King Edward's Hospital Fund for London
CATERING ADVISORY SERVICE

Report on

EXISTING CATERING SERVICES
and
RECOMMENDATIONS FOR FUTURE DEVELOPMENT

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for
SOUTHPORT GROUP HMC

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FOREWORD

The pattern of hospital catering has undergone considerable changes in recent years but the basic aims against which the service provided should be judged have not changed. These are the service of attractive, nutritious meals at the minimum cost possible, without reducing standards below levels appropriate to the hospital service.

Planning for the future should take account of changes in eating habits, the availability of suitable staff, new equipment and developments in food technology and the food supply industry, but the over-riding consideration must be the maintenance of standards. The experience available suggests that the best and most effective method of producing the service required by hospitals is still to continue where possible conventional production within a well managed and closely supervised system.

It had been suggested that a shortage of staff in the Southport area would necessitate the introduction of a frozen food system throughout the group. This report examines this proposal and suggests methods by which the service could be maintained and developed in the future.

We would conclude by recording our thanks to the various officers and staff who freely co-operated with us during our survey.

G J Stormont
Catering Adviser to the King's Fund

December 1971

INTRODUCTION

The Catering Advisory Service agreed to examine, at the request of the HMC, the food service arrangements at all the hospitals in the group and to recommend the most suitable system for them individually or collectively. This was to be considered keeping in mind modern catering techniques and possible future developments. For this purpose the group was visited by members of the Catering Advisory Service and an examination was made of the significant aspects of the existing service and of factors likely to affect the service provided in the future.

EXISTING CATERING SERVICE

Group Profile

1 The group consists of 10 hospitals. They are all within a five mile radius of group headquarters, which is sited on the sea front at Southport.

The general classification of each hospital and approximate number of beds are as below:

Southport General Infirmary	Acute	184
Sunnyside	Pre convalescent	73
New Hall	Mainly long stay	157
Christiana Hartley	Maternity	40
Fleetwood Road	Chronic	55
Hawkshead	Geriatric/Convalescent(children)	112
Greaves Hall	Mentally subnormal	572
Promenade	Mainly acute	206
St Katharine's	Maternity	18
Hesketh Park	Convalescent	120

Management

2 A group catering manager is responsible to the HMC through the group secretary for the catering service. He is assisted in his office at group headquarters by a full time clerk.

There is a deputy catering officer in post but no catering officers have been appointed. The deputy catering officer is at present based at the General Infirmary but does go to other hospitals from time to time.

With the exception of those at the Infirmary all staff dining rooms are controlled by the nursing staff. At the Promenade a warden/domestic supervisor is in post. Throughout the group nursing and administrative staff take an active part in the management and supervision of the catering service. This arrangement is the result of an inadequate catering management structure and although functioning

well in some hospitals control will need to be transferred in the future. The introduction of pay as you eat and a Salmon scheme within the group will highlight the deficiences of the existing arrangements.

Ancillary Staff

3 It has been suggested that there was a lack of kitchen staff due to the area in which the group is situated, but careful checking confirmed the initial impression that the existing cooking staff is stable and of good calibre. No evidence was found in the group, during the period of the survey, of a shortage of cooks, other than at Sunnyside where it is reasonable to assume it is the intention of the HMC to run down the cooking staff prior to the introduction of the planned new service (see para 11). The close relationship which exists between the group and the local technical college has contributed to the good standard of technical ability found among the staff. We were very favourably impressed by the attitude of staff in the group but at Greaves Hall the amount of involvement felt by the staff is clearly less than elsewhere. Over a long period the lack of stimulus given to staff in large isolated kitchens leads to the lowering of standards. This is of great practical importance and must be considered when planning for the future.

The replacement of kitchen assistant grades who leave does present a problem here, in common with the majority of the hospital service, but the existing staff appear to be fairly stable.

Kitchen Equipment & Hygiene

4 The kitchens are well equipped for the pattern of production existing in the group. The equipment in the Promenade and General Infirmary is suited as elsewhere to the large scale production of a single dish but lack of small boiling pans in both kitchens already presents problems, which would be considerably aggravated by the introduction of a choice of meals or even the batch cooking of vegetables.

The standard of cleanliness of equipment and surfaces was good throughout, which

seems to confirm that suitable staff are at present in post. The personal turnout of staff is good. At Greaves Hall it is apparent that staff smoke in the kitchen on occasions, a practice which should be stopped.

Menus

5 Menus (see appendices A, B, C, D) which rotate over a five week period, are prepared for use throughout the group by the catering manager. Separate menus are written for patients and staff which have the same dish for each meal other than supper. Gastric and diabetic menus are also prepared. No choice of meals is offered to patients and although alternatives to some dishes are provided for staff there are no general arrangements for these to be provided. At Greaves Hall the last meal served by conventional means to staff is lunch, after which a range of snacks and main dishes is available from vending machines.

The menus are basically of a good standard, well varied with a generous balance between roast and other dishes. No sweet at present is offered to patients at supper but soup is provided. Breakfast dishes included are very limited, no attempt being made to serve poached or scrambled eggs or any of the suitable fish dishes.

The extent to which the menus are followed varies considerably from hospital to hospital. For example the seven meals seen during preparation or service at the Infirmary all were as indicated on the menu but of the five meals seens at Hawkeshead three were completely different and for the fourth the sweet had been changed. Valid reasons were given by the staff on duty for these and other changes in the menu but is is clear that in practice there is considerable variation in the menu served throughout the group.

Raw Materials

6 Although the menus indicate when tinned items are to be used in practice this is not applied throughout the group. A check made during one service revealed that Greaves Hall was serving dehydrated carrots, Hesketh Park, General Infirmary and New Hall were using tinned carrots and that Hawkeshead were using fresh cauliflower. The tendency to use dehydrated food at Greaves Hall when other

hospitals were using fresh was marked, other examples noted were the use of dehydrated cabbage and apples. This is clearly undesirable and unnecessary in view of the staffing levels and excellent facilities available.

The central butchery was understaffed due to sickness during the survey period but the meat being handled was well prepared and of good average quality. It is probable that the quality of the hindquarter beef could be improved if the weights used in the contract specification are reduced. Other items, including canned goods and most fresh vegetables seen were of a good standard. Difficulty was being experienced with ready peeled potatoes but the catering manager had already taken action to rectify this problem. Some evidence of waste due to over-stocking of green salads and cabbage was noted.

Standard Recipes

7 Each hospital has been issued with a set of standard recipes. These are used more as a basis for ordering (see para 8) than for kitchen use. They do however serve as a useful guide and their circulation is of practical benefit to everyone concerned with catering in the group. Some hospitals expressed dissatisfaction with the quantities allowed. In part this is due to the difficulty under the existing supply system of ensuring that the correct number of portions are available but also reflects the wide range of patients within the group.

Stores Ordering

8 All provisions, with the exception of fresh vegetables, fruit and ready peeled potatoes, are supplied through central stores which is sited at Greaves Hall hospital. The orders are prepared and submitted by administrative and nursing staff in each hospital. They are prepared weekly using the following week's menu, the standard recipes and the average of the daily occupancy and non resident meals served figures for the previous week. This procedure is designed to control overall levels of expenditure and provide the correct amount of food for patients and staff. Unless numbers fed remain constant the result of using previous figures for future issue would lead on some occasions to there being too much food available and on others there would be insufficient. This averaging may produce

a satisfactory financial result but it is unrealistic to expect hospitals to feed patients and staff on this basis. Although small stocks of non-perishable items are held in most hospitals it is impractical to hold perishable items. In practice hospitals order sufficient food to ensure that enough is available for the number of patients and staff normally fed. Wards are encouraged to consistently over order by the routine adjustment in the general administrative office of all orders that are submitted to conform to the approximate bed state. The figures shown at appendix E relate to the Promenade but a similar situation exists in other units. Also illustrated is the consistent under issue of food in this hospital against the quantities shown in the standard recipes for the patients' supper meal. These ordering arrangements would not cope with a choice of meal service.

The procedure is useful during audit investigation into overspending but a different approach to the routine presentation of the unit costs to the catering manager for each hospital would be of moe practical value in controlling expenditure. At present only a single unit cost figure and expenditure total is provided by the treasurer's department for provisions used in each hospital which is investigated when felt necessary.

Cooking Standards

9 During the survey approximately 50 meals were seen in the latter stages of cooking and during service. This is of course only a fairly limited sample but when taken with the opinions expressed by members of the staff and patients we are satisfied that most kitchens in the group enjoy a good standard of cooking. There is a tendency in all the hospitals except Hawkeshead to cook the food too early. This often leads of course to a reduction in nutritional content and palatability.

At Greaves Hall, apart from the extensive use of dehydrated food already noted (see para 6), there appeared to be less attention paid to the preparation of some of the dishes seen than was evident at other hospitals in the group. For example pastry contained less fat than is normally used and sauces were served which had not been prepared in the correct manner.

Catering for Staff

10 Pay as you eat has only been introduced at Greaves Hall. The service is provided there by a cafeteria at breakfast and lunch which is supplemented by two vending machines and microwave ovens which also provides the only evening meal available. All beverages are provided by a beverage vending machine. The limited number of staff using the automatic equipment is illustrated by the takings which only average £1.64 per day. Difficulties have been forseen to the introduction of pay as you eat throughout the group because of the staffing arrangements and facilities which exist. This applies particularly at Avondale where waitresses serve food which is transported in a heated conveyor from the Promenade.

The control of the dining rooms and staff working in them rests with the nursing staff in all hospitals where they exist except at the Infirmary. Any proposals for the introduction of pay as you eat must take this situation into consideration. The food served to staff was, like the patients food, well cooked. The standard of the chilled meals prepared for night staff was particularly good.

The facilities at present available would make the introduction of a wider range of meals expensive to introduce but the existing staffing levels in the kitchens would not need to be increased in order to offer an improved service.

Chilled Food Service

11 Chilled food is used in the vending machines at Greaves Hall and to provide meals for night staff at the Infirmary and the Promenade. Both the General Infirmary and the Promenade Hospital provide a chilled plated food service for other hospitals. The meals provided are basically part of the production previously served in the main hospital, although some dishes are specially prepared. The Christiana Hartley Maternity Hospital is so close to the General Infirmary that the delivery time for the plated food, which was approximately 4 minutes, is equivalent to that taken to reach the wards in the main hospital. A ward kitchen has been equipped with refrigerators and two microwave ovens. The meals looked attractive but the lack of detailed information about individual requirements results in considerable plate waste.

Similar arrangements exist in St Katharine's Hospital where the chilled plated food is received from the Promenade. The plates are transported in plate sleeves which are carried in an uninsulated wooden box mounted on wheels. The total time taken to load and deliver the food on one occasion was timed at 34 minutes but this included approximately 9 minutes during which the porter became involved in giving direction and other activities.

Equipment was already on site during the survey in Sunnyside to enable the meal service for patients to be based on chilled food provided by the Promenade.

Throughout the production, storage and distribution of the meals insufficient attention is paid to temperature control for us to have any degree of confidence in the bacterial safety of the food.

Frozen Food

12 This might either be produced within the Group or purchased from an outside source.

The production of frozen food within the hospital service has been undertaken on an experimental basis. It has been introduced where there are insufficient skilled staff available to provide by conventional means a good service and where the numbers to be fed justify the capital investment required and utilise the necessary equipment, skilled management and staff to optimum effect.

The buying in of frozen food from an outside source has been shown to provide an acceptable service in hospitals in which the patients are short stay. Provisions costs are offset by the reduction in staffing levels and in the skills employed. The staff in most hospitals where it is purchased have required conventionally cooked dishes to be available in addition to the frozen foods.

The advantages usually claimed for the frozen food system are based on the reduction in the number of skilled staff required by the hospital authority to provide a pre-determined standard of food. Savings in space can also be significant. Improved control of portion sizes, introduction of uniform standard and the reduction of waste are other factors often quoted but these can be achieved with the effective management of a conventional system. Similarly the nutritional value of the meals served can be comparable unless the distance from the central kitchen is excessive in which case the peripheral regeneration of frozen food may be preferable to establishing a conventional finishing kitchen.

Lower staff costs are used to justify the investment required and in the case of purchased frozen food, the higher food costs. Implicit in this is the assumption that there are skilled staff at present within the organisation whose employment could be terminated or that there are insufficient staff in post to provide the service by conventional means.

Within this group there is no evidence of a lack of skilled cooks. The kitchen staff is stable and without enforcing redundancy actual saving in costs would be limited during the initial period. Higher staffing levels than necessary would lead to an unsatisfactory rate of work which would be difficult to adjust during later stages.

Although the kitchen at Greaves Hall would seem suitable to conversion to a frozen food production unit the number of meals required within the group is not sufficient to support the cost which would be incurred. It is also unlikely that any bonus payments could be offered to the staff employed in the unit which might compensate them for the loss of enhanced pay rates even if food were produced for other Authorities over a much wider area. The direct contact with the consumers which at the present time plays a vital part in the motivation of the staff in the other hospitals of the group would also be lost.

If commercially produced packs were introduced within the group some cooking staff would be needed as there is a demand which cannot be readily met from these packs for modified and therapeutic diets, amounting to approximately 23 per cent. The breakfast meals also require cooking unless a continental breakfast is introduced which certainly in the case of mentally handicapped patients is unacceptable. Attempts already made to involve nursing staff in the cooking of breakfast in the group where chilled food has been introduced are unlikely to be acceptable in the long term and certainly should not be attemped in the larger units. There is also a considerable management requirement for stock control and for supervision of the reheating processes. At present these functions are exercised largely by nursing and administrative staff an arrangement which is unlikely to continue. Any projected savings must take the existing deficiences in the staffing structure into consideration.

Chilled Food Service

13 Chilled foods are cooled after cooking to a temperature that should be between $0^{o}C$ ($32^{o}F$) and 4^{o}($39^{o}F$). They are reheated after a period, usually of a few hours, using microwave, convection, infra-red or conventional ovens. This has been shown

to be highly satisfactory for feeding small groups of staff or patients in many hospitals in this country. The main advantage claimed is that labour costs are reduced, through the reduction of shift and off peak work. Holding the food in a chilled state reduces the nutritional loss when compared to high temperature storage and this fact has been used to justify the use of chilled food where the distribution times are excessive.

There is no doubt that the large scale use of chilled food has inherent disadvantages which have led the DHSS to recommend against its use. Their main reason in making this recommendation is the danger of bacterial growth. The other problems which have become evident in an experiment sponsored by the King's Fund have been the difficulty of forcasting production required for a choice meal system and the extent to which the saving possible on staff is eroded by payments needed to maintain acceptable levels of income if the kitchen staff are to be retained.

The production of chilled meals in a single kitchen for this entire group would be highly undesirable and impracticable. The existing service and the extension already planned and equipped should either be discontinued or the methods used should comply with the recommendations "Pre-cooked Frozen Foods" issued by the DHSS. We fully endorse their recommendations and would add that if undue waste is to be avoided detailed information about the individual patient's needs must be available when the meals are plated. This applies to all central plating systems but does present particular difficulties because of the advance cooking that is involved in a chilled food service. The distance between the kitchen and the consumers, which is the only justification for using chilled food, makes the availability of accurate information vital, particularly when mechanised transport is not readily available.

Conventional Production

14 This is the preparation, cooking and service of food on site, each meal being produced and served without the food being subjected to any of the methods available which prolong the period during which food is acceptable after cooking.

The advantages claimed for this are based on the high acceptability and nutritional value of freshly cooked food. The service that results from direct contact between the kitchen and the consumer can be responsive to changing needs and individual requirements, factors which are important when dealing with ill patients whose condition can quickly change, and the fluctuating staff demands which have been encountered with the introduction of pay as you eat.

The staffing and control of the number of separate kitchens needed to produce conventionally cooked food presents management with problems which are only met to a reduced extent in a single unit.

High staff costs are associated with conventional production in small hospitals where numbers fed does not fully utilise the man hours on production, cooking and service that are provided by the full time cover that is traditionally provided. The unit labour cost in some small hospitals has been shown to compare favourably with larger hospitals if a study is made of the work actually performed by the staff involved. Examples have been found of staff charges being allocated to catering which should properly be allocated to other headings of expenditure. In other instances the detailed examination of work loads, which have been affected by the changes in the pattern of the patient's day and fluctuation in numbers fed, followed by a reappraisal of the duty rotas has led to a significant reduction in staff unit costs.

The management and kitchen staffing structures recommended for hospitals are designed to provide the necessary skills and when fully implemented an effective service can be provided. There is a temptation to see radical changes in production methods as the best way to improve efficiency but this part of the catering service does not constitute the basic problem in the group.

The lack of catering managerial staff has retarded the development of the service. The stores requisitioning system is not sufficiently flexible to allow variations in demand to be properly met. The use of vending machines where pay as you eat has been introduced has avoided the task of providing a service to staff which was previously felt to be justified when the staff was resident. It is unlikely that similar

arrangements would be acceptable where staff numbers dining are higher. There is a wide range of patients catered for within the group. At present their needs are known to the catering staff in each hospital which has an obvious pride in providing the service needed. There is no shortage of skilled cooks but their potential has not been fully realised. It is unrealistic to expect a good performance with an inadequate management structure.

RECOMMENDATIONS

Management

15 The group catering manager should be responsible for and exercise control over all aspects of the catering service. Each unit should be the direct responsibility of a catering officer. The creation of the maximum number of separate catering officer posts permitted is preferable to fewer senior appointments because of the need to replace the present close support provided by the nursing staff and to enable the development of the service to take place. On the basis of the figures for 1970/71 it is possible, as shown below, to establish four Grade I appointments which should be interchangeable to encourage uniformity of standards throughout the group.

Post	Hospitals	Patients	Staff Equivalent
Catering Officer I 4 points	Promenade	179	63
	St Katharine		
	Sunnyside	43	5
		222	68
Catering Officer I 4 points	General Infirmary	183	110
	Christiana Hartley		
		183	110
Catering Officer I 5 points	Greaves Hall	563	18
Catering Officer I 5 points	New Hall	135	25
	Fleetwood Road	55	6
	Hawkeshead	57	12
	Hesketh Park	79	7
		326	50

Responsibility for staff dining rooms and provision stores should pass to the catering officers. Preparation of the stores requisition, the checking of ward meal orders and the maintenance of the other procedures necessary for the control of the service should also be transferred.

The development of the service in the individual hospital would still rest almost entirely with the group catering manager but the manager in post has already achieved a great deal with limited support.

Direct contact with staff at ward level is an essential part of the catering officers role and this must be developed as the appointments are made.

The training of the catering officers in management techniques will be of prime importance and every effort should be made to arrange their participation in management courses.

Ancillary Staff

16 The level of technical skill within the kitchen is very well maintained by existing training arrangements. When the City & Guilds 357 course becomes available in the area senior staff should be encouraged to enrole.

The senior staff at Greaves Hall should be seconded for short periods to other hospitals in the group to widen their experience of accepted standards for hospital catering. This would enable them to become more critical of their own performance. Reciprocal attachments would make the arrangements more acceptable to the individual concerned. Where services are being provided for other hospitals consideration should be given to the introduction of interim bonus schemes or at least to giving a full explanation by management to the affected staff of the considerations involved.

The dining room staff establishments should include sufficient supervisory grades to whom direct responsibility for collecting cash or tickets from all staff could be delegated following the introduction of pay as you eat.

Kitchen Equipment & Hygiene

17 The kitchen at the General Infirmary and the Promenade should be equipped to allow the introduction of a centrally plated meal service with a choice of meals,

for patients. The areas and equipment required are sketched at appendices (F) and (G). It will be seen that in both hospitals the diet kitchen areas are used for the storage of the new plated meal conveyors which will be required.

At the Promenade the diet kitchen store and supporting equipment should be installed in the area previously occupied by the wash up sinks, which have already been moved. The removal of the section of wall as illustrated will greatly ease the movement of the conveyors to the plating up area and provide easy access to the new cold room which will be required to hold and plate the chilled food. Two of the thirty gallon boiling pans should be replaced by three 10 gallon tilting pans.

The dish washing machine already installed, which should be used for all ward dish-washing, is also shown with additional benching, a pre-rinse sink and spray and a waste disposal unit.

At the Infirmary the diet section is shown adjacent to the hatch which should be opened up to provide direct access from the kitchen to the new trolley storage area. New plated meal conveyors will be required for each ward except the annex, for which one of the existing conveyors should be converted to take plated meals in sleeves and the children's ward for which plated meals are not recommended (see appendix I). The Christiana Hartley Hospital would require a conveyor as it would be regarded as a ward of the Infirmary for catering purposes. One of the old conveyors would be retained to transport food to the new staff dining room.

The three 40 gallon boiling pans should be removed and replaced by three 10 gallon and one 20 gallon pans. A rearrangement of the tables as shown will facilitate the installation of the equipment required for meal plating. This would consist of an 8' hot cupboard with part bain marie top and having plate lowerators inset for service of the hot main courses.

At right angles to the above another 4' unit for the service of hot sweets. Next to this a mobile lowerator would be positioned during the service period.

A 1'6" mobile stand for the plate covers is also required centrally in the trolley loading area.

At Greaves Hall a 10 litre capacity liquidiser should be provided to produce a more acceptable and attractive finish to some of the vegetables and other foods which are minced at present. A range of mousse type dishes suitable for heavily handicapped patients could quickly be produced.

Menus

18 A four week menu cycle should be prepared by the catering manager in close consultation with the dietitian which would form the basis of all patient feeding within the group. The menus would be altered to introduce new dishes. On each day a choice of a main or a light breakfast should be available. At lunch, soup should be offered followed by a choice of three main courses, one of which would be light and suitable for gastric diets. A choice of sweets including milk pudding or cheese and biscuits should be offered. Fresh fruit should be included as an alternative on some occasions.

The dishes which are considered suitable by the dietitian for the therapeutic diets should be indicated on the weekly menu. On the daily menu circulated to wards (see appendix H) it is not recommended that this information should be shown because of the practical difficulties of supervising the choice of patients prescribed a therapeutic diet. The majority of the diets could be served from the main production which would considerably reduce the work load of the diet section and make a separate diet kitchen unnecessary.

An outline of the organisation of the meal choice and central plating system suitable for the Promenade and the General Infirmary is shown at appendix I. These arrangements should be modified at the other hospitals in the group, but the aim should be to make a choice of meals available to all those patients who could be capable of exercising some control over what they eat. This could be achieved by circulating two copies only of the daily menu to those wards where a few patients would benefit. Ward staff would mark the total number of each meal required on the

menu which is returned to the catering dept. On the duplicate which would be retained at ward level, a note of the names of individuals who have asked for each meal could be noted. Ward staff should be encouraged to ask suitable patients what they would like instead of merely ordering for the entire ward.

A Greaves Hall patients using the cafeteria should be offered alternative dishes although, due to the lack of advance information, this is likely to be slightly wasteful. The added interest for these patients would seem to justify the cost involved. At Hesketh Park the meals should be ordered by patients using the central dining rooms on a consolidated list.

The use of chilled food at Sunnyside and St Katharine's would cause difficulties because of the extra time required between the collection of orders and the service of the meal (see para 24) but this should not prevent the introduction of a choice menu system in these hospitals.

The staff menu should not be the same as the patients at any meal. This is of particular importance where staff have to feed patients. The range of dishes provided should be extended to include snack meals and staff should also be able to take only part of the meal. It is unlikely that satisfactory menu standards can be achieved if an attempt is made to include more than a main course and sweet or cheese and biscuits within the standard ASC charge. Soup and beverages should be available as extra items.

Raw Materials

19 The use of dehydrated food at Greaves Hall should be restricted to those items thought acceptable for use throughout the Group. This would stop the excessive use of dehydrated vegetables and fruit, but allow the continued use of those items which improve the quality of the food served.

A maximum weight of 175 lbs per hindquarter of beef should be used in the contract specification.

Standard Recipes

20 The use of the recipes at each hospital and in particular the suitability of the quantities suggested should be examined in detail. Where the type of patient creates special requirements, the recipes and perhaps the quantities should be modified. This should be done by the catering manager and the existing practice in some hospitals of changing them without prior consultation should cease. The recipes were prepared for acute hospitals and do not necessarily meet the needs of all patients.

Stores Ordering

21 The existing practice of ordering non perishable goods to be held within individual hospitals as a minor store should continue. These stocks and the preparation and authorisation of the stores orders should be under the control of the catering officers. The quantities requisitioned should be related to the numbers fed over a period by the catering manager in order to control what is in effect a top up stores system.

Perishable goods including meat, fish, vegetables, salads and fruit should be ordered on a daily basis against the information available about the needs of the hospitals for the following day. This would in effect create the buffer stock of these items at the central stores instead of at each hospital. This will make over buying obvious rather than being lost in the separate kitchens. The catering manager would be responsible for preparing estimates of the likely total take up of each item against which the supply organisation would buy and the butchers shop would carry out advance preparation. Issues would be made against telephone orders made to stores by 15 30 hrs. A late afternoon delivery round will be required. This procedure will have to be modified over the weekend, but if the menus for Sunday and Monday are prepared so that the minimum number of different perishable items are involved, the overissues or shortages will be kept to a minimum.

The control of costs will be considerably improved if a monthly breakdown of the provisions expenditure in each hospital is provided by the treasurers department. In order to reduce the work involved the same headings as those used for the Regional cost statements could be used. This information would enable a check to be made that a proper balance is being maintained within the overall figure and also provide a clear

indication of trends in over or underspending on different commodities within each hospital and throughout the group. This assessment should be made monthly and not merely during an audit investigation.

Cooking Standards

22 Efforts should be made to reduce the delay between completion of cooking and the service of the food. The standard of cooking and presentation will improve further in those hospitals where a plated choice of meals is introduced. In the other hospitals individual portions should be indicated to the nursing staff by the method of presentation and whenever possible, individual portions should be prepared and cooked. Senior kitchen staff at Greaves Hall should be made fully aware that they are directly responsible for the standard of food production and service. Assistance should be given to them by the catering manager and the catering officer when in post in identifying faults in the traditional practices of the kitchens and in the setting of new standards of performance.

Catering for Staff

23 Pay as you eat should be introduced throughout the group but control of the dining rooms should first be transferred to the catering department. Unless there is effective supervision of these areas, undue pressures will be placed upon dining room staff which will result in considerable conflict. Vending machine installations ensure that a return is made to the exchequer but they should be used as an extension of the services to staff, instead of replacing the administrative arrangements necessary to maintain proper standards. The usual outcome of not providing facilities and service generally thought by the staff to be up to a suitable standard is that they cease using the dining rooms and make other arrangements to obtain food. In addition to the encouragement given to ward staff to eat surplus food on wards, the image of the hospital as an employer suffers considerably if it fails to meet this basic welfare need. The feeding of minority groups through vending machines can be justified and understood by staff, but attempts to feed larger groups during peak periods by this means, with no alternative service, should not be attempted.

The number of staff using the dining rooms at the Infirmary and Avondale requires that new facilities are provided if the range of dishes recommended is to be served without undue waste.

A sketch drawing of the servery recommended for Avondale is shown at appendix J. The design is based on replacing the existing waitress service with a cafeteria and call order service. One of the meal vending machines and a microwave oven should be transferred from Greaves Hall and a new beverage machine should be installed as shown. The call order cooking equipment is available as free standing modules and should be supported on a low bench with a shelf under. The cooking area only (items 7-13) should have a perspex frontage and end panel to a height of say 7' at which height a normal solid facia should be provided throughout the entire length of the cooking, cafeteria and vending units. The perspex screen, which should have two openings, through which food would be ordered and served, is designed to facilitate ventilation. A hood with filters should be provided over the cooking equipment but general extract would be sufficient for the remainder of the counter area.

Washing up facilities should be created by converting the toilet area adjacent to the dining room, which is used at present by domestic staff.

A single dish should be available at the cafeteria counter which would have taken a long time to cook in the Promenade kitchen as at present. A choice of dishes ranging from omlettes to mixed grills would be available on a cooked to order basis from the call order unit. The dishes offered should reflect the demand but must be priced as snack meals, i e on a 40/60 basis. The main dish available on the cafeteria counter could be priced at the ASC standard rate. All breakfasts would be cooked to order and the close control over production possible could reduce waste to a minimum. One cook would be needed to cook breakfast and supper. Two cooks would be needed to cope with the numbers at lunch time. The unit would be staffed from the Promenade kitchen by the existing cooks as part of their normal shift pattern. All preparation should take place in the main kitchen.

The meal vending machine would offer a range of items such as biscuits, fruit and yoghourt during the meal service time and during off peak periods should also offer chilled pre-cooked meals and snacks.

It seems reasonable that staff at Sunnyside and St Katharine's should in future use the dining room at Avondale. The service available here would be considerably better than could be provided in their own dining rooms.

Similar facilities should be provided in the new dining room due to be built at the Infirmary.

A sketch showing the existing servery to the senior staff dining room at Greaves Hall converted to offer a choice of meals to staff is shown at appendix K. The transfer of all staff to this room will allow the existing staff dining room to be used to extend the present experiment in feeding patients centrally. It should be noted that only one meal vending machine is shown, the other should be transferred to Avondale. The evening meal at Greaves Hall should be provided from the call order unit in the servery by the staff on late duty in the main kitchen. This shift could commence later than at present to ensure that freshly cooked meals and snacks are available until at least 19 30 hrs after which time the vending machines would provide the necessary service.

In the smaller hospitals a choice of meals could be provided by using arrangements for ordering meals similar to that at present operating very well at New Hall. Arrangements which provide advance information about the intentions of staff enable small hospitals to provide the same range of meals as is available in the larger units, without undue wastage. It is practical to collect orders in advance in the small units but not on a larger scale. If good standard of catering for staff are to be achieved without very high costs either advance information must be obtained or suitable facilities must be created.

The aim should be to provide a responsive service to staff throughout the group. Their eating habits will change as a result of having to pay for each meal, but this should be seen as an opportunity to improve the efficiency of the catering service, and not as an excuse to run it down.

Chilled Food

24 Guidance given in 'Pre-Cooked Frozen Foods' published by the DHSS outlines the correct handling procedures for chilled food which should be adopted in the

in the strictrly limited circumstances in which this method is considered to be acceptable. Attention is drawn to the need to chill the food quickly to a temperature of between 1° and 5°C and to maintain a transport temperature at below 0°C.

The degree of temperature control recommended could be achieved by providing a refrigerated cold room in which food could be rapidly chilled and stored and by using refrigerated insulated containers for transporting the meals. Equipment, however, cannot guarantee that safe procedures will be followed and this led the DHSS to recommend that chilled food should not be used for the routine feeding of large numbers.

The close proximity of the Christiana Hartley to the General Infirmary makes the discontinuation of the use of chilled food the logical outcome of the introduction of a centrally plated freshly prepared meal service. It should then be treated for catering purposes as a ward of the main hospital.

The decision in respect of Sunnyside and St Katharine's is complicated by the greater distance involved and the difficult approach to both hospitals. The alternatives here appear to be either to continue the use of chilled food with its control and bacterial problems or to use centrally plated hot meals, when this service is introduced for the patients in the Promenade. The delay in distribution likely to be encountered would cause loss of nutritional content and palatability if the latter alternative is accepted. An additional disadvantage is that compared to chilled food it does not often look attractive after an uneven, jerky delivery on a plate to the patient.

If following the development of the service at the Promenade it becomes feasible to ensure the rapid delivery of hot food by the use of perhaps an enclosed low loader and a tug this should be the solution adopted. Experience will be obtained during the period when chilled food is supplied which will reveal the best possible distribution times and the degree of disturbance to the food which the handling produces. Experiments using plated hot food should be undertaken before a decision is finally made.

Until the recommendations for the Promenade are implemented, the chilled food service should continue, but it is essential that steps are taken to improve the handling of the food during this period.

A power tug should be obtained to draw a refrigerated box mounted on wheels in which the chilled food should be transported. It may well be that a suitable standard deep freeze cabinet could be mounted on a chassis to provide the necessary handling temperature at a minimum cost. A tug could also draw the heated conveyor and the supplies necessary for Avondale.

A routine must be established under which food intended for the chilled food service is rapidly cooled in a refrigerator immediately after cooking. This will require that the bulk of each item is as small as possible. Shallow trays should be used to assist the cooling process. The food should not be left until the end of the meal service in the main hospital before it is placed in the refrigerator. Particular vigilance is required to ensure that this rule is applied to gravies and sauces as well as the major items. The plates and sleeve carriers should be stood at all times in the new cold room (see appendix G) when the meals are not in transit.

Plating up should take place as quickly as possible, the meals being returned to the cold room immediately each sleeve is completed.

The use of chilled food for night staff feeding and in the vending machines should continue.

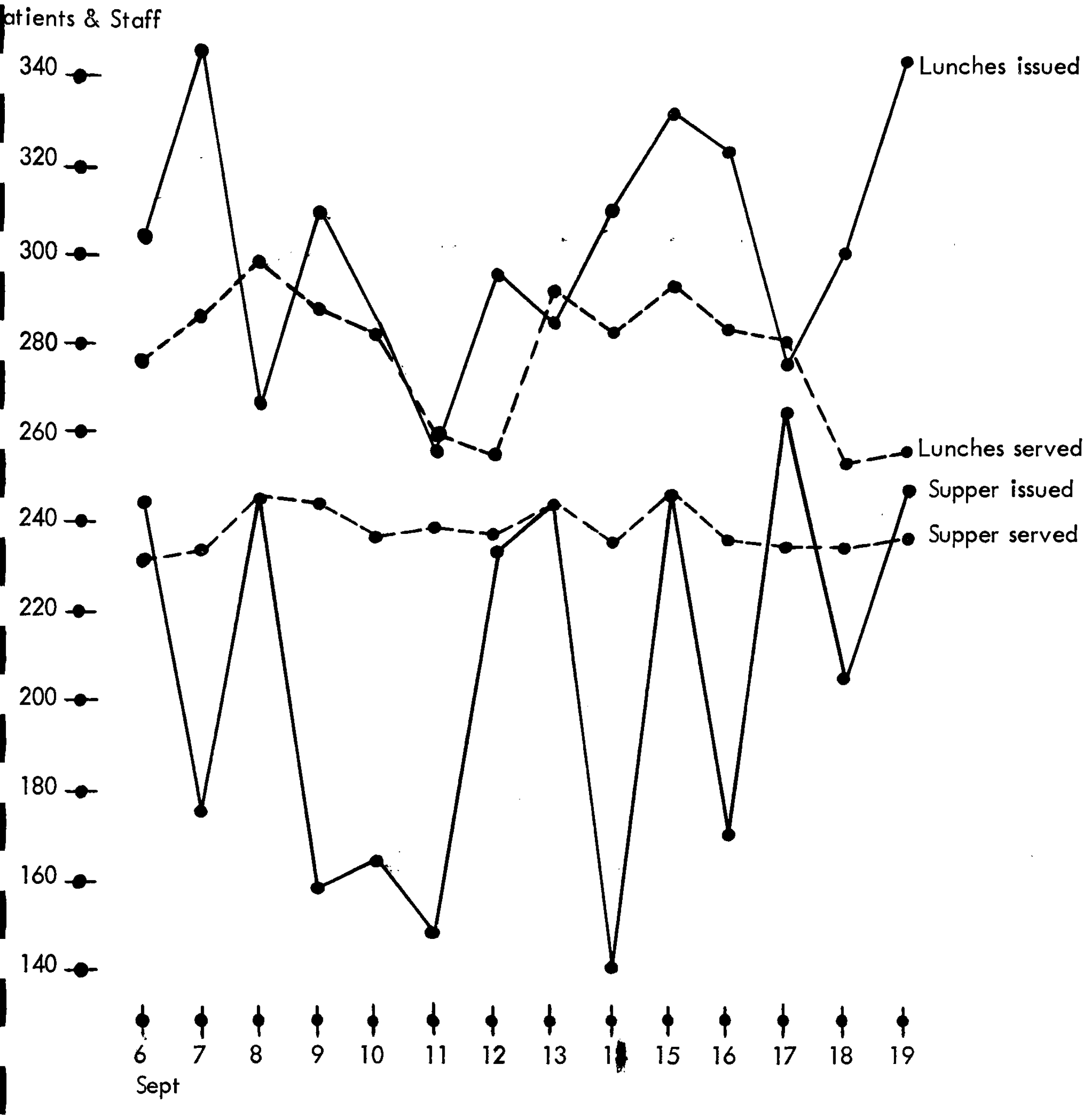
Regular checks should be made of the bacterial safety and the nutritional value of the food supplied. A major education programe should be organised for all staff involved in handling the food to ensure that they appreciate the reasons for the procedures installed. This instruction might best be given by staff of the local health authority.

December 1971.

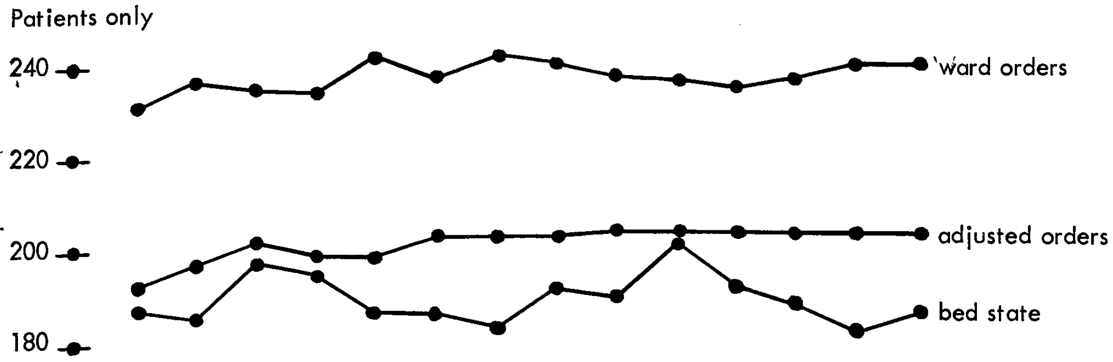
PROMENADE HOSPITAL

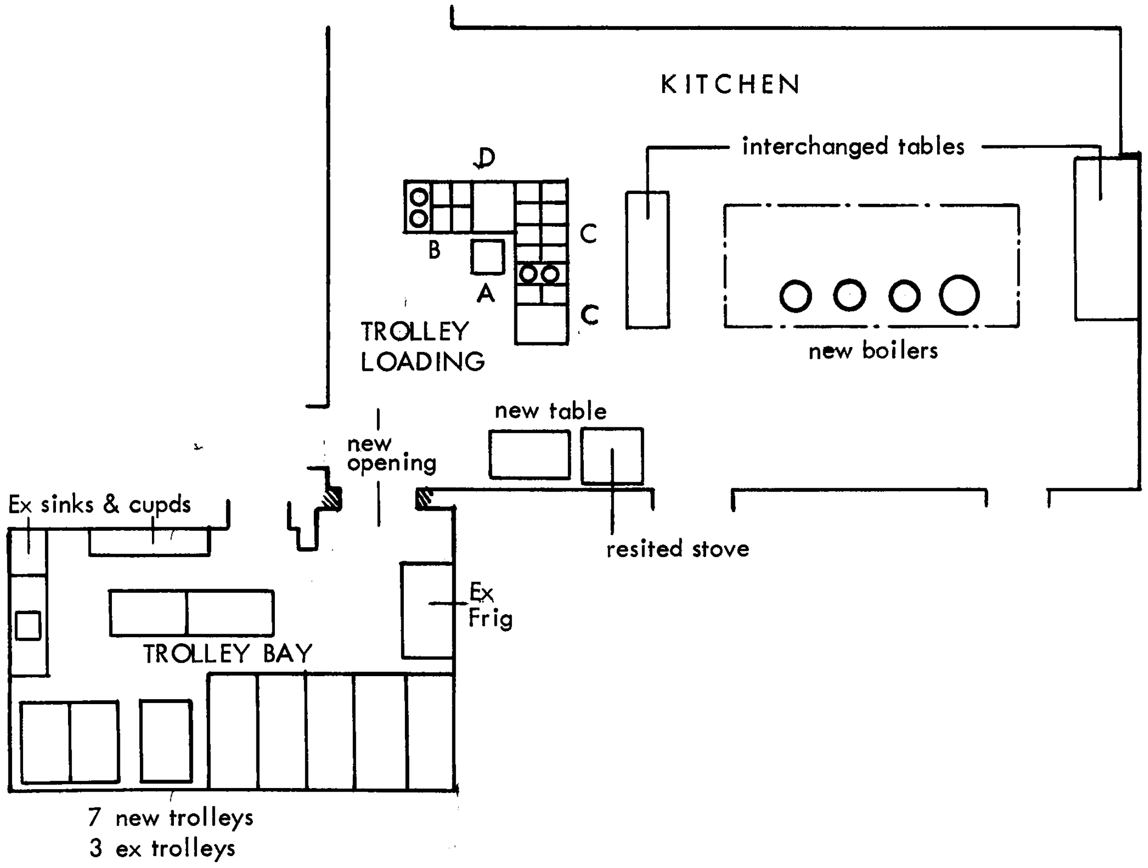
Appendix E

Lunch and Supper — Issues and Meals Served — Protein items only



Ward orders, adjusted orders and bed state



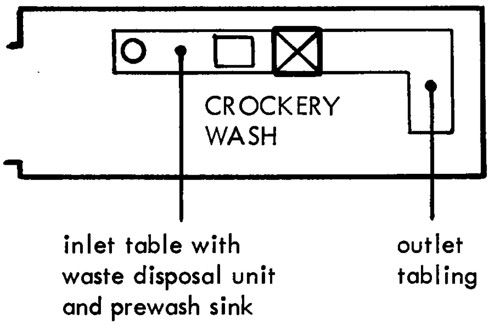


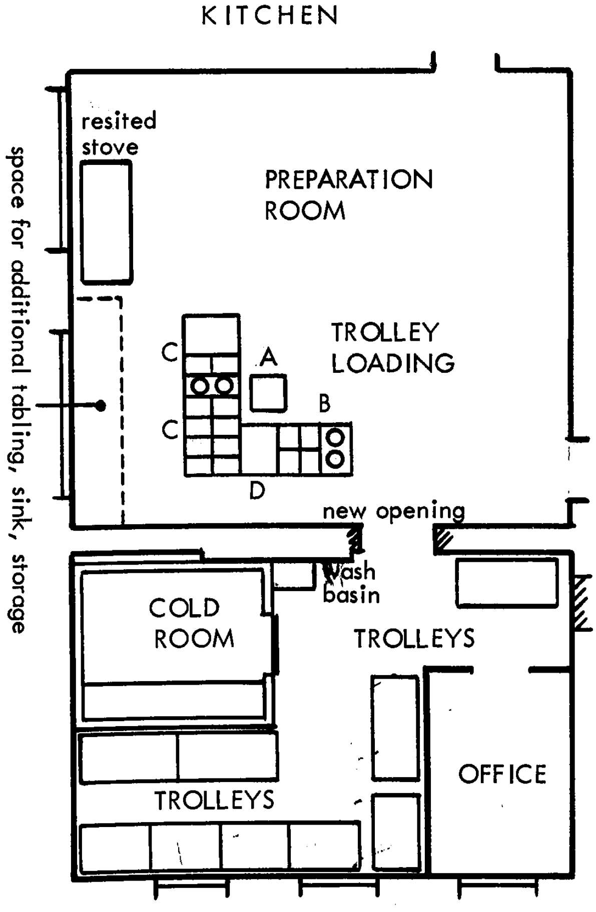
SOUTHPORT GENERAL INFIRMARY

PROPOSED ALTERATIONS TO KITCHEN

Scale: one inch equals eight feet

Appendix G





PROMENADE HOSPITAL

Proposed alterations to
Main Kitchen

Scale: one inch equals eight feet

Date. . . . . Ward. . . . .

Mr/Mrs/Miss. . . . . requires a

. . . . diet

This section should only be completed by Ward Staff if a therapeutic diet has been prescribed

---

Please indicated your choice in the boxes provided.

Mark [S] for small portion

" [N] for normal portion

" [L] for large portion

BREAKFAST

Porridge ☐

Cornflakes ☐

Grilled Bacon ☐

Scrambled Egg ☐

Fried Bread ☐

Tomatoes ☐

Name: Mr/Mrs/Miss. . . . .

(to be filled in by patient)

Name: Mr/Mrs/Miss. . . . .

(to be filled in by patient)

LUNCH

Oxtail Soup ☐

Roast Lamb, Mint Sauce ☐

Curried Beef & Rice ☐

Cold Ham & Green Salad ☐

Buttered Carrots ☐

Spinach ☐

Roast Potatoes ☐

New Potatoes ☐

Mandarin Orange Flan & Cream ☐

Baked Egg Custard ☐

Cheese & Biscuits ☐

Names: Mr/Mrs/Miss. . . . .

(to be filled in by patient)

LUNCH

Name: Mr/Mrs/Miss. . . . .

(to be filled in by patient)

SUPPER

Celery Soup ☐

Baked Cod, Mornay Sauce ☐

Grilled Pork Chop, Apple Sauce ☐

Scotch Egg & Green Salad ☐

Green Peas ☐

Grilled Tomatoes ☐

Puree Potatoes ☐

New Potatoes ☐

Meringue and Cream ☐

Semolina Pudding ☐

Dessert Pear ☐

Name: Mr/Mrs/Miss. . . . .

(to be filled in by patient)

SUPPER

Appendix H

Appendix I

Meal choice and service arrangements suitable for The General Infirmary and The Promenade

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Meal Ordering

Individual menus should be used by the patients to indicate as far as possible their own meal choice. As shown at appendix H the menu card should be perforated to produce six separate pieces and printed with headings. The menu should be typed and duplicated weekly.

The pieces should be used to mark the breakfasts and the main and sweet courses at lunch and supper. The sixth piece would be needed during the distribution, collection, checking and collation of the menus and orders.

The ward and date should be stamped on the menu in the catering office before they are distributed.

The menus should be distributed to the wards each morning with breakfast.

The childrens ward should have permanently in the ward a standard list of dishes which are attractive to children that would be always available. It should include items like cold ham, fish fingers and sausages. A limited number only of the daily menu cards should be delivered. The decision to offer the daily menu or items from the standard list must rest with the ward staff. Central plating should not be undertaken for children because of the great difficulty in controlling portion sizes.

At ward level the menu should be distributed with the lunch trays, the patients names being entered by ward staff or by the patients depending on the availability of staff and the ability and condition of the patient.

Each patient should select their meal, with the assistance of ward staff if necessary, and the completed menus should be available for collection by the porters at 14 00 hours.

The menus of patients incapable, because of their condition, of making their own selection should be completed by the ward sister.

The name and description of any therapeutic diets required should be entered by ward staff. This entry on the menu card will replace the daily diet return and should be followed up and checked at ward level by the dietitian whenever possible. The standard colour code label should be attached to the menu pieces by the diet cook after the menus have been returned.

Any alteration to the requirements of the ward after the menus have been collected should be telephoned to the catering department as they become known.

The consolidation of the menu cards should be completed by 15 30 hrs when the summary of demands for all dishes would be available. This information should then be used together with the standard recipes to calculate the issues required from stores to produce the number of portions ordered.

A copy of the summary should be passed to the kitchens immediately it becomes available.

Estimates of the possible meat requirements should be given to the butcher in advance by the group catering manager but it must be possible to adjust this estimate when the actual amount required is known. The information should be telephoned to the central butchery where the issue sheets would be completed. Signatures would be obtained from each hospital when the meat and fish is delivered. Similar arrangements should be made for the other perishable items.

The menus should be divided in the catering office into the separate courses for each meal and be banded into marked ward bundles to be issued to the kitchen as they are required for plating.

Meal Service

Before each meal service is due to start the bundles of menu card pieces should be issued to the kitchen.

Each ward trolley should be wheeled in turn to the kitchen and placed as shown on the plans at appendices F and G.

The senior cook on duty should ensure that all the food required for service is assembled on the service point unless it is possible to cook the dish as it is required for plating in order to improve the standard achieved, e g fried eggs, omlettes, chipped potatoes.

The cold items should be removed from the cold room only in the quantities required for each ward. They should be placed on the mobile trolley shown.

A senior member of staff should take charge of the plating of meals, occupying the position marked 'A' on the plans, and when the plate has been completed he should put a plate cover over it and place the menu piece on top of the cover to indicate the patient for whom it is intended. A second member of staff will be required at position 'B' at lunch and supper to take charge of plating and carry out the loading of the sweets.

Positions marked 'C' will be staff required for serving the main course on to the plates. The 'D' position is required to serve the sweet.

It will be seen that a minimum of two will be required for service at breakfast time and five at lunch and supper time. The use of dining room staff at the Infirmary to provide the extra assistance required to plate the supper meal is recommended. At the Promenade the employment of part-time staff might be considered in conjunction with the staffing of the central wash up.

The main and sweet courses should be plated simultaneously and as each conveyor is completed it should be immediately delivered to the ward.

A set sequence of conveyor loading should be established in consultation with nursing staff and the necessary staggering of meal times on the wards should be arranged to coincide with the delivery times. The breakfast should be staggered over a twenty minute period, lunch and supper should cover a thirty minute period. It would, of course, be possible to retain the set meal service times but this is not recommended as this would require some meals to be plated for long periods before they are delivered to the wards.

It is recommended that porridge, soup and gravy should be sent to the ward in bulk containers but that, in order to save nursing time, custard should be added to the appropriate plates in the main kitchen.

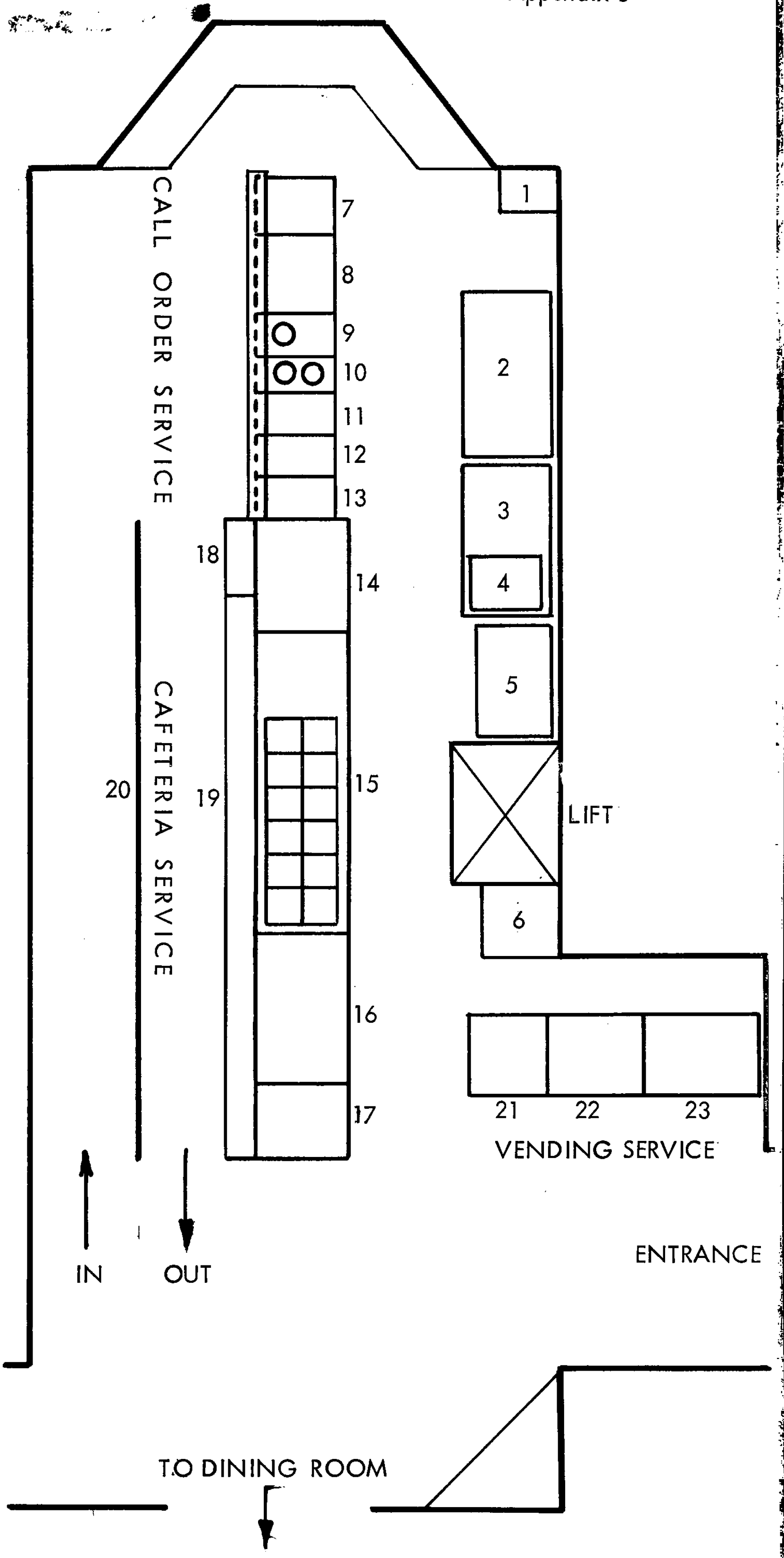
As considerable time would be saved if the conveyors are wheeled into the ward it is recommended that this should happen unless the condition of patients is such that it is vitally important to keep noise levels at a minimum.

Each patient should receive the main course and soup if ordered together. The sweet should be served after the main course has been eaten.

The cutlery and crockery should be cleared using the conveyors and the washing up should take place in the central wash up. Each ward should be dealt with in turn, cutlery and all crockery other than the plates being returned to the wards in individual ward boxes transported on a trolley.

Immediately the conveyor is returned to the catering department the plates should be removed and placed in the cold room or the heated lowerators in accordance with the requirement shown on the summary for the next meal. The plate covers should also be heated or cooled as required.

Appendix J

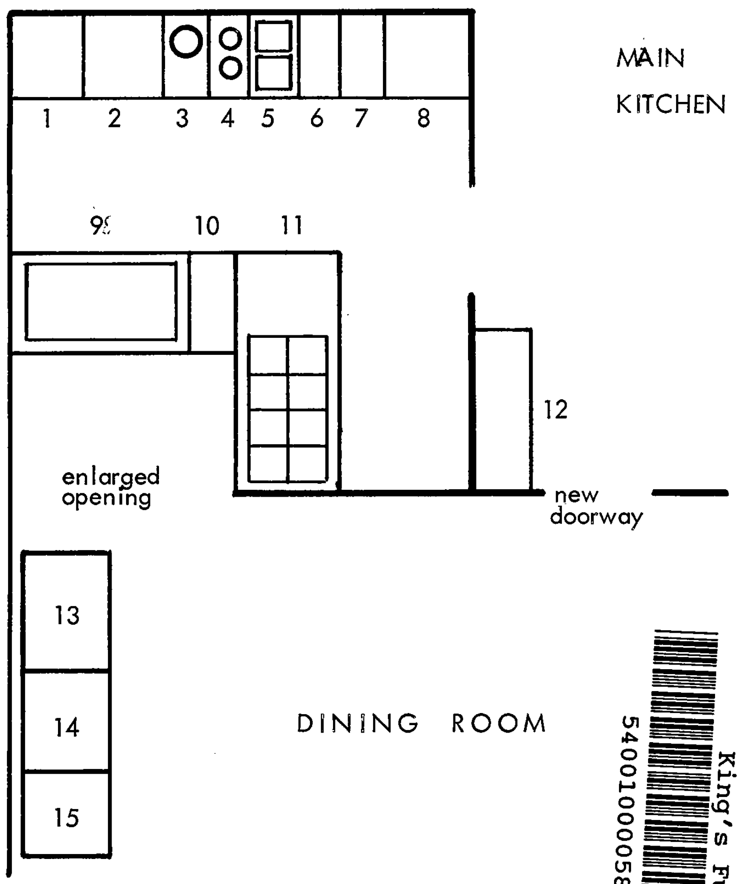


1	Wash Basin
2	Refrigerated Service Counter
3	Table
4	Gravity Feed Slicer
5	Ice Cream Conservator
6	Work Top - Shelves under
7	Fryer
8	Griddle
9	Lowerator/Work Top
0	Boiling Rings
1	Bain Marie
2	Work Top
3	Fryer
4	Ambient Counter and Display
5	Hot Cupboard with Bain Marie
6	Refrigerated Counter and Display
7	Cash Desk
8	Tray Rack
9.	Tray Slide
20	Barrier Rail
21	Beverage Vending Machine
22	Microwave Oven
23	Meal Vending Machine

AVONDALE
STAFF DINING ROOM
SERVERY

Scale: one inch equals four feet

Appendix K



1	Fryer
2	Griddle Plate
3	Lowerator/Work Top
4	Boiling Rings
5	Bain Marie
6	Work Top/Lowerator
7	Fryer
8	Work Top, cupboard under
9	Refrigerated Counter with Dole Plate, display over
10	Unheated Top, shelf under
11	Bain Marie Hot Cupboard
12	Work Top, Cupboards over and under
13	Meal Vending Machine
14	Microwave Oven
15	Hot Beverage Vending Machine

GREAVES HALL

Proposed conversion of senior staff dining room

Scale: one inch equals four feet