at some institutions. This information was not passed on to us in our survey, therefore this report shows only appropriated figures.

## CORRECTIONAL INSTITUTIONS

## APPENDIX - C-1

<u>STATE</u>	<u>NAME OF INSTITUTION</u>	<u>1967-68</u>	<u>1968-69</u>	<u>1969-70</u>	<u>1970-71</u>
Iowa	Anomosa		.747		
	Fort Madison		1.155		
	Rockwell City		.822		
Maine	Male - Juvenile	.97			
	Female - Juvenile	.81			
	Male - adult	1.23			
	Female - adult	.99			
	Prisons	.99			
Maryland	House of Corrections	.743		.660	
	Maryland Penitentiary	.659		.674	
	Hagerstown	.578		.502	
	Jessup	.671		.579	
	Correction Camps	.642		.646	
	Patuxent	.614		.682	
Minnesota	Stillwater	.73	.73	.77	.78
	St. Cloud	.73	.73	.75	.76
New Jersey	Prisons	.626	.67		
	Male reformatories	.655	.69		
	Female reformatories	.610	.75		
Oregon	State Penitentiary			.350	.350
	State Corrections			.715	.715

These states listed more than one institution - there costs were averaged for use in alphabetical listing.

#### APPENDIX Q

1. This appendix covers youth facilities.
2. 22 states reporting. Colorado's reply was received on July 16th and added to the bottom of the report without reranking previously typed material.
3. 1967/68 - 17 states reporting - 10 were feeding at a higher rate than Minnesota. High daily rate - \$1.40; low - \$0.53; Minnesota - \$0.79.
4. 1968/69 - 19 states reporting - 11 were feeding at a higher rate than Minnesota. High daily rate - \$1.88; low - \$0.51; Minnesota - \$0.79.
5. We overlooked including a question about institutional farm operations. This item may be a significant factor in several states who have reported daily food expenditures which are lower than other states.
  - A. Feeding rates for North and South Carolina have been verified by telephone.

**YOUTH FACILITIES**

Costs are per patient day

	<u>1967-68</u>	<u>Rank</u> <u>Order</u>	<u>1968-69</u>	<u>Rank</u> <u>Order</u>	<u>1969-70</u>	<u>1970-71</u>
Arizona - See Appendix D-/	1.25	2	1.07	4	1.01	1.07
District of Columbia-See Appendix D-/			.70	13	.70	
Florida	.94	7	.95	6		
Iowa - See Appendix D-/			.657	15		
Kansas	1.002	6	1.026	5	1.002	1.02
Maine	.84	9	.80	10		
Maryland - See Appendix D-/	.858	8			.826	
Minnesota - See Appendix D-/	.79	10	.79	11	.81	.82
Missouri *	.788	11	.839	9		
Montana - See Appendix D-/	1.01	5	.93	7		
Nebraska	1.06	3	.924	8	1.206	
New Jersey	.66	14	.67	14		
North Carolina	.53	16	.55	17		
Ohio			1.072	3	1.088	
Oregon					.607	
South Carolina	.55	15	.51	18		
South Dakota - See Appendix D-/	1.40	1	1.88	1		
Texas - See Appendix D-/	.751	12	.784	12		
Virginia	.67	13	.63	16		
Washington	1.05	4	1.17	2		
Wisconsin **					.814	

\* Automated Food Service Control \$1.11 per ration (1 day)

\*\* Jan.-Feb. 1970 prices-same level of feeding population varies and prices differ each locality.

The cost figures as shown on this report may not include dollar figures on items such as surplus commodities, dairy herds, fresh garden crops, etc. which may exist at some institutions. This information was not passed on to us in our survey, therefore this report shows only appropriated figures.

1967-68 16 states reporting - 9 were feeding at a higher rate than Minnesota  
 1968-69 18 states reporting - 10 were feeding at a higher rate than Minnesota  
 1969-70)  
 1970-71) ... Because of the number of states not reporting the cost for these  
 fiscal years, a rank order has not been assigned.

Colorado - reported late, therefore  
 does not appear in rank order .93 .99

YOUTH FACILITIES

APPENDIX + D-1

STATE	NAME OF INSTITUTION	1967-68	1968-69	1969-70	1970-71
Arizona	Boys Industrial Sch.	1.23	1.08	1.05	1.11
	Youth Center	1.26	1.05	.96	1.02
Dist. of Co.	District Trng. Sch.		.67	.67	
	Junior Village		.73	.73	
Iowa	Davenport		.756		
	Eldora		1.011		
	Mitchellville		.807		
	Toledo		.963		
Maryland	Rosewood	.662		.641	
	Boys Village	1.01		.829	
	Maryland Trng. School	.886		.853	
	Montrose	.725		.876	
	Victor Cullen	.913		1.00	
	Boys Forestry	.932		.698	
	Maryland Children	.877		.882	
Minnesota	Red Wing	.75	.75	.77	.78
	Sauk Centre	.70	.70	.72	.73
	Lino Lakes	.90	.90	.92	.93
	Camps	.81	.81	.83	.84
Montana	Pine Hill Boys Sch.	.649	.80		
	Mt. View Sch. - Girls	1.37	1.06		
South Dakota	State Trng. School	.65	.73		
	Youth Forestry Camp	2.15	3.03		
Texas	Gatesville St. Sch. - Boys	.772	.822		
	Mountain Sch. for Boys	.652	.712		
	Gainesville Sch. - Girls	.686	.721		
	Crockett St. Sch. - Girls	.760	.686		
	Waco State Home *	.920	.947		
	Corsicana State Home *	.817	.859		
	West Texas Child. Home *	.651	.738		

\* Includes public school lunch charges.

These states listed more than one institution - these costs were averaged for use in alphabetical listing.

APPENDIX R

1. This appendix covers institutions not otherwise classified in Appendices N, O, P, or Q.
2. Types of institutions include:
  - Alcoholic Rehabilitation Centers
  - Cerebral Palsy Hospitals
  - Charity Hospitals
  - Chronic Disease Hospitals
  - Crippled Children's Hospitals
  - Diagnostic Centers
  - Nursing Homes
  - Receiving Hospitals
  - Residential Centers
  - Social Services
  - Schools for the Deaf and Blind
  - Soldiers Homes
  - T.B. Sanatoriums
3. No attempt at ranking has been made.
4. South Carolina does conduct institutional farming operations.
5. The T.B. Sanatorium in Montana does purchase at wholesale, surplus products from other institutional farms.

INSTITUTIONS NOT OTHERWISE CLASSIFIED

Costs are per patient day

	<u>1967-68</u>	<u>1968-69</u>	<u>1969-70</u>	<u>1970-71</u>
<b>Alcoholic Rehab Center</b>				
Florida	1.00	1.14		
North Carolina		1.50		
<b>Cerebral Palsy</b>				
Louisiana		1.53	1.92	1.92
<b>Charity Hospital</b>				
Louisiana	1.08	1.11	1.11	1.08
<b>Chronic Disease Hospital</b>				
Maryland - see appendix E-1	1.00 <sup>977</sup>	1.08	1.03	
Massachusetts				
<b>Crippled Childrens Hospital</b>				
Louisiana		1.26	1.47	1.47
Minnesota	.80	.80	.875	.90
New Jersey	.81	.79		
<b>Diagnostic Center</b>				
New Jersey	.85	.90		
<b>Nursing Homes</b>				
Arizona	1.02	.87	.90	.90
Missouri	.788	.839		
Montana	.689	.689		
Ohio		.651	.715	
Colorado	.96	.96		

INSTITUTIONS NOT OTHERWISE CLASSIFIED

Costs are per patient day

	<u>1967-68</u>	<u>1968-69</u>	<u>1969-70</u>	<u>1970-71</u>
<b>Receiving Hospitals</b>				
Ohio		.958	1.122	
Oklahoma	1.68	1.50		
<b>Residential Centers</b>				
New Jersey	.85	.97		
<b>Social Service</b>				
Montana - see appendix E-1	.94	1.146		
New York	.88	.92		
Oregon			.741	
South Carolina	.34	.40		
<b>Schools for Deaf &amp; Blind</b>				
Arizona	1.20	1.26	1.38	1.44
Indiana	.84	.81		
Louisiana - Deaf	.96	.96	.96	1.05
Blind	.87	.84	.81	.87
Maine	.72	.64		
Maryland	.704		.703	
Minnesota	.68	.68	.725	.75
Oregon - Deaf			.801	.801
Blind			.829	.829
South Carolina	.63	.64		
Washington	.90	.99		
Colorado	.84	.75		
<b>Soldiers Home</b>				
Iowa		.903		
Minnesota			.73	.75
Montana	.898	.929		
*New Jersey	.739	.843		
South Dakota	1.12	1.12		
*Nebraska		1.46	1.206	

INSTITUTIONS NOT OTHERWISE CLASSIFIED

Costs are per patient day

	<u>1967-68</u>	<u>1968-69</u>	<u>1969-70</u>	<u>1970-71</u>
T. B. Sanatorium				
Arizona	1.56	1.56	1.71	1.83
Arkansas	1.305	1.248	1.353	
Florida	1.13	1.18		
Kansas	1.368	1.335	1.290	1.350
Maryland - see appendix E-1	1.16		1.25	
Missouri *	.788	.839		
Montana	.418			
**New Jersey	.92	.97		
South Carolina	1.04	1.27		
Texas - see appendix E-1	.793	.828		
Virginia		1.14		
**Nebraska	1.27	1.339	1.44	

The cost figures as shown on this report may not include dollar figures on items such as surplus commodities, dairy herd, fresh garden crops, etc. which may exist at some institutions. This information was not passed on to us in our survey, therefore this report shows only appropriated figures.

\* Automated Food Service Stock Control - \$1.11 per ration (1-day).

INSTITUTIONS NOT OTHERWISE CLASSIFIED

APPENDIX - E - 1

<u>STATE</u>	<u>NAME OF INSTITUTION</u>	<u>1967-68</u>	<u>1968-69</u>	<u>1969-70</u>	<u>1970-71</u>
Maryland - Chronic Disease					
	Deers'	.963		.996	
	Montebello	.988		.993	
	West Maryland	.982		1.12	
Montana - Social Service					
	Warm Springs	.817	.827		
	Twin Bridge Child Ctr.	1.07	1.465		
Texas - T. B. Sanatorium					
	San Antonio	.813	.839		
	Harlingen	.807	.861		
	East Texas	.782	.815		
	McKnight	.77	.790		
Maryland - T. B. Sanatorium					
	Mt. Wilson	1.19		1.28	
	Pine Bluff	1.14		1.23	

These states listed more than one institution - these costs were averaged for use in alphabetical listing.

APPENDIX S

1. This information was received from the Department of Public Welfare and represents resident distribution as of February 28, 1970 by sex/age group.
2. From the basic information we calculated:
  - A. Overall totals for each sex/age group.  
Distribution of males and females within each sex/age group - by number.
  - B. The percentage of total population for each sex/age group.
    1. Percentage distribution by age group to the overall group total for both males and females.
    2. Percentage distribution of males and females within each age group.

MINNESOTA DEPARTMENT OF PUBLIC WELFARE  
 DISTRIBUTION OF RESIDENT\* PATIENTS BY SEX AND AGE  
 FEBRUARY 28, 1970

<u>Institution</u>	<u>Sex</u>	<u>Total Patients</u>	<u>Under Age 6</u>	<u>Ages 7-11</u>	<u>Ages 12-14</u>	<u>Ages 15-17</u>	<u>Ages 18-34</u>	<u>Ages 35-54</u>	<u>Ages 55-74</u>	<u>Age 75 or older</u>
Anoka	M	240	-	-	8	16	96	58	56	6
	F	256	1	1	4	11	83	95	52	9
Fergus Falls	M	372	-	-	6	13	72	141	124	16
	F	293	-	-	3	8	63	129	82	8
Hastings	M	204	-	-	1	5	72	66	40	20
	F	167	-	-	1	2	66	66	28	4
Moose Lake	M	361	-	-	-	3	60	106	144	48
	F	278	-	-	-	5	43	95	104	31
Rochester	M	386	-	2	7	17	73	96	149	42
	F	319	2	4	4	8	52	101	100	48
St. Peter	M	170	-	-	-	3	21	48	87	11
	F	129	-	-	1	-	19	45	56	8
M. S. H.	M	143	-	1	-	4	75	52	11	-
Willmar	M	417	-	-	3	6	50	159	181	18
	F	197	-	-	1	7	29	66	83	11
Brainerd	M	568	-	45	45	75	237	138	28	-
	F	443	3	28	26	46	182	128	30	-
Cambridge	M	629	-	65	76	98	272	100	18	-
	F	508	2	57	47	62	187	126	27	-
Lake Owasso	F	107	-	3	7	20	66	10	1	-
Faribault	M	997	-	82	107	111	428	212	56	1
	F	794	-	71	71	63	310	202	76	1
Owatonna	M	92	-	10	20	46	16	-	-	-
	F	34	-	1	11	16	6	-	-	-

<u>Institution</u>	<u>Sex</u>	<u>Total Patients</u>	<u>Under Age 6</u>	<u>Ages 7-11</u>	<u>Ages 12-14</u>	<u>Ages 15-17</u>	<u>Ages 18-34</u>	<u>Ages 35-54</u>	<u>Ages 55-74</u>	<u>Age 75 or older</u>
Minnesota Valley	M	189	-	-	-	9	95	71	14	-
	F	154	-	-	-	6	70	65	13	-
Glen Lake	M	19	-	-	-	-	1	4	9	5
	F	13	-	1	-	-	1	5	2	4
Gillette **	M	20	4	4	4	4	4	-	-	-
	F	44	9	9	9	9	8	-	-	-
M. R. T. Co.	M	20	-	20	-	-	-	-	-	-
	F	3	-	3	-	-	-	-	-	-
Ah-Gwah-Ching Nursing Home	M	183	-	-	-	-	-	15	83	85
	F	293	-	-	-	-	-	22	135	136
Oak Terrace Nursing Home	M	107	-	-	-	-	-	23	57	27
	F	217	-	-	-	-	-	22	96	99
<b>Totals</b>		<b>9,366</b>	<b>21</b>	<b>407</b>	<b>462</b>	<b>673</b>	<b>2,757</b>	<b>2,466</b>	<b>1,942</b>	<b>638</b>
Male		5,117	4	229	277	410	1,572	1,289	1,057	279
Female		4,249	17	178	185	263	1,185	1,177	885	359

\* Includes temporarily absent on short and extended visits.

\*\* Ages vary greatly with rapid turnover. Estimate 80% of patients are under age 18.

Percentages (to Group Total)

Totals	100.00	.22	4.35	4.93	7.19	29.44	26.33	20.73	6.81
Male	100.00	.08	4.48	5.41	8.01	30.72	25.19	20.66	5.45
Female	100.00	.40	4.19	4.35	6.19	27.89	27.70	20.83	8.45

Percentages (within Groups)

Totals	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Male	54.63	19.05	56.27	59.96	60.92	57.02	52.27	54.43	43.73
Female	45.37	80.95	43.73	40.04	39.08	42.98	47.73	45.57	56.27

APPENDIX T

1. From the information in Appendix S we calculated by institution the following information:
  - A. Overall totals for each sex/age group.
  - B. The percentage of total population for each sex/age group.
    1. Percentage distribution by age group to the overall group total for both males and females.
    2. Percentage distribution of males and females within each age group.
  - C. These calculations provided population characteristics by sex/age group for each DPW institution as of February 28, 1970.

POPULATION CHARACTERISTICS BY SEX/AGE GROUP  
 BASED ON ACTUAL POPULATION AS OF  
 FEBRUARY 28, 1970

	Sex	Total Patients	Under 6	7-11	12-14	15-17	18-34	35-54	55-74	75 & over
Ah-Gwah-Ching	M	183	-	-	-	-	-	15	83	85
	F	<u>293</u>	-	-	-	-	-	<u>22</u>	<u>135</u>	<u>136</u>
TOTAL		476	-	-	-	-	-	37	218	221
Percentage to Group Totals										
	Totals	100.00	-	-	-	-	-	7.77	45.79	46.44
	Male	100.00	-	-	-	-	-	8.19	45.35	46.46
	Female	100.00	-	-	-	-	-	7.50	46.07	46.43
Percentage Within Groups										
	Totals	100.00	-	-	-	-	-	100.00	100.00	100.00
	Male	38.44	-	-	-	-	-	40.54	38.07	38.46
	Female	61.56	-	-	-	-	-	59.46	61.93	61.54
Anoka	M	240	-	-	8	16	96	58	56	6
	F	<u>256</u>	<u>1</u>	<u>1</u>	<u>4</u>	<u>11</u>	<u>83</u>	<u>95</u>	<u>52</u>	<u>9</u>
TOTALS		496	1	1	12	27	179	153	108	15
Percentage to Group Totals										
	Totals	100.00	.20	.20	2.41	5.44	36.08	30.84	21.77	3.06
	Male	100.00	-	-	3.33	6.66	40.00	24.16	23.33	2.52
	Female	100.00	.39	.39	1.56	4.29	32.42	37.10	20.31	3.54
Percentage Within Groups										
	Totals	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Male	48.38	-	-	66.67	59.25	53.63	37.90	51.85	40.00
	Female	51.62	100.00	100.00	33.33	40.75	46.37	62.10	48.15	60.00

	<u>Sex</u>	<u>Total Patients</u>	<u>Under 6</u>	<u>7-11</u>	<u>12-14</u>	<u>15-17</u>	<u>18-34</u>	<u>35-54</u>	<u>55-74</u>	<u>75 &amp; over</u>
Brainerd	M	568	-	45	45	75	237	138	28	-
	F	<u>443</u>	<u>3</u>	28	26	46	182	128	30	-
TOTAL		<u>1011</u>	<u>3</u>	73	71	121	419	266	58	-

## Percentage to Group Totals

Totals	100.00	.29	7.22	7.02	11.96	41.44	26.31	5.76	-
Male	100.00	-	7.92	7.92	13.20	41.72	24.29	4.95	-
Female	100.00	.67	6.32	5.86	10.38	41.08	28.89	6.80	-

## Percentage Within Groups

Totals	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	-
Male	56.18	-	61.64	63.38	61.98	56.56	51.87	48.27	-	-
Female	43.82	100.00	38.36	36.62	38.02	43.44	48.13	51.73	-	-

Cambridge	M	629	-	65	76	98	272	100	18	-
Lake Owasso	F	<u>615</u>	<u>2</u>	60	54	82	253	136	28	-
TOTAL		<u>1244</u>	<u>2</u>	125	130	180	525	236	46	-

## Percentage to Group Totals

Totals	100.00	.16	10.04	10.45	14.46	42.20	18.97	3.72	-
Male	100.00	-	10.33	12.08	15.58	43.24	15.89	2.88	-
Female	100.00	.32	9.75	8.78	13.33	41.13	22.11	4.58	-

## Percentage Within Groups

Totals	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	-
Male	50.56	-	52.00	58.46	54.44	51.80	42.37	39.13	-	-
Female	49.44	100.00	48.00	41.54	45.56	48.20	57.63	60.87	-	-

	Sex	Total Patients	Under 6	7-11	12-14	15-17	18-34	35-54	55-74	75 & over
Faribault	M	997	—	82	107	111	428	212	56	1
	F	<u>794</u>	—	<u>71</u>	<u>71</u>	<u>63</u>	<u>310</u>	<u>202</u>	<u>76</u>	<u>1</u>
TOTAL		<u>1791</u>	—	<u>153</u>	<u>178</u>	<u>174</u>	<u>738</u>	<u>414</u>	<u>132</u>	<u>2</u>

Percentage to Group Totals

Totals	100.00	—	8.54	9.93	9.71	41.20	23.11	7.37	.14
Male	100.00	—	8.22	10.73	11.13	42.92	21.26	5.61	.13
Female	100.00	—	8.94	8.94	7.93	39.04	25.44	9.57	.14

Percentage Within Groups

Totals	100.00	—	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Male	55.66	—	53.59	60.11	63.79	57.99	51.20	42.42	50.00
Female	44.34	—	46.41	39.89	36.21	42.01	48.80	57.58	50.00

Fergus Falls	M	372	—	—	6	13	72	141	124	16
	F	<u>293</u>	—	—	<u>3</u>	<u>8</u>	<u>63</u>	<u>129</u>	<u>82</u>	<u>8</u>
TOTAL		<u>665</u>	—	—	<u>9</u>	<u>21</u>	<u>135</u>	<u>270</u>	<u>206</u>	<u>24</u>

Percentage to Group Totals

Totals	100.0	—	—	1.35	3.15	20.30	40.60	30.97	3.63
Male	100.0	—	—	1.61	3.49	19.35	37.90	33.33	4.32
Female	100.0	—	—	1.02	2.73	21.50	44.02	27.98	2.75

Percentage Within Groups

Totals	100.0	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Male	55.93	—	—	66.67	61.90	53.33	52.22	60.19	66.67
Female	44.07	—	—	33.33	38.10	46.67	47.78	39.81	33.33

	Sex	Total Patients	Under 6	7-11	12-14	15-17	18-34	35-54	55-74	75 & over
Gillette	M	20	4	4	4	4	4	-	-	-
	F	<u>44</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>8</u>	-	-	-
TOTAL		64	13	13	13	13	12	-	-	-

## Percentage to Group Totals

Totals	100.00	20.31	20.31	20.31	20.31	18.76	-	-	-
Male	100.00	20.00	20.00	20.00	20.00	20.00	-	-	-
Female	100.00	20.45	20.45	20.45	20.45	18.20	-	-	-

## Percentage Within Groups

Totals	100.00	100.00	100.00	100.00	100.00	100.00	-	-	-
Male	31.25	30.76	30.76	30.76	30.76	33.33	-	-	-
Female	68.75	69.24	69.24	69.24	69.24	66.67	-	-	-

Glen Lake	M	126	-	-	-	-	1	27	66	32
Oak Terrace	F	<u>230</u>	-	<u>1</u>	-	-	<u>1</u>	<u>25</u>	<u>98</u>	<u>103</u>
TOTAL		356		1			2	52	164	135

## Percentage to Group Totals

Totals	100.00	-	.28	-	-	.56	14.60	46.06	38.50
Male	100.00	-	-	-	-	.79	21.42	52.38	25.41
Female	100.00	-	.43	-	-	.43	10.86	42.60	45.68

## Percentage Within Groups

Totals	100.00	-	100.00	-	-	100.00	100.00	100.00	100.00
Male	35.39	-	-	-	-	50.00	51.92	40.24	23.70
Female	64.61	-	100.00	-	-	50.00	48.08	59.76	76.30

	Sex	Total Patients	Under 6	7-11	12-14	15-17	18-34	35-54	55-74	75 & over
Hastings	M	204	-	-	1	5	72	66	40	20
	F	<u>167</u>	-	-	<u>1</u>	<u>2</u>	<u>66</u>	<u>66</u>	<u>28</u>	<u>4</u>
	TOTAL	371	-	-	2	7	138	132	68	24
Percentage to Group Total										
	Totals	100.00	-	-	.53	1.88	37.19	35.57	18.32	6.51
	Male	100.00	-	-	.49	2.45	35.29	32.35	19.60	9.82
	Female	100.00	-	-	.59	1.19	39.52	39.52	16.76	2.42
Percentage Within Groups										
	Totals	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Male	54.98	-	-	50.00	71.42	52.17	50.00	58.82	83.33
	Female	45.02	-	-	50.00	28.58	47.83	50.00	41.18	16.67
Minnesota Residential Treatment Center										
	M	20	-	20	-	-	-	-	-	-
	F	<u>3</u>	-	<u>3</u>	-	-	-	-	-	-
	TOTAL	23	-	23	-	-	-	-	-	-
Percentage to Group Total										
	Totals	100.00	-	100.00	-	-	-	-	-	-
	Male	100.00	-	100.00	-	-	-	-	-	-
	Female	100.00	-	100.00	-	-	-	-	-	-
Percentage Within Groups										
	Totals	100.00	-	100.00	-	-	-	-	-	-
	Male	86.95	-	86.95	-	-	-	-	-	-
	Female	13.05	-	13.05	-	-	-	-	-	-

	<u>Sex</u>	<u>Total Patients</u>	<u>Under 6</u>	<u>7-11</u>	<u>12-14</u>	<u>15-17</u>	<u>18-34</u>	<u>35-54</u>	<u>55-74</u>	<u>75 &amp; over</u>
Moose Lake	M	361	-	-	-	3	60	106	144	48
	F	<u>278</u>	-	-	-	<u>5</u>	<u>43</u>	<u>95</u>	<u>104</u>	<u>31</u>
TOTAL		639	-	-	-	8	103	201	248	79
Percentage to Group Totals										
Totals		100.00	-	-	-	1.25	16.11	31.45	38.81	12.38
Male		100.00	-	-	-	.83	16.62	29.36	39.88	13.31
Female		100.00	-	-	-	1.79	15.46	34.17	37.41	11.17
Percentage Within Groups										
Totals		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Male		56.49	-	-	-	37.50	58.25	52.73	58.06	60.75
Female		43.51	-	-	-	62.50	41.75	47.27	41.94	39.25
Owatonna	M	92	-	10	20	46	16	-	-	-
	F	<u>34</u>	-	<u>1</u>	<u>11</u>	<u>16</u>	<u>6</u>	-	-	-
TOTAL		126	-	11	31	62	22	-	-	-
Percentage to Group Totals										
Totals		100.00	-	8.73	24.60	49.20	17.47	-	-	-
Male		100.00	-	10.86	21.73	50.00	17.41	-	-	-
Female		100.00	-	2.94	32.35	47.05	17.66	-	-	-
Percentage Within Groups										
Totals		100.00	-	100.00	100.00	100.00	100.00	-	-	-
Male		73.01	-	90.90	64.51	74.19	72.72	-	-	-
Female		26.99	-	9.10	35.49	25.81	27.28	-	-	-

	<u>Sex</u>	<u>Total Patients</u>	<u>Under 6</u>	<u>7-11</u>	<u>12-14</u>	<u>15-17</u>	<u>18-34</u>	<u>35-54</u>	<u>55-74</u>	<u>75 &amp; over</u>
Rochester	M	386	-	2	7	17	73	96	149	42
	F	<u>319</u>	<u>2</u>	<u>4</u>	<u>4</u>	<u>8</u>	<u>52</u>	<u>101</u>	<u>100</u>	<u>48</u>
TOTAL		705	2	6	11	25	125	197	249	90
Percentage in Group Total										
	Totals	100.00	.28	.85	1.56	3.54	17.73	27.94	35.31	12.79
	Male	100.00	-	.51	1.81	4.40	18.91	24.87	38.60	10.90
	Female	100.00	.62	1.25	1.25	2.50	16.30	31.66	31.34	15.08
Percentage Within Groups										
	Totals	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Male	54.75	-	33.33	63.63	68.00	58.40	48.73	59.83	46.66
	Female	45.25	100.00	66.67	36.37	32.00	41.60	51.27	40.17	53.34
St. Peter/Minn. Security/ Minnesota Valley	M	502	-	1	-	16	191	171	112	11
	F	<u>283</u>	<u>-</u>	<u>-</u>	<u>1</u>	<u>6</u>	<u>89</u>	<u>110</u>	<u>69</u>	<u>8</u>
TOTAL		785	-	1	1	22	280	281	181	19
Percentage in Group Total										
	Totals	100.0	-	.12	.12	2.80	35.66	35.79	23.05	2.46
	Male	100.00	-	.19	-	3.18	38.04	34.06	22.31	2.22
	Female	100.00	-	-	.35	2.12	31.44	38.86	24.38	2.85
Percentage Within Groups										
	Totals	100.00	-	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Male	63.94	-	100.00	-	72.72	68.21	60.85	61.87	57.89
	Female	36.06	-	-	100.00	27.28	31.79	39.15	38.13	42.11

	Sex	Total Patients	Under 6	7-11	12-14	15-17	18-34	35-54	55-74	75 & over
Willmar	M	417	--	--	3	6	50	159	181	18
	F	<u>197</u>	<u>--</u>	<u>--</u>	<u>1</u>	<u>7</u>	<u>29</u>	<u>66</u>	<u>83</u>	<u>11</u>
TOTAL		614	--	--	4	13	79	225	264	29
Percentage to Group Total										
	Totals	100.00	--	--	.65	2.11	12.86	36.64	42.99	4.75
	Male	100.00	--	--	.71	1.43	11.99	38.12	43.40	4.31
	Female	100.00	--	--	.50	3.55	14.72	33.50	42.13	5.60
Percentage Within Groups										
	Totals	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Male	67.91	--	--	75.00	46.15	63.29	70.66	68.56	62.06
	Female	32.09	--	--	25.00	53.85	36.71	29.34	31.44	37.94

APPENDIX U

1. This information was received from the Department of Public Welfare and represents preliminary estimates of the resident population by institution for 1971/73.

Department of Public Welfare Institutions  
 1971-73 Preliminary Biennial Budget  
 Estimated Resident Population

	Present	Estimated Resident Pop.	
	Resident Pop.	1971-72	1972-73
<u>M.I. Hospitals</u>			
Anoka	477	500	475
Hastings	381	450	450
Willmar	620	630	600
Fergus Falls	579	700	700
Rochester	678	750	740
St. Peter	771	825	825
Moose Lake	<u>621</u>	<u>600</u>	<u>600</u>
Sub-Total	4,127	4,455	4,390
<u>M.R. Hospitals</u>			
Faribault	1,773	1,630	1,630
Cambridge	1,257	1,100	1,100
Brainerd	<u>1,069</u>	<u>1,100</u>	<u>1,125</u>
Sub-Total	4,099	3,830	3,855
<u>Special Schools</u>			
Braille	74	90	90
Deaf	<u>268</u>	<u>300</u>	<u>300</u>
Sub-Total	342	390	390
<u>Special Hospitals</u>			
Gillette	72	75	75
Ah-Gwah-Ching	477	480	480
Glen Lake	<u>357</u>	<u>365</u>	<u>365</u>
Sub-Total	906	920	920
Grand Total	9,474	9,595	9,555

APPENDIX V

1. Using information found in Appendices S & U we have calculated the anticipated resident populations, by DPW sex/age groups, for each institution in the Department of Public Welfare for the years 1971/72 and 1972/73.
2. These projections are based on the assumption the population 'make-up' within institutions will not differ significantly from actual population characteristics revealed by Appendix T.

PROJECTED PATIENT POPULATIONS  
BY DPW SEX/AGE GROUP  
1971/72

<u>Institution</u>	<u>Sex</u>	<u>Total</u>	<u>Under 6</u>	<u>7-11</u>	<u>12-14</u>	<u>15-17</u>	<u>18-34</u>	<u>35-54</u>	<u>55-74</u>	<u>75 &amp; over</u>
		<u>Patients</u>								
1. Ah-Gwah-Ching	M	184	-	-	-	-	-	15	83	86
	F	296	-	-	-	-	-	22	136	138
	Total	480	-	-	-	-	-	37	219	224
2. Anoka	M	241	-	-	8	16	96	58	56	7
	F	259	1	1	4	11	84	96	52	10
	Total	500	1	1	12	27	180	154	108	17
3. Brainerd	M	617	-	48	48	81	257	149	34	-
	F	483	3	31	29	50	198	140	32	-
	Total	1,100	3	79	77	131	455	289	66	-
4. Cambridge-Lake Owasso	M	556	-	57	67	86	240	88	18	-
	F	544	1	53	47	73	224	120	26	-
	Total	1,100	1	110	114	159	464	208	44	-
5. Faribault	M	907	-	74	97	100	389	192	50	5
	F	723	-	65	64	58	282	184	70	-
	Total	1,630	-	139	161	158	671	376	120	5
6. Fergus Falls	M	391	-	-	6	13	75	148	130	19
	F	309	-	-	3	9	67	136	86	8
	Total	700	-	-	9	22	142	284	216	27
7. Gillette	M	23	5	5	5	5	3	-	-	-
	F	52	10	10	10	10	12	-	-	-
	Total	75	15	15	15	15	15	-	-	-

<u>Institution</u>	<u>Sex</u>	<u>Total</u>								
		<u>Patients</u>	<u>Under 6</u>	<u>7-11</u>	<u>12-14</u>	<u>15-17</u>	<u>18-34</u>	<u>35-54</u>	<u>55-74</u>	<u>75 &amp; over</u>
8. Glen Lake-Oak Terrace	M	129	-	-	-	-	1	27	67	34
	F	236	-	1	-	-	1	26	101	107
	Total	365	-	1	-	-	2	53	168	141
9. Hastings	M	247	-	-	1	6	87	79	48	26
	F	203	-	-	1	2	80	81	34	5
	Total	450	-	-	2	8	167	160	82	31
10. Moose Lake	M	338	-	-	-	2	56	99	134	47
	F	262	-	-	-	5	40	89	98	30
	Total	600	-	-	-	7	96	188	232	77
11. Rochester	M	410	-	2	7	18	77	101	158	47
	F	340	2	4	4	8	55	108	106	53
	Total	750	2	6	11	26	132	209	264	100
12. St. Peter-M.S.H Minn. Valley	M	527	-	1	-	16	200	179	117	14
	F	298	-	-	1	7	94	116	73	7
	Total	825	-	1	1	23	294	295	190	21
13. Willmar	M	427	-	-	3	6	51	162	185	20
	F	203	-	-	1	7	30	68	85	12
	Total	630	-	-	4	13	81	230	270	32

PROJECTED PATIENT POPULATIONS  
BY DPW SEX/AGE GROUP  
1972/73

<u>Institution</u>	<u>Sex</u>	<u>Total Patients</u>	<u>Under 6</u>	<u>7-11</u>	<u>12-14</u>	<u>15-17</u>	<u>18-34</u>	<u>35-54</u>	<u>55-74</u>	<u>75 &amp; over</u>
1. Ah-Gwah-Ching	M	184	-	-	-	-	-	15	83	86
	F	296	-	-	-	-	-	22	136	138
	Total	480	-	-	-	-	-	37	219	224
2. Anoka	M	229	-	-	7	15	91	55	53	8
	F	246	1	1	4	10	80	91	50	9
	Total	475	1	1	11	25	171	146	103	17
3. Brainerd	M	632	-	50	50	83	263	153	33	-
	F	493	3	31	28	51	203	142	35	-
	Total	1,125	3	81	78	134	466	295	68	-
4. Cambridge - Lake Owasso	M	556	-	57	67	86	240	88	18	-
	F	544	1	53	47	73	224	120	26	-
	Total	1,100	1	110	114	159	464	208	44	-
5. Faribault	M	907	-	74	97	100	389	192	50	5
	F	723	-	65	64	58	282	184	70	-
	Total	1,630	-	139	161	158	671	376	120	5
6. Fergus Falls	M	391	-	-	6	13	75	148	130	19
	F	309	-	-	3	9	67	136	86	8
	Total	700	-	-	9	22	142	284	216	27
7. Gillette	M	23	5	5	5	5	3	-	-	-
	F	52	10	10	10	10	12	-	-	-
	Total	75	15	15	15	15	15	-	-	-

<u>Institution</u>	<u>Sex</u>	<u>Total Patients</u>	<u>Under 6</u>	<u>7-11</u>	<u>12-14</u>	<u>15-17</u>	<u>18-34</u>	<u>35-54</u>	<u>55-74</u>	<u>75 &amp; over</u>
8. Glen Lake - Oak Terrace	M	129	-	-	-	-	1	27	67	34
	F	236	-	-	-	-	1	26	101	107
	Total	365	-	-	-	-	2	53	168	141
9. Hastings	M	247	-	-	1	6	87	79	48	26
	F	203	-	-	1	2	80	81	34	5
	Total	450	-	-	2	8	167	160	82	31
10. Moose Lake	M	338	-	-	-	2	56	99	134	47
	F	262	-	-	-	5	40	89	98	30
	Total	600	-	-	-	7	96	188	232	77
11. Rochester	M	405	-	2	7	17	76	100	156	47
	F	335	2	4	4	9	55	106	105	50
	Total	740	2	6	11	26	131	206	261	97
12. St. Peter - M.S.H. - Minn. Valley	M	527	-	1	-	16	200	179	117	14
	F	298	-	-	1	7	94	116	73	7
	Total	825	-	1	1	23	294	295	190	21
13. Willmar	M	407	-	-	2	5	48	155	176	21
	F	193	-	-	1	7	29	64	81	11
	Total	600	-	-	3	12	77	219	257	32

APPENDIX W

1. The following was received from the Department of Corrections and contains average resident population in their institutions, some information on the age of their population, and estimated population figures for the 1971/73 biennium.

SEX AND RANGE OF AGES OF PERSONS  
IN CORRECTIONAL INSTITUTIONS

<u>Institution</u>	<u>Sex</u>	<u>Average Daily Pop.</u>		<u>Median Age</u>		<u>Age (Low-High)</u>		<u>Anticipated Population 1971/73 Biennium</u>
		Male	Female	Male	Female	Male	Female	
Minnesota State Prison	M	920		33.1		17-50+		950
State Reformatory for Men	M	708		Adult 23.7 Youth 20.5		20-45 15-25		800
Minn. Correctional Institution for Women	W	58		Adult 28.5 Youth 20.9		21-50+ 19-25		58
State Training School	M	298		16.5		12-21		250
Minnesota Home School	M & F	Male 41 Female 122		14.2		12-17	13-19	175
Minnesota Reception Diagnostic Center	M & F	Male 127 Female 50		16.3 15.7		13-20	13-19	185
Thistledeew Forestry Camp	M	50		17.7		15-21		50
St. Croix Camp	M	50		17.6		13-18		50
Willow River Camp	M	50		20.0		17-25		50
Minnesota Reception-Diagnostic Center - B Building	M	52		17.1		16-18		65

APPENDIX X

1. This projection is based on the data supplied by the Department of Corrections which appears in Appendix W.
2. The format in which that information was presented necessitated percentage calculation of the sex/age distributions.
3. Our computed distributions using the six sex/age groups which appear in Item 31 follows.

DEPARTMENT OF CORRECTIONS INSTITUTIONS  
POPULATION CHARACTERISTICS OF 1969/70 POPULATION

	<u>Sex</u>	<u>Total Patients</u>	<u>Under 6</u>	<u>7-11</u>	<u>12-19</u>	<u>20 &amp; over</u>
Minn. Correctional Institution for women	F	<u>58</u>	-	-	<u>2</u>	<u>56</u>
Total		58	-	-	2	56
Minnesota Home School	M	41	-	-	41	-
	F	<u>122</u>	-	-	<u>122</u>	-
Total		163	-	-	163	-
Minn. Reception-Diagnostic Center	M	127	-	-	81	46
	F	<u>50</u>	-	-	<u>36</u>	<u>14</u>
Total		177	-	-	117	60
Minn. Reception-Diagnostic Center - B Building	M	<u>52</u>	-	-	<u>36</u>	<u>16</u>
Total		52	-	-	36	16
Minnesota State Prison	M	<u>920</u>	-	-	<u>84</u>	<u>836</u>
Total		920	-	-	84	836
St. Croix Camp	M	<u>50</u>	-	-	<u>43</u>	<u>7</u>
Total		50	-	-	43	7
State Reformatory for Men	M	<u>708</u>	-	-	<u>117</u>	<u>591</u>
Total		708	-	-	117	591
State Training School	M	<u>298</u>	-	-	<u>210</u>	<u>88</u>
Total		298	-	-	210	88
Thistledew Forestry Camp	M	<u>50</u>	-	-	<u>24</u>	<u>26</u>
Total		50	-	-	24	26
Willow River Camp	M	<u>50</u>	-	-	<u>11</u>	<u>39</u>
Total		50	-	-	11	39

APPENDIX Y

1. This projection is based on the data supplied by the Department of Corrections which appears in Appendix W and our calculated population characteristics as they appear in Appendix X.
2. We have used the stimated resident populations (same for both years) which were supplied by the Department of Corrections in a telephone call on July 20, 1970.
3. Our computed distribution for 1971/73 using the six sex/age groups which appear in item 31 follows.

DEPARTMENT OF CORRECTIONS  
 PROJECTED RESIDENT POPULATIONS  
 SIX SEX/AGE GROUPS (Item 31)  
 FOR 1971/72 - 1972/73

<u>Institution</u>	<u>Sex</u>	<u>Total Patients</u>	<u>Under 6</u>	<u>7-11</u>	<u>12-19</u>	<u>20 and over</u>
Minn. Correctional Institution for Women	F	<u>58</u>	---	---	<u>2</u>	<u>56</u>
Total		58			2	56
Minnesota Home School	M	<u>44</u>	---	---	<u>44</u>	---
	F	<u>131</u>	---	---	<u>131</u>	---
Total		175			175	
Minn. Reception Diagnostic Center	M	<u>132</u>	---	---	<u>84</u>	<u>48</u>
	F	<u>53</u>	---	---	<u>38</u>	<u>15</u>
Total		185			122	63
Minn. Reception-Diagnostic Center-B Building	M	<u>65</u>	---	---	<u>45</u>	<u>20</u>
Total		65			45	20
Minn. State Prison	M	<u>950</u>	---	---	<u>86</u>	<u>864</u>
Total		950			86	864
St. Croix Camp	M	<u>50</u>	---	---	<u>43</u>	<u>7</u>
Total		50			43	7
State Reformatory for Men	M	<u>800</u>	---	---	<u>132</u>	<u>668</u>
Total		800			132	668
State Training School	M	<u>250</u>	---	---	<u>176</u>	<u>74</u>
Total		250			176	74
ThistleDew Forestry Camp	M	<u>50</u>	---	---	<u>24</u>	<u>26</u>
Total		50			24	26
Willow River Camp	M	<u>50</u>	---	---	<u>11</u>	<u>39</u>
Total		50			11	39

APPENDIX Z

1. The Consumer and Food Economics Research Division, Agricultural Research Service, United States Department of Agriculture, periodically issues a report titled:

"Cost of Food at Home, Estimated for Food Plans at Three Cost Levels"

A copy of the report for March 1970 - CFE (Adm.) 256 - follows.

2. A copy of the USDA's "Recommended Daily Dietary Allowances" follows. This table provides basic data on recommended diets for specific sex/age groups.
3. It is suggested this report serve as a base point in determining future residential feeding levels for all of Minnesota's institutions.
  - A. Use of this report would satisfy conditions set forth in item 29 of the synopsis:
    - A. Be logical and based on fact.
    - B. Be uniform in application so it is fair to all, and
    - C. Be based on nationally recognized nutritional standards.

Cost of Food at Home <sup>1/</sup> Estimated for Food Plans  
at Three Cost Levels, March 1970, U. S. Average

Sex-age groups <sup>2/</sup>	Cost for 1 week			Cost for 1 month		
	Low-cost plan	Moderate-cost plan	Liberal plan	Low-cost plan	Moderate cost plan	Liberal plan
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
<u>FAMILIES</u>						
Family of 2, 20-35 years <sup>3/</sup> .....	18.30	23.20	28.50	79.30	101.00	123.50
Family of 2, 55-75 years <sup>3/</sup> .....	15.10	19.40	23.30	65.00	84.40	101.10
Family of 4, preschool children <sup>4/</sup>	26.50	33.70	41.00	115.20	146.70	178.00
Family of 4, school children <sup>5/</sup> ..	30.80	39.30	49.30	133.60	170.90	209.10
<u>INDIVIDUALS <sup>6/</sup></u>						
Children, under 1 year .....	3.60	4.50	5.00	15.50	19.50	21.80
1-3 years .....	4.50	5.70	6.80	19.70	24.80	29.70
3-6 years .....	5.40	6.90	8.30	23.40	30.10	36.00
6-9 years .....	6.60	8.40	10.50	28.40	36.50	45.40
Girls, 9-12 years .....	7.50	9.60	11.30	32.30	41.80	48.80
12-15 years .....	8.20	10.70	12.90	35.60	46.30	55.90
15-20 years .....	8.40	10.60	12.60	36.40	46.00	54.60
Boys, 9-12 years .....	7.60	9.80	11.90	33.10	42.60	51.40
12-15 years .....	8.90	11.70	14.00	38.70	50.90	60.50
15-20 years .....	10.30	13.10	15.80	44.60	56.60	68.30
Women, 20-35 years .....	7.70	9.80	11.80	33.50	42.70	51.20
35-55 years .....	7.40	9.50	11.40	32.20	41.10	49.30
55-75 years .....	6.30	8.10	9.70	27.20	35.30	42.00
75 years and over .....	5.70	7.20	8.90	24.70	31.40	38.40
Pregnant .....	9.20	11.50	13.50	39.80	49.70	58.70
Nursing .....	10.60	13.20	15.40	46.10	57.20	66.80
Men, 20-35 years .....	8.90	11.30	14.10	38.60	49.10	61.10
35-55 years .....	8.30	10.50	12.90	35.90	45.70	55.70
55-75 years .....	7.40	9.50	11.50	31.90	41.40	49.90
75 years and over .....	6.90	9.20	11.10	29.80	39.90	48.00

<sup>1/</sup> These estimates were computed from quantities in food plans published in Family Economics Review, October 1964. The costs of the food plans were first estimated by using the average price per pound of each food group paid by urban survey families at three selected income levels in 1965. These prices were adjusted to current levels by use of Retail Food Prices by Cities released periodically by the Bureau of Labor Statistics.

<sup>2/</sup> Age groups include the persons of the first age listed up to but not including those of the second age listed.

<sup>3/</sup> Ten percent added for family size adjustment.

<sup>4/</sup> Man and woman, 20-35 years; children, 1-3 and 3-6 years.

<sup>5/</sup> Man and woman, 20-35; child, 6-9 and boy 9-12 years.

<sup>6/</sup> The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5-person--subtract 5 percent; 6-or-more-person--subtract 10 percent.

TABLE 17.—Recommended daily dietary allowances<sup>1</sup>

Sex and age	Energy	Protein	Calcium	Iron	Vitamin A		Riboflavin	Niacin equivalent	Ascorbic acid
					Value	mine			
<b>Children:</b>									
Birth to 1 year.....	Cal. 920	Gm. 20	Gm. 0.7	Mg. 8	I.U. 1,500	Mg. 0.4	Mg. 0.6	Mg. 6	Mg. 30
1 to 3 years.....	1,300	32	.8	8	2,000	.5	.8	9	40
3 to 6 years.....	1,600	40	.8	10	2,500	.6	1.0	11	50
6 to 9 years.....	2,100	52	.8	12	3,500	.8	1.3	14	60
<b>Girls:</b>									
9 to 12 years.....	2,200	55	1.1	15	4,500	.9	1.3	15	80
12 to 15 years.....	2,500	62	1.3	15	5,000	1.0	1.5	17	80
15 to 18 years <sup>2</sup> .....	2,300	58	1.3	15	5,000	.9	1.3	15	70
<b>Boys:</b>									
9 to 12 years.....	2,400	60	1.1	15	4,500	1.0	1.4	16	70
12 to 15 years.....	3,000	75	1.4	15	5,000	1.2	1.8	20	80
15 to 18 years <sup>2</sup> .....	3,400	85	1.4	15	5,000	1.4	2.0	22	80
<b>Women:</b>									
18 to 35 years <sup>3</sup> .....	2,100	58	.8	15	5,000	.8	1.3	14	70
35 to 55 years.....	1,900	58	.8	15	5,000	.8	1.2	13	70
55 to 75 years.....	1,600	58	.8	10	5,000	.8	1.2	13	70
Pregnant (2d and 3d trimester) <sup>4</sup> .....	2,300	78	1.3	20	6,000	1.0	1.6	17	100
Lactating <sup>4</sup> .....	3,100	98	1.3	20	8,000	1.2	1.9	21	100
<b>Men:</b>									
18 to 35 years <sup>3</sup> .....	2,900	70	.8	10	5,000	1.2	1.7	19	70
35 to 55 years.....	2,600	70	.8	10	5,000	1.0	1.6	17	70
55 to 75 years.....	2,200	70	.8	10	5,000	.9	1.3	15	70

<sup>1</sup> Allowances for all nutrients are from National Research Council's *Recommended Dietary Allowances*, 6th ed., 1964. Age groups include the persons of the first age listed up to but not including those of the second age listed.

<sup>2</sup> These allowances were used as criteria for food plans for the group 15 to 20 years of age.

<sup>3</sup> These allowances were used as criteria for food plans for the group 20 to 35 years of age.

<sup>4</sup> Based on allowances for women 20 to 35 years of age.

APPENDIX AA

1. Computations shown in this section have been based on data taken from Appendix Z ("Cost of Food at Home, Estimated for Food Plans at Three Cost Levels"; CFE (Adm.) - 256), for March, 1970.
2. The USDA uses 20 sex/age groups. We are proposing the use of 6 such groups (see item 31). To arrive at a daily food cost using USDA information from the above noted report the following computational steps were taken:
  - A. Costs were recorded for each of the USDA groups being combined into one of our groups.

Example: Our Group One (Zero through five years) include the following USDA groups: Children under one; Children 1-3 years; and Children 3-6 years.

Using figures from the moderate cost plan we have:

$$\$19.50 + \$24.80 + \$30.10 = \$74.40$$

- B. The sum from the first step is divided by the number of USDA groups which went into the sum.

Example: The sum was \$74.40; and the number of items in the sum was 3.

$$\$74.40 \div 3 = \$24.80 \text{ computed monthly cost for Group One.}$$

- C. The computed monthly cost is multiplied by twelve to arrive at a cost for the full year.

Example: The computed monthly cost was \$24.80.

$$\$24.80 \text{ time } 12 \text{ months} = \$297.60 \text{ computed yearly cost for Group One.}$$

- D. The large family savings deduction (of 10%), noted in footnote six of the March, 1970, "Cost of Food at Home, Estimated for Food Plans at Three Cost Levels" is deducted from the computed yearly cost.

Example: \$297.60 less 10% (\$29.76) = \$267.84 revised yearly cost for Group One

- E. The revised yearly cost is divided by 365 to arrive at a computed cost per day.

Example: \$267.84  $\div$  365 days = \$0.7338 daily cost for Group One to provide a USDA moderate cost feeding.

Appendix AA - cont.

3. These steps were followed in determining the daily cost for each of our six sex/age groups for the Low Cost, Moderate Cost, and Liberal Plans.

FOOD COSTS PER PATIENT PER DAY

LOW COST PLAN

GROUP I - Children 0 - 6 years

$$\begin{aligned} 15.50 + 19.70 + 23.40 &= \$58.60 + 3 = \$19.53 \\ 19.53 \times 12 \text{ months} &= \$234.36 \text{ less } 10\% (\$23.44) = \$210.92 \\ 210.92 + 365 \text{ days} &= \$ 0.5779 \end{aligned}$$

DAILY FOOD COSTS PER PATIENT - GROUP I - \$ 0.5779

GROUP II - Children 7 - 11 years

$$\begin{aligned} 28.40 + 32.30 + 33.10 &= \$93.80 + 3 = \$31.27 \\ 31.27 \times 12 \text{ months} &= \$375.24 \text{ less } 10\% (\$37.52) = \$337.72 \\ 337.72 + 365 \text{ days} &= \$ 0.9253 \end{aligned}$$

DAILY FOOD COSTS PER PATIENT - GROUP II - \$ 0.9253

GROUP III - Girls 12 - 19 years

$$\begin{aligned} 35.60 + 36.40 &= \$72.00 + 2 = \$36.00 \\ 36.00 \times 12 \text{ months} &= \$432.00 \text{ less } 10\% (\$43.20) = \$388.80 \\ 388.80 + 365 \text{ days} &= \$ 1.0652 \end{aligned}$$

DAILY FOOD COSTS PER PATIENT - GROUP III - \$ 1.0652

GROUP IV - Boys 12 - 19 years

$$\begin{aligned} 38.70 + 44.60 &= \$83.30 + 2 = \$41.65 \\ 41.65 \times 12 \text{ months} &= \$499.80 \text{ less } 10\% (\$49.98) = \$449.82 \\ 449.82 + 365 \text{ days} &= \$ 1.2324 \end{aligned}$$

DAILY FOOD COSTS PER PATIENT - GROUP IV - \$ 1.2324

Low Cost Plan Cont'd -

GROUP V - Women 20 and above

$$\begin{aligned} 23.50 + 32.20 + 27.20 + 24.70 &= \$117.60 + 4 = \$29.40 \\ 29.40 \times 12 \text{ months} &= \$352.80 \text{ less } 10\% (\$35.28) = \$317.52 \\ 317.52 + 365 \text{ days} &= \$ 0.8699 \end{aligned}$$

DAILY FOOD COSTS PER PATIENT - GROUP V - \$ 0.8699

GROUP VI - Men 20 and above

$$\begin{aligned} 30.60 + 35.90 + 31.90 + 29.80 &= \$136.20 + 4 = \$34.05 \\ 34.05 \times 12 \text{ months} &= \$408.60 \text{ less } 10\% (\$40.86) = \$367.74 \\ 367.74 + 365 \text{ days} &= \$ 1.0075 \end{aligned}$$

DAILY FOOD COSTS PER PATIENT - GROUP VI - \$ 1.0075

FOOD COSTS PER PATIENT PER DAY

MODERATE COST PLAN

GROUP I - Children 0 - 6 years

$$\begin{aligned} 19.50 + 24.80 + 30.10 &= \$74.40 + 3 = \$24.80 \\ 24.80 \times 12 \text{ months} &= \$297.60 \text{ less } 10\% (\$29.76) = \$267.84 \\ 267.84 + 365 \text{ days} &= \$0.7338 \end{aligned}$$

DAILY FOOD COSTS PER PATIENT - GROUP I - \$ 0.7338

GROUP II - Children 7 - 11 years

$$\begin{aligned} 36.50 + 41.80 + 42.60 &= \$120.90 + 3 = \$40.30 \\ 40.30 \times 12 \text{ months} &= \$483.60 \text{ less } 10\% (\$48.36) = \$435.24 \\ 435.24 + 365 \text{ days} &= \$ 1.1924 \end{aligned}$$

DAILY FOOD COSTS PER PATIENT - GROUP II - \$ 1.1924

GROUP III - Girls 12 - 19 years

$$\begin{aligned} 46.30 + 46.00 &= \$92.30 + 2 = \$46.15 \\ 46.15 \times 12 \text{ months} &= \$553.80 \text{ less } 10\% (\$55.38) = \$498.42 \\ 498.42 + 365 \text{ days} &= \$ 1.3655 \end{aligned}$$

DAILY FOOD COSTS PER PATIENT - GROUP III - \$ 1.3655

GROUP IV - Boys 12 - 19 years

$$\begin{aligned} 50.90 + 56.60 &= \$107.50 + 2 = \$53.75 \\ 53.75 \times 12 \text{ months} &= \$645.00 \text{ less } 10\% (64.50) = \$580.50 \\ 580.50 + 365 \text{ days} &= \$ 1.5904 \end{aligned}$$

DAILY FOOD COSTS PER PATIENT - GROUP IV - \$ 1.5904

Moderate Cost Plan Cont'd -

GROUP V - Women 20 and above

$$\begin{aligned} 42.70 + 41.10 + 35.30 + 31.40 &= \$150.50 + 4 = \$37.63 \\ 37.63 \times 12 \text{ months} &= \$451.56 \text{ less } 10\% (45.16) = \$406.40 \\ 406.40 + 365 \text{ days} &= \$ 1.1134 \end{aligned}$$

DAILY FOOD COSTS PER PATIENT - GROUP V - \$ 1.1134

GROUP VI - Men 20 and above

$$\begin{aligned} 49.10 + 45.70 + 41.40 + 39.90 &= \$176.10 + 4 = \$44.03 \\ 44.03 \times 12 \text{ months} &= \$528.36 \text{ less } 10\% (\$52.84) = \$475.52 \\ 475.52 + 365 \text{ days} &= \$ 1.3028 \end{aligned}$$

DAILY FOOD COSTS PER PATIENT - GROUP VI - \$ 1.3028

FOOD COSTS PER PATIENT PER DAY

LIBERAL PLAN

GROUP I - Children 0 - 6 years

$$\begin{aligned} 21.80 + 29.70 + 36.00 &= \$87.50 + 3 = \$29.17 \\ 29.17 \times 12 \text{ months} &= \$350.04 \text{ less } 10\% (\$35.00) = \$315.04 \\ \$315.04 + 365 \text{ days} &= \$ 0.8631 \end{aligned}$$

DAILY FOOD COST PER PATIENT - GROUP I - \$ 0.8631

GROUP II - Children 7 - 11 years

$$\begin{aligned} 45.40 + 48.80 + 51.40 &= \$145.60 + 3 = \$48.53 \\ 48.53 \times 12 \text{ months} &= \$582.36 \text{ less } 10\% (\$58.24) = \$524.12 \\ 524.12 + 365 \text{ days} &= \$ 1.4359 \end{aligned}$$

DAILY FOOD COST PER PATIENT - GROUP II - \$ 1.4359

GROUP III - Girls 12 - 19 years

$$\begin{aligned} 55.90 + 54.60 &= \$110.50 + 2 = \$55.25 \\ 55.25 \times 12 \text{ months} &= \$663.00 \text{ less } 10\% (\$66.30) = \$596.70 \\ 596.70 + 365 \text{ days} &= \$ 1.6348 \end{aligned}$$

DAILY FOOD COST PER PATIENT - GROUP III - \$ 1.6348

GROUP IV - Boys 12 - 19 years

$$\begin{aligned} 60.50 + 68.30 &= \$128.80 + 2 = \$64.40 \\ 64.40 \times 12 \text{ months} &= \$772.80 \text{ less } 10\% (\$77.28) = \$695.52 \\ 695.52 + 365 \text{ days} &= \$1.9055 \end{aligned}$$

DAILY FOOD COST PER PATIENT - GROUP IV - \$1.9055

Liberal Plan cont'd -

GROUP V - Women 20 and above

$$\begin{aligned} 51.20 + 49.30 + 42.00 + 38.40 &= \$180.90 \div 4 = \$45.23 \\ 45.23 \times 12 \text{ months} &= \$542.76 \text{ less } 10\% (\$54.28) = \$488.48 \\ 488.48 \div 365 \text{ days} &= \$ 1.3383 \end{aligned}$$

DAILY FOOD COST PER PATIENT - GROUP V - \$ 1.3383

GROUP VI - Men 20 and above

$$\begin{aligned} 61.10 + 55.70 + 49.90 + 48.00 &= \$214.70 \div 4 = \$53.68 \\ 53.68 \times 12 \text{ months} &= \$644.16 \text{ less } 10\% (\$64.42) = \$579.74 \\ 579.74 \div 365 \text{ days} &= \$ 1.5883 \end{aligned}$$

DAILY FOOD COST PER PATIENT - GROUP VI - \$ 1.5883

APPENDIX AB

1. Appendix AA shows the computations for the six sex/age groups for the Low Cost, Moderate Cost, and Liberal Plans.
2. The data in this appendix is arranged to provide "At-A-Glance" comparison of daily costs between the three plans.
3. We are suggesting the Moderate Cost Plan serve as the point from which all food computations be made.
4. The information contained in this Department of Agriculture report is released periodically and it could serve, either by itself, or in combination with, the Cost-Of-Living Index, as a 'check-point' so feeding standards could be maintained and funds from reserve financing (Food Contingent Fund) be provided as needed.

A. This would satisfy condition 'F' as set forth in Item 29:

"F - Contain reserve financing so the established standard of feeding can be maintained if food prices increase.

1. Safeguards so the reserve financing can be used only on certification by the appropriate state agency that the funds are needed.
2. A reporting mechanism which is sufficiently responsive so 'reserve' funds can be provided as needed during the fiscal year."

FOOD COSTS PER PATIENT PER DAY

SUMMARY

<u>SEX/AGE GROUP</u>	<u>LOW COST PLAN</u>	<u>MODERATE COST PLAN</u>	<u>LIBERAL PLAN</u>
GROUP I - Children 0 - 6 years	\$ 0.5779	\$ 0.7338	\$ 0.8631
GROUP II - Children 7 - 11 years	0.9253	1.1924	1.4359
GROUP III - Girls 12 - 19 years	1.0652	1.3655	1.6348
GROUP IV - Boys 12 - 19 years	1.2324	1.5904	1.9055
GROUP V - Women 20 and above	0.8699	1.1134	1.3383
GROUP VI - Men 20 and above	1.0075	1.3028	1.5883

APPENDIX AC

1. Item 25 reads in part:

"Using information from items 23 & 24 (and Appendices S & U) we calculated anticipated resident populations, by DFW sex/age groups, for each institution in the Department of Public Welfare for the years 1971/72 and 1972/73. This information appears in Appendix V."

2. In item 31, we proposed six sex/age groups rather than those used by the Department of Public Welfare in their statistical presentation as shown in Appendix V.
3. To convert the projections contained in Appendix V to the proposed six sex/age groups (see item 31) it was necessary to prepare Appendix AC.
4. Appendix AC serves as our "model" showing projected resident population by institution (as estimated by the Department of Public Welfare) and our projections of the population characteristics.
5. The information contained in Appendix AC will be used in all cost projections made from this point forward.

DEPARTMENT OF PUBLIC WELFARE INSTITUTIONS  
 PROJECTED RESIDENT POPULATIONS  
 SIX SEX/AGE GROUPS (Item 31)  
 FOR 1971/72

<u>Institution</u>	<u>Sex</u>	<u>Total Patients</u>	<u>Under 6</u>	<u>6-11</u>	<u>12-19</u>	<u>20 &amp; over</u>
1. Ah-Gwah-Ching	M	184	-	-	-	184
	F	296	-	-	-	296
	Total	480	-	-	-	480
2. Anoka	M	241	-	-	36	205
	F	259	1	1	25	232
	Total	500	1	1	61	437
3. Brainerd	M	617	-	48	161	408
	F	483	3	31	103	346
	Total	1,100	3	79	264	754
4. Cambridge-Lake Owasso	M	556	-	57	183	316
	F	544	1	53	148	343
	Total	1,100	1	110	331	659
5. Faribault	M	907	-	74	245	588
	F	723	-	65	157	501
	Total	1,630	-	139	402	1,089
6. Fergus Falls	M	391	-	-	28	363
	F	309	-	-	20	289
	Total	700	-	-	48	652
7. Gillette	M	23	4	4	9	6
	F	52	11	11	23	7
	Total	75	15	15	32	13

For 1971/72

<u>Institution</u>	<u>Sex</u>	<u>Patients</u>	<u>Under 6</u>	<u>6-11</u>	<u>12-19</u>	<u>20 &amp; over</u>
8. Glen Lake - Oak Terrace	M	129	-	-	1	128
	F	236	-	1	1	234
	Total	365	-	1	2	362
9. Hastings	M	247	-	-	18	229
	F	203	-	-	13	190
	Total	450	-	-	31	419
10. Moose Lake	M	338	-	-	9	329
	F	262	-	-	10	252
	Total	600	-	-	19	581
11. Rochester	M	410	-	2	34	374
	F	340	2	4	19	315
	Total	750	2	6	53	689
12. St. Peter/M.S.H. Minn. Valley	M	527	-	1	41	485
	F	298	-	-	19	279
	Total	825	-	1	60	764
13. Willmar	M	427	-	-	15	412
	F	203	-	-	12	191
	Total	630	-	-	27	603

DEPARTMENT OF PUBLIC WELFARE INSTITUTIONS  
 PROJECTED RESIDENT POPULATIONS  
 SIX SEX/AGE GROUPS (Item 31)  
 FOR 1972/73

Institution	Sex	Total Patients	Under 6	7-11	12-19	20 & over
1. Ah-Gwah-Ching	M	184	-	-	-	184
	F	296	-	-	-	296
	Total	480	-	-	-	480
2. Anoka	M	229	-	-	33	196
	F	246	1	1	24	220
	Total	475	1	1	57	416
3. Brainerd	M	632	-	50	165	417
	F	493	3	31	104	355
	Total	1,125	3	81	269	772
4. Cambridge - Lake Owasso	M	556	-	57	183	316
	F	544	1	53	148	343
	Total	1,100	1	110	331	659
5. Faribault	M	907	-	74	245	588
	F	723	-	65	157	501
	Total	1,630	-	139	402	1,089
6. Fergus Falls	M	391	-	-	28	363
	F	309	-	-	20	289
	Total	700	-	-	48	652
7. Gillette	M	23	4	4	9	6
	F	52	11	11	23	7
	Total	75	15	15	32	13

For 1972/73

Institution	Sex	Total Patients	Under 6	7-11	12-19	20 & over
8. Glen Lake - Oak Terrace	M	129	-	-	1	128
	F	236	-	1	1	234
	Total	365	-	1	2	362
9. Hastings	M	247	-	-	18	229
	F	203	-	-	13	190
	Total	450	-	-	31	419
10. Moose Lake	M	338	-	-	9	329
	F	262	-	-	10	252
	Total	600	-	-	19	581
11. Rochester	M	405	-	2	33	370
	F	335	2	4	20	309
	Total	740	2	6	53	679
12. St. Peter/M.S.H./ Minn. Valley	M	527	-	1	41	485
	F	298	-	-	19	279
	Total	825	-	1	60	764
13. Willmar	M	407	-	-	13	394
	F	193	-	-	11	182
	Total	600	-	-	24	576

APPENDIX AD

1. This appendix contains our computations on the actual food needs by institution for the 1971/73 biennium.
2. We have utilized the dollar information found in Appendix AA using the Moderate Cost Plan as our 'base'.
3. We have also utilized projected populations for each Department of Public Welfare institution, by the six sex/age groups found in Appendix AC.
4. These two facets of information have been combined in the computations which follow.
5. Both years have been calculated for those institutions where DPW figures show an anticipated change in population.
6. Calculations are on March, 1970, food costs - and would have to be adjusted in the manner previously described if prices increase or decrease during the biennium.

PROVISION REQUEST FOR 1971-73 BASED ON SEX/AGE GROUP DISTRIBUTION, PROJECTED POPULATION AND U.S.D.A. MODERATE COST FOOD PLAN.

The average cost per patient day for 1971/72 and 1972/73 have been computed using the following method:

- A. U.S.D.A. Moderate Cost feeding level (per sex/age group) times the estimated patient population (per sex/age group) equals the total daily food cost per sex/age group.
- B. Total of six sex/age groups, divided by total estimated patient population per institution, to arrive at the average patient food cost per day.

DPW Institution	Group I	Group II	Group III	Group IV	Group V	Group VI	Total 71/72	Ave. Cost Per Patient Day	Total 72/73	Ave. Cost Per Patient Day
Ah-Gwah-Ching					296	184	480		480	
					329.57	239.72	569.29	1.186	569.29	1.186
Anoka	1	1	25	36	232	205	500			
	.7338	1.1924	34.14	57.25	258.31	267.07	618.69	1.237		
	1	1	24	33	220	196			475	
	.7338	1.1924	32.77	52.48	244.95	255.35			587.47	1.237
Brainerd	3	79	103	161	346	408	1100			
	2.20	94.20	140.65	256.05	385.24	531.54	1409.88	1.282		
	3	81	104	165	355	417			1125	
	2.20	96.58	142.01	262.42	395.26	543.27			1441.74	1.282
Cambridge-Lake Owasso	1	110	148	183	343	315	1100		1100	
	.7338	131.16	202.09	291.04	381.90	410.68	1417.60	1.288	1417.60	1.288
Faribault	-	139	157	245	501	588	1630		1630	
	-	165.74	214.38	389.65	557.81	766.05	2093.63	1.284	2093.63	1.284
Fergus Falls	-	-	20	28	289	363	700		700	
	-	-	27.37	11.53	321.77	172.92	866.53	1.238	866.53	1.238

<u>DPW Institution</u>	<u>Group I .7338</u>	<u>Group II 1.1924</u>	<u>Group III 1.3655</u>	<u>Group IV 1.5904</u>	<u>Group V 1.1134</u>	<u>Group VI 1.3028</u>	<u>Total 71/72</u>	<u>Ave. Cost Per Patient Day</u>	<u>Total 72/73</u>	<u>Ave. Cost Per Patient Day</u>
Gillette	15 11.01	15 17.89	23 31.41	9 14.31	7 7.79	6 7.82	75 90.22	1.203	75 90.22	1.203
Glen Lake- Oak Terrace	- -	1 1.1924	1 1.3655	1 1.5904	234 260.54	128 166.76	365 431.44	1.182	365 431.44	1.182
Hastings	- -	- -	13 17.75	18 28.63	190 211.55	229 298.34	450 556.27	1.236	450 556.27	1.236
Moose Lake	- -	- -	10 13.65	9 14.31	252 280.58	329 428.62	600 737.17	1.229	600 737.17	1.229
Rochester	2 1.47	6 7.15	19 25.94	34 54.07	315 350.72	374 487.25	750 926.61	1.235		
	2 1.47	6 7.15	20 27.31	33 52.48	309 344.04	370 482.04			740 914.49	1.236
St. Peter - MSH - MVSAC	- -	1 1.1924	19 25.94	41 65.21	279 310.64	485 631.86	825 1034.84	1.254	825 1034.84	1.254
Willmar	- -	- -	12 16.39	15 23.86	191 212.66	412 536.75	630 789.66	1.253		
	- -	- -	11 15.02	13 20.68	182 202.64	394 513.30			600 751.64	1.253

APPENDIX AE

1. This appendix contains our computations on the actual food needs by institution for the 1971/73 biennium.
2. We have utilized the dollar information found in Appendix AA using the Moderate Cost Plan as our 'base'.
3. We have also utilized projected populations for each Department of Corrections institution, by the six sex/age groups found in Appendix AC.
4. These two facets of information have been combined in the computations which follow.
5. Both years have been calculated for those institutions where DPW figures show an anticipated change in population.
6. Calculations are on March 1970 food costs - and would have to be adjusted in the manner previously described if prices increase or decrease during the biennium.

PROVISION REQUEST FOR 1971-73 BASED ON SEX/AGE GROUP DISTRIBUTION, PROJECTED POPULATION  
AND U.S.D.A. MODERATE COST FOOD PLAN

<u>Correctional Institution</u>	<u>Group I</u>	<u>Group II</u>	<u>Group III</u>	<u>Group IV</u>	<u>Group V</u>	<u>Group VI</u>	<u>Total 71-72</u>	<u>Ave. Cost Per Patient Day</u>	<u>Total 72-73</u>	<u>Ave. Cost Per Patient Day</u>
Minn. Correctional Inst. for Women	-	-	2	-	56	-	58		58	
	-	-	2.73	-	62.35	-	65.08	1.122	65.08	1.122
Minn. Home School	-	-	122	41	-	-	163		163	
	-	-	166.59	65.21	-	-	231.80	1.422	231.80	1.422
Minn. Reception-Diagnostic Center	-	-	36	81	14	46	177		177	
	-	-	49.16	128.82	15.59	59.93	253.50	1.432	253.50	1.432
Minn. Rec.-Diag. Center - B Bldg.	-	-	-	36	-	16	52		52	
	-	-	-	57.25	-	20.84	78.10	1.502	78.10	1.502
Minn. State Prison	-	-	-	84	-	836	920		920	
	-	-	-	133.59	-	1089.14	1222.73	1.329	1222.73	1.329
St. Croix Camp	-	-	-	43	-	7	50		50	
	-	-	-	68.39	-	9.12	77.51	1.550	77.51	1.550
State Reform. for Men	-	-	-	117	-	591	708		708	
	-	-	-	186.08	-	769.95	956.03	1.350	956.03	1.350
State Training School	-	-	-	210	-	88	298		298	
	-	-	-	333.98	-	114.65	448.63	1.505	448.63	1.505
Thistledeew Forestry Camp	-	-	-	24	-	26	50		50	
	-	-	-	38.17	-	33.87	72.04	1.441	72.04	1.441
Willow River Camp	-	-	-	11	-	39	50		50	
	-	-	-	17.49	-	50.81	68.30	1.366	68.30	1.366

APPENDIX AF

1. The following material has been computed by using the projected population characteristics from Appendices X and AC and the daily food costs per resident for the low-cost plan from Appendix AA.
2. Three institutions (one from the Department of Corrections and two from the Department of Public Welfare) were selected for this study.
3. The computations show the average cost per resident day for both 1971-72 and 1972-73 using the USDA low-cost figures for the appropriate sex/age groups.
4. Comparative costs follow:

<u>Institution</u>	<u>1971/72 Projected Cost Per Resident Per Day USDA Low Cost Plan</u>	<u>1971/72 Projected Cost Per Resident Per Day USDA Moderate Cost Plan</u>
Minnesota State Prison	\$1.0280	\$1.329
Faribault State Hospital	.9975	1.284
St. Peter State Hospital (SPSH, MVSAC, MSH)	.9733	1.254

5. These three institutions are all receiving a per resident per day food allowance which is significantly lower than the amount needed to provide a feeding level equal to the USDA low-cost plan.
6. Since these institutions were randomly selected, it appears the present appropriation for food in all institutions in the Departments of Corrections and Public Welfare is not sufficient to provide a diet equal to the USDA low-cost plan.

PROJECTED PROVISION REQUEST FOR 1971-73 BASED ON SEX/AGE GROUP DISTRIBUTION,  
 PROJECTED POPULATIONS, AND THE U.S.D.A. LOW COST PLAN FOR  
 THREE RANDOMLY SELECTED INSTITUTIONS

<u>Institution</u>	<u>Group I</u>	<u>Group II</u>	<u>Group III</u>	<u>Group IV</u>	<u>Group V</u>	<u>Group VI</u>	<u>Total</u> <u>71-72</u>	<u>Ave. Cost Per</u> <u>Patient Day</u>	<u>Total</u> <u>72-73</u>	<u>Ave. Cost Per</u> <u>Patient Day</u>
Minn. State Prison	-	-	-	84	-	836	920	-	920	-
	-	-	-	103.52	-	842.27	945.79	1.0280	945.79	1.0280
Faribault	-	139	157	245	501	588	1630	.9975	1630	.9975
	-	128.62	167.23	301.94	435.82	592.41	1626.02	-	1626.02	-
St. Peter	-	1	19	41	279	485	825	-	825	-
	-	.93	20.24	50.53	242.70	488.63	803.03	.9733	803.03	.9733

APPENDIX AG

1. The average cost per resident per day from appendices AD (DPW institutions) and AE (Correctional institutions) has been combined with projected resident populations from appendices U and W.
2. These computations provided the total food cost for each institution and for each department for 1971/72 and 1972/73.
3. Projected biennial food cost for the Department of Corrections is \$2,538,945.
4. Projected biennial food cost for the Department of Public Welfare is \$8,418,006.
5. Combined biennial food cost is \$10,956,951.

PROJECTED EXPENDITURES FOR FOOD - CORRECTIONAL INSTITUTIONS

<u>Corrections</u>	<u>Total Estimated Pop. 71/72</u>	<u>Ave. Cost Per Patient Per Day</u>	<u>Total Cost 1971/72 366 Days</u>	<u>Total Estimated Pop. 72/73</u>	<u>Ave. Cost Per Patient Per Day</u>	<u>Total Cost 1972/73 365 Days</u>	<u>Total Cost Biennium</u>
Minn. Correctional Inst. for Women	58	1.122	23,817.82	58	1.122	23,752.74	47,570.56
Minn. Home School	163	1.422	84,833.68	163	1.422	84,601.89	169,435.57
Minn. Reception- Diagnostic Center	177	1.432	92,767.82	177	1.432	92,514.36	185,282.18
Minn. Reception- Diagnostic Center B Building	52	1.502	28,586.06	52	1.502	28,507.96	57,094.02
Minn. State Prison	920	1.329	447,500.88	920	1.329	446,278.20	893,779.08
St. Croix Camp	50	1.550	28,365.00	50	1.550	28,287.50	56,652.50
State Reformatory for Men	708	1.350	349,822.80	708	1.350	348,867.00	698,689.80
State Training School	298	1.505	164,147.34	298	1.505	163,698.85	327,846.19
Thistledeew Forestry Camp	50	1.441	26,370.30	50	1.441	26,298.25	52,668.55
Willow River Camp	50	1.366	24,997.80	50	1.366	24,929.50	49,927.30
<b>Total</b>			<b>1,271,209.50</b>			<b>1,267,736.25</b>	<b>2,538,945.75</b>

PROJECTED EXPENDITURES FOR FOOD - DPW INSTITUTIONS

DPW Institution	Total Estimated Pop. 71-72	Ave. Cost Per Patient Per Day	Total Cost 1971-72 366 Days	Total Estimated Pop 72-73	Ave. Cost Per Patient Per Day	Total Cost 1972-73 365 Days	Total Cost Biennium
Ah-Gwah-Ching	480	1.186	208,356.48	480	1.186	207,787.20	416,143.68
Anoka	500	1.237	226,371.00	475	1.237	214,464.88	440,835.88
Brainerd	1100	1.282	516,133.20	1125	1.282	526,421.25	1042,554.45
Cambridge/Lake Owasso	1100	1.288	518,548.80	1100	1.288	517,132.00	1035,680.80
Faribault	1630	1.284	766,008.72	1630	1.284	763,915.80	1529,924.52
Fergus Falls	700	1.238	317,175.60	700	1.238	316,309.00	633,484.60
Gillette	75	1.203	33,022.35	75	1.203	32,932.13	65,954.48
Glen Lake/Oak Terrace	365	1.182	157,903.38	365	1.182	157,471.95	315,375.33
Hastings	450	1.236	203,569.20	450	1.236	203,013.00	406,582.20
Moose Lake	600	1.229	269,888.40	600	1.229	269,151.00	539,039.40
Rochester	750	1.235	339,007.50	740	1.236	333,843.60	672,851.10
St. Peter-M.S.H.- M.V.S.A.C.	825	1.254	378,645.30	825	1.254	377,610.75	756,256.05
Willmar	630	1.253	288,916.74	600	1.253	274,407.00	563,323.74
Total			4,223,546.67			4,194,459.56	8,418,006.23