

# King's Fund

## Catering Advisory Service

ASSESSMENT

of the

PERIPHERAL FINISHING KITCHEN ST. JAMES' HOSPITAL, BALHAM





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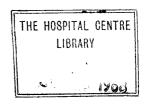
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ASSESSMENT of the PERIPHERAL FINISHING KITCHEN ST. JAMES' HOSPITAL, BALHAM

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## Foreword

Criticisms of hospital food arise mainly from the effects of delay between cooking and eating. The Catering Advisory Service of King Edward's Fund has been particularly interested in studying ways and means of shortening this interval. This study on peripheral finishing kitchens is one of the possible solutions. It has the great advantage of taking the cooking nearer to the point of service and can provide a higher standard than is possible from a central kitchen. From the patients point of view it is a real success but unfortunately, it seems that this particular solution may be more expensive in staffing, at least in older hospitals where less adjustments are possible than when planning a new hospital.

F. Avery Jones, C.B.E., M.D., F.R.C.P.

December, 1967.

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#### INTRODUCTION

## The System

1. The peripheral finishing kitchen service is a system of food service to patients in hospital about which there has been speculation for many years. The method is to take the cooking nearer to the point of consumption by means of an end cooking unit sited near to the wards.

## The King's Fund

In 1964, the King's Fund made a grant of £12,500 and the 2. South West Metropolitan Regional Hospital Board £3,600 to build and equip a kitchen and dining room in order to evaluate the system, and finally to produce a report which would be available to hospitals throughout the land. An additional £1,800 grant was made by the King's Fund in 1966 to help cover maintenance. In choosing a hospital for the experiment the King's Fund had in mind a typical general hospital in which the wards were compactly sited in multiples of four, accommodating approximately 30 in each ward, making a total number of 120 patients. The four wards would surround a central point which could be converted into a peripheral finishing kitchen or a site offering facilities The hospital should have a co-operative managefor building. ment interested in catering. St. James' Hospital, Balham, was chosen as fulfilling these requirements. The service to wards 1 and 2 commenced on 31st May and to wards 7 and 8 on 20th July, The planning and studies were undertaken by the King's 1966. The South West Metropolitan Fund Catering Advisory Service. Regional Hospital Board Work Study Officers also carried out two assessments and their suggestions are referred to in the report.

## The Hospital

3. St. James' Hospital is a busy general hospital of some 570 beds and some 14,000 admissions a year. The main structure was built in 1910 and consisted of 18 wards at that time. A further six wards were added by the London County Council before the last war. Wards are contained in eight 3 storey ward blocks, twelve on either side at right angles to interconnecting corridors on all three floors. (Appendix 1)

#### The Study

4. Originally it had been thought that the kitchen would be run by nursing staff. However during the planning stage it was decided that the whole operation should be run by catering staff. This decision having been taken it was thought that the kitchen would take three months in operation before it would settle down after which an assessment could be made.

Because of various unforeseen difficulties arising, not the least of which was a considerable increase in staff establishment, it was decided to carry out a series of experiments each one of which would be studied. There have been four separate studies by the King's Fund.

- 1. Of ward staff prior to installation
- Of ward staff after installation.
- 3. Of the use of modified menus and cooking, and individual menus.
- Of the system serving six wards, two on a different level from the kitchen.

## The new kitchen and dining room (Appendix 2).

- The building is sited between the end ward and the end but one at the end of a corridor on the ground floor. It was planned to serve the four wards, two on either side of the kitchen and two on the other side of the corridor.
- The kitchen covers an area of 600 sq. ft. and the dining room 400 sq. ft. making a total of 1,000 sq. ft. in all. Facilities provided include end cooking, plating of food, automatic crockery washing and storage of equipment
- 7. The dining room which has a pleasant aspect, accommodates 28 patients at tables of four.

## Synopsis of Conclusions

- A peripheral finishing kitchen can operate in a hospital and provide a higher standard than is possible with a bulk food service but it will cost more. Although skilled cooks are required in the main kitchen semi-skilled cooks can be used on the periphery. The system also provides the opportunity to make better use of nursing skills or alternatively extend the services of trained nurses. To achieve economic running costs there must be a re-allocation of work in the wards. Co-operation is also essential as with any other system.
- 9. Grilled and fried foods, etc. are better than with the bulk food service and dishes can be put on the menu for patients which could not otherwise be satisfactorily served to the wards. However care must be taken to ensure that bad cooking habits do not develop.
- 10. Individual menus operate more satisfactorily.
- 11. More catering supervisors are required than with the bulk food trolley or central tray service. On the other hand there is closer contact with the patients which should be reflected in low waste and greater patients satisfaction.

- Studies before and after installation. revealed considerable time savings on catering services by ward staff.
- It has been said that the cost of staffing is high but since definite figures are difficult to obtain for other forms waitress service comparisons are difficult. It is thought that any form of waitress service to patients in hospital is likely to increase labour costs, and unless these coincide with the introduction of team cleaning of wards, and improved means of interdepartmental communication to eliminate message carrying, it is unlikely that reductions in ward domestic staff will correspond with increases in the number of catering staff employed. Reductions in the number of nursing staff employed are not likely to be made since it is understood that wards are frequently understaffed. It is not unreasonable therefore to assume that the patients will benefit from improved care where nurses are not employed for so long on catering services.
- The quality of service is closely related to the personnel employed in common with other more sophisticated systems of food service—Providing good staff and supervision are available the peripheral finishing kitchen achieves, to a high degree, some of the main objectives of a catering service to hospital patients in that:
  - a. A selective menu is offered
  - b. The meal is served attractively on a tray
  - The time is reduced between the cooking and service of those dishes which rapidly deteriorate in quality
  - d. The time spent by nurses on catering services is reduced to a minimum

Failure in supervision however could result in the standard being little better than the bulk food trolley system.

- 15. The dining room is popular with patients but fewer attended than had been anticipated Medical staff feel that attending the dining room had a beneficial effect on the patients. The encouragement to get up and about helps to restore patients' confidence and can be a contribution towards shortening the length of stay in hospital.
- Metropolitan Regional Hospital Board Work Study Unit was to establish the staff running costs and to suggest modifications and improvements which would reduce these costs. Action taken by the hospital effected a reduction in catering staff hours but this was not achieved without a lowering of standards. Further efforts were made by the hospital along the same lines by introducing the service to another two wards in February 1967 but this was unsuccessful. If numbers such as these, i.e. 180 patients on six wards are to be served then the wards should be in close proximity and on the same floor level as the peripheral finishing kitchen.

## I AGREED POLICY

- 17. The policy was discussed and agreed with the Hospital's Officers, but it should be mentioned that there was a change in the appointment of both the Matron and Catering Officer during the policy making and assessment stages. It was the Fund's aim to integrate the new system with that existing at the hospital as far as possible so as to minimise the amount of extra administrative work involved in the selection and staggering of meals Therefore, although certain improvements could have been effected adjustments at this stage were not to be made.
- A choice of meals by bulk trolley service was already provided for the patients and so it was decided to work the system with the same menu as was used for all patients and staff within the hospital.

#### Menus

19. The menu offers the patient at breakfast a choice of porridge or cereals; a cooked dish such as bacon and tomatoes; or an egg or fish dish, toast, butter, marmalade and tea. For lunch there is a choice of three hot dishes or a salad, three sweets or cheese and biscuits and a similar choice for supper with the addition of soup.

#### Meals Selection

The menus are circulated on the wards between 7.30 and 8 p.m. to enable the patients to make their choice of dishes from lunch the following day up to and including breakfast Each dish on the menu for main courses and the day after. sweets is given a code number from 1-3 or 1-4, and the patient's choice is recorded in duplicate, column by column, on a prepared sheet against his/her name. The columns are totalled by Sister in the early morning of the following day and sent to the Catering Officer The Catering Officer instructs the The information from wards 1, 2, kitchen staff accordingly. 7 and 8 was to be treated in exactly the same way but in addition Sister would underline the name in red ink if the patient should attend the dining room. After the information had been noted by the main kitchen and the diet kitchen, the lists were to be returned to the peripheral finishing kitchen for the preparation of trays for the wards.

#### Preparation and Cooking

21. One advantage of the peripheral finishing kitchen is that it takes the cooking nearer to the point of service. Some foods would still be cooked centrally but those which depreciate either in appearance or nutritionally would be dealt with in the peripheral finishing kitchen. Fish and chips, although prepared

centrally, would be finished on the periphery. Similarly roast meats would be cooked centrally but would be sliced in the end kitchen and go straight on to the plate. Vegetables and eggs would be boiled and/or fried in the end kitchen and served immediately.

22. Therapeutic diets which are not included in the general dietary would still be cooked in the diet kitchen. For example the main courses for reducing and diabetics diets are dealt with in the general dietary. The sweet course is sent from the diet kitchen. Other therapeutic diets are sent up prepared from the diet kitchen

#### Service of Meals

#### Wards

- 23. A continuous meal service is desirable in any food system and is essential to the peripheral finishing kitchen. To achieve this it was estimated that one hour would be required to cover the four wards. A schedule of work was prepared by the King's Fund and agreed by the hospital.
- Trays were to be set in the kitchen and distributed to the wards in unheated stainless steel tray trolleys, each trolley to carry ten laminated wooden trays  $12\frac{1}{2}$ "  $\bar{x}$   $19\frac{1}{2}$ ". Eleven spaces were provided and  $\frac{1}{2}$ " turn up was allowed round the top shelf affording an extra shelf. Both of which were to afford space for additional items like sauces, extra toast, bread and butter, etc. It was thought that ten was the maximum number of plated meals which could be served at one time without delay causing heat loss. These trolleys, three to a ward, would be dispatched successively to the wards and dining room after loading.
- 25. It was agreed that wards 1 and 2 should be served first then the patients from wards 1 and 2 in the dining room, followed by wards 7 and 8 and then patients from wards 7 and 8 in the dining room.
- 26. All trays were to be prepared with those items which are required for the meal about to be served. Each shelf on the trolleys was to be identified by a numbered disc, and the wards by different colours, red, blue, yellow and green. The numbers on the shelves would correspond with bed numbers in the wards. The food would be plated from the hot and cold service counter, and from the display case. The order of work for the midday meal would be as follows:
  - i. Before the meal service started the waitresses were to place condiments and cutlery wrapped in a paper napkin on the trays. A side plate would be added if required.
  - ii. The Supervisor would call out the meal requirements for each patient using the meals selection sheet. First she would call the name of the patient, then decoding the number she would call out each course by name.

- iii The server would serve the meat and vegetables and place a cover over.
- iv The loader would serve the sweet and would place both dishes on the tray until ten meals were loaded on to the trolley.
- v The waitress would take the trolley to the ward or dining room and serve the patient.
- wi When the second trolley was ready another waitress would take it to the ward and continue serving the patients. The two waitresses would shuttle between dining room, wards and the peripheral finishing kitchen avoiding delay until service was complete.
- vii Supper was to be served in the same way as lunch, but in addition soup was to be available and would be served in a plastic bowl by the loader.
- 27. For breakfast a similar procedure was to be adopted with the exceptions that:
  - A waitress would make toast and tea and load them. Tea pots would be put on to a tray and placed into the eleventh space on the trolley. Toast would be placed on to the trolley top.
  - 2. Another waitress would butter bread and place it on the trolley with hot milk, in jugs. These were to go on the top shelf with the upturn, together with the toast. Cold milk in a jug and sugar bowl were to be placed on each tray.
- It was considered desirable that tea bags be used, as this controls the amount of tea infused in one pot and ensures against over and under use. Over use would render the tea too strong at the second cup, whereas with tea bags the limit of infusion is reached before the first cup is poured out affording uniform strength in both cups. Tea pots and toast were to be served as required

#### Beverages

- 29. Beverages were to be served at times which would fit in with the hospital routine, comprising early morning tea, mid-morning drinks, afternoon tea and late evening drinks.
- 30. The method of serving early morning tea was to be by means of two stainless steel beverage trolleys with sliding perspex doors one side only. Cups and saucers were to be placed in the trolley. Tea was to be made in 6 pint pots and sugar, milk and tea spoons served from the trolley top. Wards were to be served in turn, 1 and 7 by one waitress and 2 and 8 by another. Mid-morning and

late evening drinks were to be treated similarly but coffee, hot water and hot milk were to be in jugs for making Horlicks, Ovaltine and Oxo according to the patient's choice. Afternoon teas were to be served on a tray carrying cup, saucer, tea spoon, tea pot, sugar bowl and milk jug, also a side plate with two biscuits.

## Dining Room

- Originally it had been thoughtbetween 25% and 50% of patients would be able to attend the dining room for all meals. However, later it was decided to limit dining room attendance to luncheon and supper meals only, on the grounds that most patients would find the day too long if they began their perambulations around 8.00 a.m. and did not end until 7.00 p.m.
- Matron said that a number of patients might be coming to the dining room in invalid chairs. Therefore at her request tables were designed with a lip to prevent incapacitated patients from accidentally pulling plates off.
- 33. To speed the service it was planned to take meals on trays to the patients in the dining room in just the same way as to those in the ward but the tray, instead of being placed on the locker shelf or bed table, was to be placed on the dining table.

#### Crockery

- The selection of crockery was left to the King's Fund because of the need to place orders quickly and the design had to correspond with tray and trolley sizes. It was also felt that a project sponsored by the King's Fund should be up to date and on a par with standards generally expected and found in many homes today. Cutlery already in use on the wards was considered suitable for use in the peripheral finishing kitchen.
- 35. By choosing and designing all items together, i.e. crockery, cutlery, trays and trolleys more compact equipment could be ordered and more efficient use of space achieved.

#### Crockery Washing

As the service of all food and beverages had been centralised in the peripheral finishing kitchen it was desirable to arrange for crockery to be washed there. Accordingly a dishwashing machine was installed and extra racks provided to enable cups to be stored on racks in the shelves provided under the beverage unit with the minimum of handling by the operators.

## Staffing

37. It was agreed to provide a 24 hour service which would require the following staff weekly:

		Hrs	$\underline{\mathtt{Mins}}$ .	<u>Hrs</u>	$\underline{\mathtt{Mins}}$ .
Maids ful Maids par	5 variable	200 178	and a		
		<u>378</u>		378	-

These hours include staffing during the night.

In addition a Supervisor	would			
be required	26	25		
and a Cook for	_35	<u>27</u>		
	61	<b>52</b>	61	52
Total			439	52

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## ASSESSMENT

- 38. The service commenced to wards 1 and 2 on 31st May 1966 and to wards 7 and 8 on 26th July. During the initial months of the service advisers from the King's Fund were in close touch with the new department and helped the with the supervision.
- 39 Although the patients at St James' Hospital were accustomed to a selective menu and a good standard of food service compared with many hospitals, the peripheral finishing kitchen was able to improve on this on several counts.

#### Kitchen

- 40. The siting of the kitchen proved satisfactory and the size adequate, although the extra trolleys required after the change of policy caused the kitchen to be overcrowded. In a further installation it would probably be more satisfactory to have the crockery washing machine adjacent but separate from the kitchen itself. This would relieve the congestion after meal times and reduce the noise. Crockery dispensers would improve the work flow.
- 41. These adjustments would increase the overall size of the kitchen and increase capital costs by £1,200 approximately (1967)

#### Equipment

- 42. The equipment in general (Appendix 2), proved suitable and works well. It is thought however that one oven range would be adequate. The addition of a griddle and two  $3\frac{1}{2}$  gallon tilting kettles with segmental baskets would save the transportation of frying and boiling pans from the main kitchen.
- 43. A  $12\frac{1}{2}$  gallon mixer could be used for mashing potatoes and a liquidiser would help in the preparation of soft diets.
- 44. A 15' conveyor belt and three bains marie mobile service units in place of the fixed service counter would facilitate plating.
- The extra cost of these alternatives would amount to £3,000 approximately.

#### Menus

46. The same menus which were planned with a bulk trolley system in mind were used for the peripheral finishing kitchen but this limited the scope of the new kitchen. Fried and grilled dishes, etc. could all feature more frequently on a menu served from the peripheral finishing kitchen because of the greater ease in cooking them and the improved results. However the planning of a special menu for the four wards was regarded as too disruptive to be done all the time and so an experiment was made using a modified menu more suited to a peripheral finishing kitchen (see Section IV).

#### Meals Selection

- 47. The system of meals selection went on as was agreed. However patients did not always receive the dish they had requested. Occasionally nurses marked the wrong column and the dishes were sometimes put on the wrong tray. It was thought that individual menus which would accompany the tray to the ward would largely overcome these difficulties, therefore an experiment was made in the use of this type of menu (see Section IV).
- 48. The introduction of individual menus meant having two systems running concurrently in the hospital which increased work in the Catering Office. Therefore the King's Fund provided positive assistance as an interim measure in order to try this system.

#### Preparation and Cooking

49. The agreed policy was put into practice. Dishes which require end cooking leave the kitchen looking attractive and palatable. Sausage toad, for example, was cooked individually and looked more appetising than that which was served to other wards which had become deflated from having been unavoidably kept in covered dishes. Other examples of the short elapsed time between cooking and presentation are shown in Appendix 3.

which should provide a better standard of nutrition. However, on one occasion chipped potatoes, although properly end cooked, had been overblanched and looked as if they had been left from the previous evening. They were hard and unappetising, which demonstrates that bad cooking practices can nullify the success of any system.

- The cooks employed were usually young apprentices who were interested and enthusiastic but inclined to be over anxious and came to the peripheral finishing kitchen too far in advance of the meal service. With proper planning, one journey, arriving 30-45 minutes before the meal service and using the cooking guide (Appendix 4) is time enough. An important factor which emerged was that a relatively inexperienced cook can be used effectively.
- 51. Therapeutic diets which require special cooking were prepared and cooked in the diet kitchen. Diabetic and reducing diets which could be chosen from the menu were cooked and served in the same way as other items in the general dietary.
- During the course of the experiment, in spite of problems encountered in persuading cooks employed on the general dietary to cook dishes suitable for therapeutic diets, cooking was done with the same principles being observed as for the general dietary. Boiling, frying, grilling, etc. which apart from achieving the desired objective of end cooking for all meals including therapeutic diets, helped to dispel for some of the cooks the illusion of mystery from the preparation of these diets.

#### Meals Service

- 53. After a short settling down period it was found that the speed of the meal service was quicker than had been expected. Generally all breakfasts were served within 30 minutes and lunch and supper in 40 minutes. Afternoon tea took 20 minutes to serve. The staggering of meals was effected with a minimum of fuss and no adverse comment was heard.
- 54. In a central tray service the object is to serve the food and load the trolleys as quickly as possible. With a peripheral finishing kitchen it is more important to gear the cooking and plating to the speed of service on the ward. The meal does not suffer as long as the fragile foods are not languishing in the bains marie nor the food going cold on the plates. Compared with some forms of waitress service which are marked by high speed plating at a central point the service seems slow. This is more than balanced by the speed with which the food is dispatched after plating, direct to the bedside, which takes less than 4 minutes.
- 55. Trays were laid up in advance and food was plated from a service counter which had a heated bain marie and a cold section. A Supervisor called out the menu as agreed and the catering staff plated the meals which were covered and loaded on to each tray until 10 meals had been served. It was still necessary to do this even when using individual menus since staff were sited on either side of the service counter and they could not

all see the menus easily at the same time (see Section IV). Access to the trays was limited by the underside of the upper shelves which on occasions made for less attractive presentation than was desirable. In any further installation it may be considered desirable to install a small conveyor belt to facilitate the plating of food since the service points would be at either side.

56. The service was carried out as agreed with certain minor exceptions. At breakfast instead of tea pots being loaded on to a tray and placed in a space on the trolley it was found more convenient to put one on each tray. The toast was put into racks and with sliced bread on a plate, placed on the top shelf of the trolley. The space allowed for other items was often used for another patient's tray, with eleven served from one trolley instead of ten. This is useful in the case of there being either 21 or 22 on a ward and meant only two trolleys being required instead of three.

#### Beverages

57. The service also went as planned with the exception that one member of the staff usually served wards 1 and 2 and another wards 7 and 8.

#### Dining Room

- 58. Trays were not used for service to the patients in the dining room. The service was planned with this in mind to speed clearing away in case more than one service was required in quick succession. As the numbers never exceeded 28 the tables were always laid in advance and the waitresses served the patients at the table. The service to the dining room was always done after wards 1 and 2 and before ward 7. By this time the more infirm patients had arrived and were seated. It was found necessary to serve all courses together as on the wards.
- 59. The response to this service was disappointing, although patients who attended were most appreciative and the idea was highly regarded by medical staff. It was explained that although a patient may be sitting by the bed or walking in the ward the short distance between ward and dining room was considered too far for some of the up patients to negotiate.
- 60. Certain problems were encountered and it was apparent that the success of the system depends a great deal on cooperation and good communication between the ward and peripheral finishing kitchen. For example, if patients who were described as coming to the dining room did not come, or on the other hand, if some came who were supposed to be dining on the ward, this delayed the service. These two problems were put right during the service, but it marred the smooth running of the system and the fewer occasions they occur the better. Good communication is easier with this sytem than any other known system as the kitchen is close to the wards and kitchen staff are in the ward serving beverages between main meals and can carry information.

## Crockery

- 61. The crockery used for the patients at the outset was Haze Blue Micratex. Matching blue 5th diameter Melaware bowls were used for soup and sweet. Each patient was given a pair of blue plastic condiments and two toughened glass bowls for butter and marmalade. Individual stainless steel tea sets were provided, the pots holding \(\frac{3}{4}\) pint, the milk jugs 4 ozs. and sugar bowls 2 ozs.
- 62. Breakages took place in the natural sequence of events and the plates were replaced by the hospital. were 9" in diameter and fit on the tray but the usable portion of the plates was 1" less in diameter as the rims of these plates were 1" wide. In due course, plates of a larger size were used in order to give the same effective area but because of having a wide rim, it was found that they did not fit comfortably on the trays which caused spillage and disarrangement of the items. Apart from the change of plates which were white as epposed to blue rimmed, cups were also replaced by pink or green ones. Although this did not detract from the tray arrangement nevertheless the general appearance and attractiveness were spoilt by the assortment of colours, blue, pink and green.

## Crockery Washing

- 63. The crockery washing machine and benching were found to be adequate for a centralised washing operation However because:-
  - 1. There were certain adjustments in layout to provide space for a water softener.
  - 2. There was revision of the original thought on the system of service being planned after the building had started.

It was found that the area was not adequate for the sorting of crockery prior to washing. As pointed out in paragraph 40 it would probably be more satisfactory to have the crockery washing machine adjacent to but separate from the kitchen.

- 64. In this particular stage of the experiment it was arranged that one ward's crockery, i.e. two or three trolleys were brought into the kitchen at a time, sorted and washed. The remaining trolleys were brought into the dining room and held there until required. This helped to some extent
- The crockery washing baskets which, though not always used for cups, etc. as planned, proved useful as storage containers
- The washing of crockery, cutlery, etc. in a properly operated dishwashing machine eliminates the use of tea cloths and improves the standard of hygiene. It was observed that cups which were transferred from the ward kitchen to the peripheral finishing kitchen and which were stained around the handle and base were soon clean again after two or three operations in the dishwashing machine.

#### Staffing

#### Service Staff

- 67. It was found impracticable to provide a 24 hour service. A certain amount of difficulty was experienced in recruiting staff and it was necessary to draw from the labour force normally used in the staff dining room.
- Because of the need to replace the staff in the peripheral finishing kitchen from the dining room as a result of sickness and absence, it was necessary for the staff to work similar hours of duty. Hours of duty required whilst ideally suited for the working of the peripheral finishing kitchen did not attract staff, and hours of work had to be altered to allow a greater degree of flexibility.
- After a little over two months, during which time the kitchen was understaffed and run with the aid of overtime the kitchen became fully staffed with the following personnel:

				<u>Hours</u>
	1 Supervisor		===	40
	1 Senior Maid) 7 Maids ) full	time	=	320
	4 overtime	:	_	4
Mornings	1 part time Maid 28	;	=	28
	(1 part time Maid x		=	24
• • • • • • • • • • • • • • • • • • • •	(1 part time Maid x		=	27
				$\overline{4}4\overline{3}$

#### TOTAL HOURS = 443

- 70. It was found necessary to employ a full time Supervisor rather than call on one only during the actual meal service. This was particularly necessary because of the number of foreign staff employed in the catering department of the hospital. She was required to interpret information and liaise with the wards at hours other than at meal times. A person of intelligence is needed to understand and remember the specific requirements of patients on therapeutic diets, the patients who are to attend the dining room, those who are to be served on the ward and to arrange the trays in the proper order before service as well as to supervise the other staff in the peripheral finishing kitchen.
- 71. It is necessary for the server—the loader and waitress to be bright and efficient. Any slipshod methods quickly influence the service. Therefore, as with any other waitress or centralised service a high calibre of staff is required

#### Cooks

72. It was usually necessary for one cook to come to the peripheral finishing kitchen 30 minutes before the meal service began and he was occupied in the collection of dishes, 30 minutes before service at lunch and 15 minutes before service at breakfast and supper. After the meal service he was required for 15 minutes to clean up. The total time he spent each day was made up as follows:

Cooks Duties	Preparation Main Kitchen	Preparation P F K.	Cooking	Cleaning	Cotal
Breakfast Lunch Supper	7.00- 7.15 10.45-11.15 5.00- 5.15	7.15- 7 45 11.15-11.45 5.15- 5.45	7.45-8.30 11.45-12.30 5.45-6.30	8 30- 8 45 12 30-12 45 6 30- 6 45 Total	$1\frac{3}{4}$ 2 $1\frac{3}{4}$ 5 $\frac{1}{2}$

#### Night Staff

73. Although there were not sufficient staff to cover the 24 hour period a snack service was nevertheless provided. The hospital found the kitchen and dining room idealfor the serving of night staff meals. It provided better control; the main kitchen was locked up and the dining room provided cosiness. Although the way staff finished at 10.00 p m. the night cook took over at this time.

## Ward Staff

- 74. The study revealed that with a conventional bulk trolley service catering activities on one ward occupied 5 hours 54 minutes of nursing time, and 9 hours 34 minutes of ward domestic time. With the peripheral finishing kitchen system this was reduced to 1 hour 38 minutes and 32 minutes respectively. (Appendix 5).
- 75. Corresponding reductions in ward domestic time were not made initially but after three months a reduction of one maid from each ward was effected. No savings were possible in nursing staff but nurses were able to organise their timetable to take advantage of the extra time at their disposal. This was particularly noticeable at meal times when patients had to be fed. Nurses were able to give these patients closer attention more quickly than before. It is considered that the standard of nursing was improved.
- 76. The majority of nursing staff on wards 1, 2, 7 and 8 were pleased with the service and did not care to contemplate the idea of a return to the bulk trolley system. Further it is thought that this reaction would be unanimous if the service had not suffered by efforts to reduce staff and extend the service beyond those for which the kitchen was planned. This was nevertheless an unavoidable hazard and necessary to exploit the experiment.

#### Patients' Reaction

- 77. A great many compliments were paid and the patients were unanimously in favour of the new system.
- 78. The few complaints which were made, were usually due to some carelessness on the part of the operators who had neglected to put an item of equipment on the tray, or had made the tea too early and it had gone cold, etc. For this reason it is emphasized that reliable staff are required.
- 79. The dining room was particularly popular with patients. It gave them an opportunity to get away from the ward and take their meals in rather different surroundings.

#### <u>Waste</u>

80. There was evidence of a reduction in the amount of food waste (Appendix 6) as food sent to the wards by bulk food trolley service cannot be re-used whereas foods not used in a peripheral finishing kitchen when suitable can be re-used. The high waste figure recorded from the peripheral finishing kitchen during service to the six wards reflects the poorer standard of service to the two upper wards.

#### III

## SERVICE TO FOUR WARDS WITH REDUCED NUMBERS OF STAFF

#### The Study

- 81. The Work Study department of the South West Metropolitan Regional Hospital Board was requested by the Group Secretary to establish the staff running costs of the peripheral finishing kitchen.
- 82. As a result of their investigations it was reported that additional running costs amounted to £9,500 and that no savings had been made in domestic staff on the wards to offset the extra cost.

## Ward Maids and Domestics

83. In a comparative study of ward domestics and ward orderlies the Work Study team made the following observations:-

Time spent by ward orderlies and domestics

	WARD NOT SERVED BY P.F.K.	WARD SERVED BY P.F.K.
	Mins per diem	Mins per diem
Kitchen tasks Cleaning annexes Dusting & polishing	48 63 32	131 125 108

- 84. It will be seen that staff double or trebled the time spent on other duties when not catering.
- 85. The Work Study team made several suggestions aimed at reducing costs. For instance they pointed out that expenditure could be reduced by a total of £3,370 if the following services were undertaken by ward domestic staff:-
  - 1. The service of meals to patients
  - 2. Dishwashing
  - 3. Preparation of beverages
- 86. Further it was suggested that routine cleaning in the peripheral finishing kitchen could be performed by ward domestic staff and that male operators should be replaced by female staff. These changes could save £1,000 per annum and a further £700 if duties concerned with service of meals were simplified, eliminated or combined.

87. The Work Study team pointed out that the main disadvantage of some of these proposals was the divided responsibility for the supervision of staff in the peripheral finishing kitchen, some of whom would be controlled by the Domestic Superintendent and others by the Catering Officer. Another obstacle to the implementation of these proposals was the co-ordination of the wards and peripheral finishing kitchen activities, to arrive at a mutually convenient time.

#### Action Taken

88. The action taken by the hospital was to replace male staff by female staff. Alterations were made in the methods of service and staff was reduced to the following:-

 Supervisor
 1 x 40 hours = 40

 Domestics
 5 x 40 hours = 200

 Part-time
 2 x 30 hours = 60

 1 x 24 hours = 24

324 hours per week

- 89. It was arranged for a member of the dining room staff to come to the peripheral finishing kitchen at meal times to assist on the service, but owing to continuous staff shortage it was seldom possible to spare one.
- 90. The cook was used for plating up some of the items. The Supervisor plated others. One Domestic was employed in plating or preparation, i.e. making toast and tea, serving porridge, cereals or cold sweets, and two were employed as waitresses on the wards.

#### Results

- One of the suggestions made by the Work Study depart-91. ment was the loading of trays with condiments, cutlery, etc. during the plating process. These two activities were combined by the domestics employed on service, or the Supervisor, according to availability. Service times varied between 30-40 minutes and this was not unreasonable but facilities were far from ideal for this type of service. For example, plates were balanced precariously wherever space permitted. However the further suggestions by the Work Study officers such as the introduction of an additional table and the individual menus were not followed and this contributed to the difficulties. Blanking off plates were used on the hot service space to allow the tray to stand there while serving took place. As a result difficulties were experienced in accommodating the extra items on the menu in the bain marie counter.
- 92. There was a decline in standards, not so much care was taken in service and spillages were seldom cleaned off plates before being placed on trays.
- 93. The staff were overworked and unhappy with the arrangements.

- It was obvious that the kitchen was suffering from lack of staff. Trays were sticky, condiments dirty, plate covers were dirty and in short supply. Equipment was not cared for.
- 95 In practice the relief from the staff dining room did not always turn up, so this method of staffing the peripheral finishing kitchen proved unsatisfactory.
- Afternoon tea instead of being served on a tray in individual pots was served from beverage trolleys and biscuits balanced in the saucer. Tea served in individual pots was an amenity most appreciated by patients and this was stopped.
- 97. The Supervisor was too busy with work in the kitchen to supervise properly. The standards of service envisaged could not be satisfactorily maintained at that staffing level.
- 98. The objective of these efforts was to reduce staffing costs and this was achieved. However it was at the cost of lower standards which are considered unacceptable
- 99. Later the service was extended to a further two wards to see if by this means further savings in ward domestic staff would help to justify the employment of extra catering staff and thus possibly improve the general standard of service bringing it to the level it was in the first few months of the experiment (see Section V).

#### IV

## MODIFIED MENU AND COOKING

#### Menus

The menu for 14 days was revised with the co-operation of the Catering Officer and the Dietitian. The following dishes which were suitable for end cooking were added.

(Appendix 7).

Fried, Poached and Scrambled eggs (available at breakfast)
Grilled Gammon
Vienna Steak
Cheese Omelet
Chipped, Saute, Scalloped, Rissoles and Roast potatoes
Jam Pancakes
Banana and Apple Fritters
Banana Hotcakes and Syrup

#### Cooks

One cook was employed in the peripheral finishing kitchen during meal services. The menu had been planned to keep the cook occupied but as the number of staff employed in the service of meals had been reduced, (see Section III) it was often necessary for the cook to help to plate meals at the service counter. As an alternative to this arrangement for the purpose of the experiment the King's Fund provided help when available.

## Preparation and Cooking

- 102. Dishes were prepared as in Appendix 3. The dishes which required end cooking left the kitchen looking more attractive and palatable than those which were served to the other wards.
- 103. Creamed potatoes were cooked in the main kitchen as there was no machine to cream them, but it would have been desirable for them to have been cooked in the peripheral finishing kitchen. A small mixing machine would solve this . problem. (see paragraph 43).
- 104. The cooking of vegetables on the double oven range meant taking pans from the kitchen. Therefore in a future installation it might be better to include two small tilting kettles which would speed the boiling process and eliminate the need for a pan of water for vegetables being put on the stove early. Segmental baskets would aid batch cooking (see paragraphs 42 and 43).

#### Meal Service

- 105. The service of meals was carried out by four members of staff in accordance with reductions recommended (Section III). The Supervisor and two domestics being responsible for plating and one domestic acting as waitress.
- 106. The speed and efficiency with which the operation was done depended almost entirely on the Supervisor. If the Supervisor could take in all requirements at a glance, instructing the maids, and at the same time serving vegetables, all went well. If, on the other hand, the Supervisor needed to refer constantly to the menu for each separate item then this was laborious.

#### Patient Reaction

107. Many patients enjoyed having the dishes which were included. This appreciation was expressed by the number who chose those dishes when available. Their enthusiasm for omelets can be measured by the fact that 55% of the patients chose them when on the menu.

% of patients choosing

Fried egg	20
Poached egg	<b>2</b> 8
Scrambled egg	26
Grilled Gammon	33
Vienna Steak	11
Cheese Omelet	55
Chipped potatoes	38
Saute potatoes	16
Scalloped potatoes	9
Rissolee potatoes	9
Roast poatoes	32
Jam pancakes	10
Banana fritters	22
Apple fritters	25
Banana hotcakes & syrup	22
Daniel III I I	

#### Individual Menus

- 108. Individual menus were prepared by the King's Fund from the modified menus, e.g. Appendix 7.
- 109. The information required from the menus was:
  - (a) The patients' selection
  - (b) The number of patients on each ward
  - (c) The number of special diets and their choice if they are able to choose
  - (d) The number and names of those patients coming to the dining room
- 110. The individual menus provides this information though it would have been useful if a space had been provided for (d). In practice the nurse wrote 'dining room' at the top of the menu.
- 111. The following directions should also be recorded unless provision is made completely in the daily menus for diabetics, reducing and low residue diets.
  - 1. Diabetic and reducing diets choose the main course only at each meal.
  - 2. Low residue diets choose the main course and sweet only.

## Distribution, Collection and Analysis

- 112. The distribution of the menus was made to the wards during the afternoon of the day preceding the date on the menu. It was the practice in the hospital for nurses to arrange for patients to make their choice during visiting time between 7.30 p.m. and 8.00 p.m. This was continued.
- 113. Menus were checked by Sister in the morning of the following day and collected before 9.00 a.m. by a member of the King's Fund staff. They were analysed and the information passed on to the catering office, to the diet kitchen and the main kitchen.

#### Effectiveness as regards Nurses

- 114. The nurses found the menus more trouble at first because those patients who could not complete menus for themselves took longer in making their choice. The new menus required the patients to choose vegetables in addition to the main course and this took a little longer. As the patients and nurses became accustomed to the menus, the task became easier.
- 115. In the morning Sister also found her task easier, as there was no adding up of numbers.
- 116. Latterly a considerable number of nurses said that they were sorry the experiment was over. Having the menu on the tray which had in most cases been completed by the patient was proof that the patient had been sent his/her choice, thus precluding complaint or argument on this score.

## Effectiveness as regards Catering Staff

- 117. The staff soon got used to the new menus which worked satisfactorily from the start.
- or tray slide would enable the menus to be placed in a menu clip on the tray and to be on view to the three staff employed in plating. This should be considered in future designs.

## Effectiveness as regards Patients

Generally the patients do not think very deeply about the type of menu so long as the food they order turns up satisfactorily. However a number of patients said that they preferred the individual menus because they were able to choose their vegetables and potatoes separately or indeed, to choose to have none at all.

#### Conclusions

- 120. The patients enjoyed having the kind of dishes which were included in the menu which are unsatisfactory where a bulk food trolley system is operated.
- 121. The individual menus were an improvement on the old method because the patients were able to choose their vegetables separately. This was very important to those patients asked.
- 12.2. The menus reduced the possibility of error in two important ways
  - 1. The menu accompanied the meal on the tray, therefore the wrong dishes were not placed on a tray with the wrong name disc, as sometimes happened with other methods.
  - 2. The patient usually chose his own meal so the chance of a nurse recording the wrong number on the menu sheet was eliminated.
- It is thought that any extra time involved in the distribution and collection of menus was usefully spent, on the grounds that the patient received his/her choice of dishes more satisfactorily. However this extra time was cancelled out by the saving of Sister's time through not having to total menus on the following morning.

v

## SERVICE TO SIX WARDS

- 124. In accordance with the wishes of the hospital, an experiment was conducted in the service of meals from the peripheral finishing kitchen to patients on six wards. To the four wards 1, 2, 7 and 8 which had been receiving the service since May and July, 1966, wards 9 and 3 on the first floor were added. The service commenced on 8th and 15th February, 1967 respectively. Ward 9 is a Female Surgical Ward and Ward 3 is a Female Medical Ward.
- The average number of beds on the wards was 30 and the total numbers served varied between 160-180

#### Cooks

One cook was employed in the peripheral finishing kitchen for the service of meals to four wards and no change was required to this arrangement in the service to the six.

## Preparation and Cooking

No change was necessary in the method of cooking but some extra batch cooking was required for the increased numbers. This aspect was satisfactory.

#### Meals Service

No change was made in the method of meal selection. It was thought likely that each main meal service would spread over the period of 56 minutes as against the previous 40 minutes for four wards. It was therefore planned to serve:

Breakfast from 07.45-08.41 Luncheon from 11.45-12.41 Supper from 17.45-18.41

allowing 8 minutes for each ward at luncheon and supper, 8 minutes for dining room service and 10 minutes for each ward at breakfast when no dining room service was required.

- 129. No alterations were required for the service of beverages which were served as before, starting at 06.04, 10 00, 15.00 and 20.00 hours
- 130. The service of meals was made to the wards in the following order, wards 2, 1, 7, 8, 3 and 9.
- Trays were preloaded as before and extra trays were purchased to cover the increased numbers. No extra trolleys were provided as it was arranged to re-use those from from wards 1 and 2 when they became available. When ward numbers were lower than usual and a larger number of patients came to the dining room the 12 trolleys already available were

adequate and no re-using was necessary. Sometimes when only one or two extra trays were required which were more than could be held on the trolleys, they were sent in by hand. This was expedient but it caused a certain amount of inconvenience.

- 132. At breakfast, two maids plated meal requirements at the Supervisor's instruction and loaded plates on to trays. One maid made tea and toast, while two waitresses served each ward in turn.
- 133. The luncheon service was performed by six members of staff. Two maids served meats and vegetables and hot sweets, one maid served cold sweets and salads. The Supervisor loaded plates and dishes on to trays and at the same time instructed the maids as to menu requirements. Two waitresses served each ward in turn.
- 134. Suppers were plated similarly to luncheon but only two members of staff were employed plating meals. The Supervisor made herself also responsible for serving soups. Cold sweets were preplated and kept on the cold section of the service counter and loaded by the Supervisor.
- 135. Beverages were served from trolleys as before, three waitresses taking trolleys to wards 2, 7, and 3 and continuing with wards 1, 8 and 9 respectively.
- A beverage trolley was not purchased for wards 9 and 3.
  A formica topped three tier trolley was used for this purpose.
- The service of meals from the counter was made as before. The cook replenished sliced meats, fried foods and vegetables, etc. However as the service counter was not planned to accommodate the quantity required for the numbers being served, both the hot and cold side of the counter became overcrowded. The cupboards of the hot plate were overflowing with plates, dishest plate covers and lids. The capacity of the counter was too small for the numbers being served which led the cooks to underestimate quantities as there were often occasions when insufficient food had been supplied. This in turn caused the cook to make several trips to the main kitchen.
- Timing observations proved that on average the length of time between plating and arriving at the patients' bed was between 5 and 6 minutes as compared with  $3\frac{1}{2}$  to 4 minutes on wards 1, 2, 7 and 8. On one occasion there was a delay of 10 minutes in serving three patients when a nurse took the trolley from the waitress and after having served the first 6 patients, left the ward for 10 minutes. It was also sometimes necessary to wait for the lift and this delayed the service even more.
- which breakages will eventually achieve and the assortment of colours is increased by Melaware discontinuing manufacture of the bowls and lids chosen by the Fund and which can only be replaced by colours the company has in stock.

#### Dining Room

140. The dining room was used only initially by patients from ward 3 and not at all by ward 9, and proved unpopular because of the need to negotiate either the stairs or the lift.

## Nursing Staff Reaction

- 141. The nurses were pleased with the service in that they were not required to serve the food but thought that standards were not so good
- 142. There were complaints about dirty cutlery and occasional complaints about the quality of dishes which it was difficult to rectify due to the distance being too far for a good liaison. Wards 9 and 3 were served last and the later service was not popular with these wards.

#### Patient Reaction

Patients varied in their reaction, some were pleased with the service generally but there were a number of complaints about cold food.

## Staffing

This comprises:-

		Hours weekly
2	Supervisors working	80
7	Domestics working	280
3	Domestics working	$67\frac{1}{2}$
3	Domestics working	60 ້
		$487\frac{1}{2}$

Whole time equivalents 12.18 persons per week. One cook was employed approximately 1 hour 50 minutes at each main meal =  $38\frac{1}{2}$  hours. It was understood that 6 domestics had been withdrawn from 6 wards = 240 hours

#### Waste

145. Experiments revealed an increase which was higher than is considered reasonable due to the unsatisfactory standards of service for six wards as compared with four for which the kitchen was designed (Appendix 5).

## Washing Up

146. Crockery was washed by machine as before, but the reloading of trolleys required that trays and trolleys were returned to the kitchen before the later wards received their meals. Dishes have to be off loaded to make the trolleys available for wards 3 and 9

#### Conclusions

- 147. It is thought that the service to wards not sited on the same floor as the peripheral finishing kitchen was unsatisfactory, because
  - a. The food took too long on its journey to the wards and loses too much heat.
  - b. The kitchen was too far away from the wards to enable good liaison, a factor essential to the success of this system.
  - The numbers served were more than the kitchen was designed to serve, resulting in over-crowding in the hot cupboard and general confusion when trolleys were returned for re-use.
- 148. It is not unreasonable for a peripheral finishing kitchen to serve the number being served, i.e. 160-180 patients but if this were to be done it would be necessary to design the kitchen for these numbers and for the wards to be on the same floor not so far distant as to make good liaison impracticable.

IV

#### COSTS

The cost of the system is considered under two main headings, capital and maintenance.

## CAPITAL COSTS

The capital costs at St. James' Hospital were as follows:

#### Building

Kitchen Dining room	$\begin{array}{c} £6,183 \\ £4,121 \end{array}$	£10,304
Equipment and Furnishings	•	
Kitchen Dining room	£3,843 353	£ 4,196
Other Items (ii)		£ 617
<u>Fees</u> (iii)		£ 1,371
		£16,488

How does this compare with a bulk food service?

## Comparison of Costs

- 150. Firstly the actual total cost at St. James' Hospital should not be used for comparison purposes, as it was a 'one off project' and special features were introduced such as foundations capable of taking three storeys. Therefore a figure of £8 per square foot has been taken as being reasonable.
- Secondly, in making the comparison the dining room, although desirable, is omitted and the kitchen could operate without it 'Other items' include cutlery, crockery, condiment sets, etc. which are also common to a bulk food service and therefore are omitted from the comparison. Similarly the fees are excluded.
- The Ministry of Health Building Note 4 is taken as the basis for a ward kitchen area and the equipment has been taken as a similar standard to that installed in the peripheral finishing kitchen and costed accordingly. It includes a dishwashing machine as the cost of dishwashing equipment is similar whether it is at ward level or centralised. Good quality trolleys, complete with containers, and suitable for a selective menu have been costed for the bulk food service. A trolley for the conveyance of food from the main kitchen to the peripheral finishing kitchen, although not required at St James' would be required for a new hospital and therefore has been added to the costs of the peripheral finishing kitchen.
- The comparison of costs for 120 patients in 4 wards are:

		$\underline{\mathbf{p}}$	<u>F.K.</u>	<u>Bull</u>	k Tro	<u>lley</u>
Area 6	00			<b>4</b> x	200	sq.ft
Building		£4,	800	£6,4	400	-
Kitchen equipmen	t	£4,	043	£3,	520	
Distribution tro		included	<u>ab</u> ove	£1.0	000	
TOTAL		£ <u>8</u> ,	843	£ <u>10</u> ,	900	
	per bed	£	74	£	91	

Therefore on capital cost there is a saving of approximately £17 per bed, £510 per ward of 30 patients

#### Study I

The extra staff involved in the peripheral finishing kitchen cost:

	per week	
1 Supervisor	13 2 2	
l Senior maid	12 7 2	
$10 \ (=8^{24}/40) \ \text{maids}$	106 12 0	
Overtime	1 8 5	
	133 9 9	
Cook 42 hours overtime	23 10 10	
	$\overline{157} \ \ 0 \ \ 7$	
Employers' contributions	26 6 O	
	£183 6 7' (3666/7d	)

These figures include National Health Insurance, Selective Employment Tax, Graduated Pensions Scheme and Superannuation Contributions. It also includes overtime which would be eliminated in a more favourable staffing situation.

## Studies II and III

155. Whilst the costs in Study II were less than Study I, Study III had increased costs. However they are not presented because in neither case was the service satisfactory.

#### FINAL ASSESSMENT

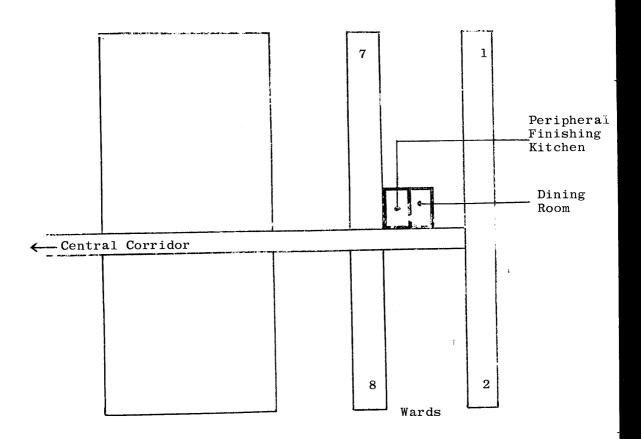
156.		£	s	d	£	s	d	
	Staff as Study I LESS Direct Issues	10	0	6	183	6	7 per week	:
	Ward Orderlies	66	-		<u>76</u>	5	10	
							9*per week — (2140/9)	
	Cost per patient week (Av. no. of patients 102	20 .4)	/11	or	£54	7	7 6 p.a.	

Without the Cook

\*This was based on three weeks' study, October, 1966. Current (September 1967) total weekly average costs £97.1.1. due to further adjustments made by the hospital since the study was undertaken.

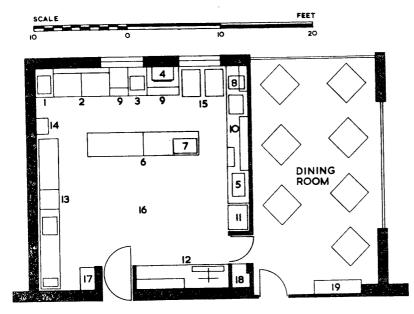
16/4

- 157. Therefore in considering a peripheral finishing kitchen the Hospital Management Committee must assess whether the recurring expenditure of £54 per annum per patient as against a saving in capital expenditure of £19 per head is worthwhile for:
  - 1. Freshly cooked food particularly vitamin C and fried foods.
  - 2. Improved standard of presentation.
  - 3. Saving in nurses' time resulting in better nursing standards.
  - The time the cook spent in the peripheral finishing kitchen has been taken into account as it was claimed that overtime had to be worked in the main kitchen because the cook was absent from the main kitchen for these hours. However it is felt that if the whole hospital were on this system a complete re-organisation of work would take place and overtime should not arise.



SITE PLAN

### KING'S FUND CATERING ADVISORY SERVICE



HOSPITAL CORRIDOR

### BASIC EQUIPMENT

- I SINK UNIT
- 2 TWO OVEN RANGE
- 3 FRYER
- 4 GRILLER
- 5 TOASTER
- 6 SERVICE COUNTER
- 7 DISPLAY CASE
- 8 SLICER
- 9 BENCH UNITS
- IO BENCH, SINK, CUPDS
- II REFRIGERATOR
- 12 BEVERAGE UNIT
- 13 DISHWASHING INSTALLATION
- 14 WASH HAND BASIN
- 15 BEVERAGE TROLLEYS
- 16 TRAY TROLLEYS
- 17 WATER SOFTENER
- 18 CLEANER'S CUPD.
- 19 SIDEBOARD

PERIPHERAL FINISHING KITCHEN AT ST. JAMES' HOSPITAL, BALHAM, S.W. 12.

OPENED: JULY 1966

CATERING ADVISER TO THE KING'S FUND : G.J.STORMONT, F.H.C.I.

APPENDIX 3

### Some Comparisons of Elapsed Time between Cooking and Service

The state of the s	Peripheral Finishing Kitchen		hing	Main Kitchen			n
Item	Time of comple- tion of cooking	Time of ser- vice	Elapsed time between cooking and serving	Time of completion of cooking	Loaded into trolleys	Time of arrival at ward	Elapsed time between cooking & arrival at ward
Fish							
Poached	11.48 sauted & glazed	11.50- 12.15	2-27 mins	10.40 sauted & glazed	11.00	11.40	1 hour
Fried	continu- ous cook -ing		1- 5 mins	10.30	10.35	11.40	1 hr 10 mins
Potatoes	11.40	11.45- 12.15	5-35 mins	10.35	11.00	11.42	l hr 7 mins
Cabbage	11.40	11.45- 12.15	5-35 mins	11.05	11.20	11.42	37 mins
Roast Meat	Slicing as require	ŀ	5-8 mins	Slicing at 10.35	11.00	11.40	1 hr 5 mins

### EXAMPLE OF MENU AND COOKING GUIDE

	Prepare in Main Kitchen	Cook in Main Kitchen	Take to P.F.K. Cooked	Take to P.F.K. pre- pared but not	Prepare in P.F.K.	Cook in P.F.K.
Luncheon						
Braised Beef	*	*	*			
Noodles	*	*	*			
Bacon Croquettes	*			*		*
$^{ m Egg}$ in tomato sauce	*	*	*		*	*
Cold Meat	*	*	*		slice	,
Carrots	*			*		*
Cabbage	*			*		*
Salad	*			*		
Creamed potatoes	*	*	*			
Apricot Flan custard	*	*	*	*		*
Coffee Cream	*	*	*			
Semolina milk pudding	*	*	*			
Supper	*	*	*			
Potato soup					*	*
Cheese Omelet Boiled Silverside	*	*	*		slice	
Chopped Pork	*			*	slice	*
Grilled Tomatoes	*			*		*
Beetroot	*	*	*	:		
Creamed Potatoes	*	*	*	:		
Banana Hotcakes in syrup	*			*		*
Tapioca milk pudding	*	*	*	•		
Cheese & biscuits					*	
Proakfast						
<u>Breakfast</u> Porridge	*	*	*	<b>k</b>		
Stewed Rhubarb	*	*	×	k		
Cornflakes					*	
Finnan Haddock	*			*		*
Grilled Bacon & Kidney	*			*	<b>.</b>	*
Boiled Egg					*	*
Fried Egg						

## WARD STAFF

# Comparisons of Time spent on Food Service Average time spent daily on one Ward in Food Service

Before the Peripheral Finishing Kitchen was Operating

After the Peripheral Finishing Kitchen was Operating

			$\underline{\mathtt{Mins}}$	Mins		<u>Mins</u>	Mins
	Analysis and t Selection	Sister Nurse Maid	$\begin{array}{r} 12 \\ 46 \\ \underline{2} \end{array}$	60	Sister Nurse	6 _22	28
Meal Pro	eparation	Nurse Maid	$\frac{26}{122}$	148		_	-
Service		Sister Nurse Maid	30 196 <u>92</u>	318	Sister Nurse Maid	6 46 8	60
Clearing	g	Nurse Maid	30 <u>58</u>	88	Nurse Maid	18 8	26
Washing	Crockery	Nurse Maid	$\frac{12}{164}$	176	Maid	2	2
	Utensils	Maid	52	52		-	-
	Kitchen	Nurse Maid	2 84 15 h	86 928 = nrs 28 mins	Maid	14 2 hi	$\frac{14}{130} = $ cs 10 mins

	Analys:	is of time	e spent of	n One Ward	
${\tt Before}$	<u></u>		Aft	er	Saving
	Mins		<del></del>	Mins	$\underline{\mathtt{Mins}}$
Sister	42		Sister	$\overline{12}$	30
Nurse	312		Nurse	86	226
Maid	574		Maid	32	542
	928			130	<u>798</u>
				${ t Hrs}$	Mins
			928 =	15	28
			130 =	2	10
Saving	on one ward	daily		13	18
Saving	on four war	ds daily	=	53	12
<del>-</del>	on four war		=	372	24
Whole t	ime equival	ent at 40	hour wee	k	
	G : +	U 3	5		

 Sisters
 0.35

 Nurses
 2.625

 Maids
 6.325

Total theoretical saving 9.3 persons per week

### PLATE WASTE

The following are some examples of the experiments in plate waste.

### 4 Wards (1, 2, 7, 8)

		<u>W</u> a	ste
Date	Service	<u>Total</u>	Average per head
		<u>lbs</u> ozs	ozs
13 May 1966	Bulk Food Trolley	104 4	16.35 (A)
16 May 1966	Bulk Food Trolley	93 12	13.4 (A)
25 July 1966	Peripheral Finishing Kitchen	22 13	3.3
3 Aug. 1966	Peripheral Finishing Kitchen	38 2	5.86
	6 Wards (1, 2, 7, 8, 9	<u>, 3</u> )	
	(2 on floor above)		
10 April 1967	Peripheral Finishing Kitchen	95 -	9.25 (B)

- (A) This includes trolley waste but since it had been in the ward, on medical grounds, it should not be used.
- (b) Approximately 25% of this was not plate waste but remained in the service counter. Since it had not been in the ward, it could be served to others.

	St. James' Hospital	APPENDIX 7
narus session and an area	Ward Name Tues. 13th Dec. Diet  Portion large/small	Ward  Wed. 14th Dec. Diet  Portion large/small
Description large/small  Luncheon  Brown Stew & Dumplings D & R  Sausage Toad  Veal in Cream Sauce Low Res.  Cold Meat D & R  Low Res.  * * *  Creamed Swede  Braised Celery  Salad  * * *  Creamed Potatoes  Chipped Potatoes  * * *  Baked Almond Sponge Low Res.  & Almond Sauce	Supper  Mutton Broth  Bacon & Egg Pie  Braised Tongue D & R  Low Res.  Brisket of Beef D & R  Low Res.  * * *  Sliced Carrot  * * *  Saute Potatoes  Potato Salad  * * *  Chocolate Gateau  Sago Milk Pudding Low Res  Cheese & Biscuits Low Res	Breakfast  Porridge  Stewed Prunes  Cornflakes  * * *  Finnan Haddock D&R  Low Res.  Grilled Sausage  & Macaire Potatoes  Fried Egg D&R  Boiled Egg Low Res.  * * *  Toast, Butter,  Marmalade, Tea
Raspberry Cream Low Res.  Semolina Milk Pudding Low Res.  Cheese & Biscuits Low Res.	•	

	St. James' Hospital	APPENDIX 7
Walu	Ward  Name  Tues. 13th Dec. Diet  Portion large/small	Ward  Name  Wed. 14th Dec. Diet  Portion large/small
Luncheon  Brown Stew & Dumplings D & R Sausage Toad Veal in Cream Sauce Low Res. Cold Meat D & R Low Res.  * * *  Creamed Swede Braised Celery Salad  * * *  Creamed Potatoes Chipped Potatoes Chipped Potatoes  * * *  Baked Almond Sponge Low Res. & Almond Sauce Raspberry Cream Low Res.	Supper  Mutton Broth  Bacon & Egg Pie  Braised Tongue D & R  Low Res.  Brisket of Beef D & R  Low Res.  * * *  Sliced Carrot  * * *  Saute Potatoes  Potato Salad  * * *  Chocolate Gateau  Sago Milk Pudding Low Res  Cheese & Biscuits Low Res	marmarade, rea
Raspoerry Cream Low Res.		

Cheese & Biscuits Low Res.

Vard  Ved. 14th Dec. Diet  Portion large/small	Ward  Name  Wed. 14th Dec. Diet  Portion large/small	Ward Name Thur. 15th Dec. Diet  Portion large/small
Luncheon  Grilled Gammon D & R Low Res  Braised Beef  Poached Fish Low Res in Cream Sce Cold Meat D & R Low Res  * * *  Mixed Root Vegetables Leeks in White Sauce Salad  * * *  Creamed Potatoes  * * *  Steam Chocolate Low Res Sponge & Choc. Sce. Jam Pancake Tapioca Pudding Low Res	Supper Yellow Split Pea Soup  ***  Veal Escalope Braised Chicken D & R Low Res Luncheon Meat D & R Low Res  ***  Beetroot  ***  Creamed Potatoes Chipped Potatoes  ***  Apple Flaked Rice Milk Low Res Pudding Cheese & Biscuits Low Res	Breakfast Porridge Orange Juice Low Res Cornflakes  * * * Fishcakes Grilled Bacon & Tomatoes D&R Poached Egg Low Res Boiled Egg Low Res  * * * Toast, Butter, Marmalade, Tea
Cheese & Biscuits Low Res		

Ward  Wed. 14th Dec. Diet  Portion large/small	Ward Name Wed. 14th Dec. Diet  Portion large/small	Ward Name Thur. 15th Dec. Diet  Portion large/small
Luncheon  Grilled Gammon D & R Low Res  Braised Beef  Poached Fish Low Res in Cream Sce Cold Meat D & R Low Res  * * *  Mixed Root Vegetables Leeks in White Sauce Salad  * * *  Creamed Potatoes  * * *  Steam Chocolate Low Res Sponge & Choc.Sce. Jam Pancake Tapioca Pudding Low Res	Supper  Yellow Split Pea Soup  ***  Veal Escalope Braised Chicken D & R Low Res  Luncheon Meat D & R Low Res  ***  Beetroot  ***  Creamed Potatoes Chipped Potatoes  ***  Apple Flaked Rice Milk Low Res Pudding Cheese & Biscuits Low Res	Breakfast Porridge Orange Juice Low Res Cornflakes * * * Fishcakes Grilled Bacon & Tomatoes D & R Poached Egg D & R Low Res Boiled Egg Low Res  * * * Toast, Butter, Marmalade, Tea
Cheese & Bisquits Low Res		

Nard Name	Ward Name	Ward Name
Thurs. 15th Dec.Diet Portion large/small	Thurs. 15th Dec.Diet Portion large/small	Fri. 16th Dec. Diet Portion large/small
Inurs. 15th Dec.Dlet. Portion large/small  Luncheon  Roast Beef & York- D & R shire Pudding Low Res  Cheese Egg & Tomato flan  Minced Lamb D & R Low Res  Cold Meat Low Res  * * *  Cabbage  Creamed Turnip  Salad  * * *  Creamed Potatoes  Rissolee Potatoes  * * *  Bakewell Tart & Custard  Banana Fritters	Portion large/small  Supper Cream of Vegetable Soup  * * * Fried Egg D & R Saute of Veal Low Res Jellied Veal Low Res  * * * Baked Beans Russian Salad  * * * Chipped Potatoes  * * * Apple Snow Low Res Semolina Milk Pudding Low Res Cheese & Biscuits Low Res	Portion large/small  Breakfast  Porridge Stewed Figs Cornflakes  * * *  Golden Cutlets of D & R Haddock Low Res  Grilled Bacon & Saute Potatoes  Scrambled Egg D & R Low Res  Boiled Egg Low Res  * * *  Toast, Butter, Marmalade, Tea
Macaroni Milk Pudding Low Res Cheese & Biscuits Low Res		

Ward Name	Ward Name	Ward Name
Thurs. 15th Dec.Diet Portion large/small	Thurs. 15th Dec.Diet Portion large/small	Fri. 16th Dec. Diet  Portion large/small
Luncheon	Supper	Breakfast
Roast Beef & York- D & R	Cream of Vegetable Soup	Porridge
shire Pudding Low Res	* * *	Stewed Figs
Cheese Egg & Tomato	Fried Egg D & R	Cornflakes
flan D & R	Saute of Veal Low Res	* * *
Minced Lamb Low Res D & R	Jellied Veal D & R Low Res	Golden Cutlet's of D & R Haddock Low Res
Low Res	* * *	Grilled Bacon & Saute Potatoes
Cabbage · ·	Baked Beans Russian Salad	Scrambled Egg D & R
Creamed Turnip	* * *	Low Res
Salad	Chipped Potatoes	Boiled Egg D & R Low Res
* * *	* * *	* * *
Creamed Potatoes	Apple Snow Low Res	Toast, Butter,
Rissolee Potatoes	Semolina Milk	Marmalade, Tea
* * *	Pudding Low Res	
Bakewell Tart & Custard	Cheese & Biscuits Low Res	
Banana Fritters		
Macaroni Milk Pudding Low Res		
Cheese & Bisquits Low Res		

Ward Name Fri. 16th Dec. Diet  Portion large/small	Ward Name Fri. 16th Dec. Diet Portion large/small	Ward Name Sat. 17th Dec. Diet  Portion large/small
Luncheon  Fried Fish in Batter D & R Tomato Sauce  Haricot Mutton  Poached Fish & Egg Low Res. Sauce  Cold Meat D & R Low Res.  * * *  Peas Tomatoes Salad  * * *  Creamed Potatoes Chipped Potatoes Chipped Potatoes  * * *  Apricot Eve's Pudding & Custard  Raspberry Ripple Low Res & Wafers Baked Rice Milk Low Res Pudding Cheese & Biscuits Low Res	Cream of Carrot Soup  ***  Cheese & Egg Salad D & R  Cheese & Egg Salad Low Res  Beef Casserole Low Res  Vienna Steak & D & R  & Mushroom Sce  ***  Beetroot  ***  Creamed Potatoes  Saute Potatoes  Saute Potatoes  ***  Cherry Flan  Sago Milk Pudding Low Res  Cheese & Biscuits Low Res	Breakfast Porridge Grapefruit Juice Low Res Cornflakes  * * *  Grilled Kipper D & R  Grilled Bacon & Liver Sausage D & R  Boiled E3g D & R  Low Res  * * *  Toast, Butter, Marmalade, Tea

Ward Name Fri. 16th Dec. Diet  Portion large/small	Ward Name Fri. 16th Dec. Diet  Portion large/small	
Luncheon  Fried Fish in Batter D & R Tomato Sauce  Haricot Mutton  Poached Fish & Egg Low Res. Sauce  Cold Meat D & R Low Res.  * * *  Peas Tomatoes Salad  * * *  Creamed Potatoes Chipped Potatoes Chipped Potatoes  * * *  Apricot Eve's Pudding & Custard  Raspberry Ripple Low Res & Wafers Baked Rice Milk Low Res Pudding Cheese & Biscuits Low Res	Beef Casserole D & F  Beef Casserole D & F  Vienna Steak & D & F  & Mushroom Sce  * * *  Beetroot  * * *  Creamed Potatoes  Saute Potatoes  * * *  Cherry Flan  Sago Milk Pudding Low  Cheese & Biscuits Low	* * * *  Res  Grilled Kipper D & R  Grilled Bacon & Liver Sausage D & R  Boiled Egg D & R  Low Res  * * *  Toast, Butter,  Marmalade, Tea

	21. James, Hosbitar	
Ward Name Sat. 17th Dec. Diet  Portion large/small	Ward Name Sat. 17th Dec. Diet  Portion large/small	Ward Name Sun. 18th Dec. Diet Portion large/small
Luncheon	Supper	Breakfast
Braised Lamb Chop D & R Cold Meat D & R Low Res Minced Ham D & R Low Res  * * *  Cabbage Braised Onion Salad  * * *  Creamed Potatoes Scalloped Potatoes  * * *  Compote of Fruit Chocolate Cream Low Res Semolina Milk Pudding Low Res	Cream of Tomato Soup  * * * *  Grilled Sausage &  Tomatoes D & R  Poached Egg Low Res  Corned Beef Low Res  * * *  Grilled Tomatoes  Spinach  * * *  Potato Salad  Mashed Potatoes  * * *  Orange  Tapioca Milk Pudding Low Res  Cheese & Biscuits Low Res	Porridge Stewed Gooseberries Cornflakes  * * *  Poached Haddock D & R  Low Res  D & R  Boiled Egg Low Res  Grilled Bacon D & R  Fried Egg D & R  * * *  Toast, Butter, Marmalade, Tea

	St. James' Hospital	
Ward Name Sat. 17th Dec. Diet Portion large/small	Ward Name Sat. 17th Dec. Diet  Portion large/small	Ward Name Sun. 18th Dec. Diet  Portion large/small
Luncheon	Supper	Breakfast
Braised Lamb Chop D & R Cold Meat D & R Low Res Minced Ham Low Res  * * *  Cabbage Braised Onion Salad  * * *  Creamed Potatoes Scalloped Potatoes  * * *  Compote of Fruit Chocolate Cream Low Res Semolina Milk Pudding Low Res	Cream of Tomato Soup  * * * *  Grilled Sausage &  Tomatoes D & R  Poached Egg Low Res  Corned Beef Low Res  * * *  Grilled Tomatoes  Spinach  * * *  Potato Salad  Mashed Potatoes  * * *  Orange  Tapioca Milk Pudding Low Res  Cheese & Biscuits Low Res	Porridge Stewed Gooseberries Cornflakes  * * *  Poached Haddock D & R  Low Res  Boiled Egg D & R  Grilled Bacon D & R  Low Res  Fried Egg D & R  * * *  Toast, Butter,  Marmalade, Tea

### St. James' Hospital Ward..... Name..... Ward..... Name..... Ward...... Name..... Mon. 19th Dec. Diet..... Sund. 18th Dec. Diet..... Sun. 18th Dec. Diet..... Portion large/small Portion large/small Portion large/small Breakfast Supper Luncheon D & R Porridge Cream of Chicken Soup Roast Lamb Low Res Tomato Juice Low Res D & R Cold Meat Low Res Cornflakes Cold Pork D & R Poached Chicken Low Res D & R Poached Fish in-Cheese Sauce Low Res Golden Cutlets of D & R Low Res Haddock Baked Parsnips Grilled Bacon & Brussels Sprouts Beetroot Baked Beans \* \* \* D & R Poached Egg Low Res Creamed Potatoes Roast Potatoes D & R Boiled Egg Creamed Potatoes \* \* \* Low Res \* \* \* Fruit Trifle \* \* \* Creamed Rice Milk Apple Fritters Toast. Butter, Pudding Low Res Jelly Whip Low Res Marmalde, Tea Cheese & Biscuits Low Res Sago Milk Pudding Low Res Cheese & Biscuits Low Res

Vard Name Sun. 18th Dec. Diet Portion large/small	Ward Name Sund. 18th Dec. Diet Portion large/small	Ward  Mon. 19th Dec. Diet  Portion large/small
Luncheon  Roast Lamb D & R Low Res D & R Low Res Poached Chicken D & R Low Res Foached Chicken D & R Low Res Foached Chicken D & R Low Res Foached Chicken D & R Cold Meat Low Res Foached Chicken D & R Low Res Foached Poached Res Foached Potatoes	Supper  Cream of Chicken Soup  * * *  Cold Pork D & R  Poached Fish in Cheese Sauce Low Res  * * *  Beetroot  * * *  Creamed Potatoes  * * *  Fruit Trifle  Creamed Rice Milk Pudding Low Res	Breakfast  Porridge Tomato Juice Low Res Cornflakes  * * *  Golden Cutlets of D & R Haddock Low Res  Grilled Bacon & Baked Beans  Poached Egg D & R Low Res  Boiled Egg Low Res  * * *  Toast, Butter, Marmalde, Tea
Sago Milk Pudding Low Res Cheese & Biscuits Low Res	Cheese & Biscuits Low Res	1102 1103 10 9 2 0 W

th Dec.	Name Diet large/small	th Dec.	Name Diet large/small	Tues. 20	Name Oth Dec. Diet Portion large/small
Bacon C: Egg in S Cold Mes Carrots Cabbage Salad Creamed Apricot	Luncheon  Beef & Noodles D & R Low Res roquettes  Tomato Sauce at D & R Low Res  * * *  Potatoes  * * *  Flan & Custard Cream Low Res	Cheese Chopped  ** Grilled Beetroo  * Creamed  * Banana	Soup  * * Omelet D & R Omelet Low Res Silverside Low Res Pork D & R Pork Low Res  * *	es	Breakfast Porridge Stewed Rhubarb Cornflakes  * * * Finnan Haddock D & R Low Res Grilled Bacon & D & R Kidney Low Res Fried Egg D & R Boiled Egg D & R Boiled Egg Low Res  * * * Toast, Butter, Marmalade, Tea
	a Milk Pudding Low Res	-	& Biscuits Low Res		

Ward  Name  Non. 19th Dec. Diet  Portion large/small	Ward Name  Mon. 19th Dec. Diet  Portion large/small	Ward Name Tues. 20th Dec. Diet Portion large/small
Luncheon  Braised Beef & Noodles D & R  Bacon Croquettes  Egg in Tomato Sauce  Cold Meat D & R  Low Res  * * *  Carrots  Cabbage  Salad  * * *	Supper Potato Soup  * * *  Cheese Omelet D & R Low Res Boiled Silverside Low Res Chopped Pork D & R Chopped Pork Low Res  * * *  Grilled Tomatoes Beetroot  * * *	Breakfast  Porridge  Stewed Rhubarb  Cornflakes  * * *  Finnan Haddock D & R  Low Res  Grilled Bacon & D & R  Kidney Low Res  Fried Egg D & R  Boiled Egg Low Res
Creamed Potatoes  * * *  Apricot Flan & Custard  Coffee Cream Low Res  Semolina Milk Pudding Low Res	Creamed Potatoes  * * *  Banana Hotcakes & Syrup  Tapioca Milk Pudding Low Res  Cheese & Biscuits Low Res	* * * Toast, Butter, Marmalade, Tea

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Werd.					19	29933866
Ward Name	Braised Beel & Moodles Low Res Broom Croquettes	Cold Meat Dow Res	Calbage	Creamed & * * *	Apricof Fish & Chaird  Best wol mean estion  Best woll anthony all Mentiones	b]esae
Mon. loth Dec. Diet  Rosi. Isac. Diet	Totato Soup  Potato Soup  * * *  D & R  Ses	Boiled Silverside Dow Res		Greamed Potatoen	Benana Hotoaka & syrup sea wol antbaug Alla soolgan cheek & Bisculta Low Res	" ns zalttug yd solodo ruoy stsolbal sat zaliit yd noltrog ruoy stsolbal
Ward Bane	Pasinsere esasina byests	A & G. Moobber magniff  H & G. Moobber magniff  H & G. Moobber being	% % ¥ C C C C C C C C C C C C C C C C C C C	* * * * * * * * * * * * * * * * * * *		. 'N' in the box provided



