King Edward's Hospital Fund for London

MENU PLANNING AND FOOD TABLES

Reprinted from the Second Memorandum on Hospital Diet.

Published for King Edward's Hospital Fund for London by
RBER & SON, LTD., FURNIVAL STREET, LONDON, E.C.4.
Price 6d. net, post free.

INTRODUCTION.

Nearly two years ago the Fund published a Memorandum on Hospital Diet. It aroused wide interest, not only in hospital circles but elsewhere. The demand for copies and the large volume of correspondence that the Memorandum produced gave clear indications that the subject was causing many people considerable anxiety.

The need for further study of the many problems presented by hospital catering was clearly apparent. Accordingly, the Distribution Committee of the Fund recommended the formation of a Committee on Hospital Diet to carry on the work of the Sub-committee, on whose investigations the original Memorandum of July, 1943, had been based. The Committee was appointed by His Royal Highness the President in October, 1943, and during the past sixteen months has met regularly, under the Chairmanship of Sir Jack Drummond.

It soon became apparent that there was need of a further Memorandum on Hospital Diet which would suggest in greater detail the way in which a higher standard would be obtained. This Second Memorandum has recently been published* and for the convenience of those engaged in the more practical work of Menu planning and cooking, the section especially dealing with these subjects together with specimen Recipes and Tables of Food Values have been reprinted here as a separate booklet.

---

* Published for King Edward's Hospital Fund for London by Geo. Barber & Son, Ltd., Furnival Street, London, E.C.4. Price 9d. net, post free.

MENU PLANNING
AND
FOOD TABLES.

CONTENTS.

	Page
Menu Planning	1
Salads and Vegetables (with special reference to Vitamin C)	6
Specimen Menu (Full diet)	12
(Light diet)	15
Examples of Recipes	18
Table of Standard Requirements	25
Table of Food Values	27

MENU PLANNING

Before the war, it was the practice in many hospitals to provide only one cooked meal a day for ward patients. All too frequently, a set menu was used and was adhered to week in, week out, throughout the year. A large proportion of the complaints about hospital feeding that have come to the attention of the Fund's Committee during the past year concern the failure to provide sufficient cooked meals and the dreary monotony of the menus.

Fortunately for patients and staff there is an increasing appreciation of the responsibility in regard to feeding in hospitals. There are now many that provide three cooked and appetising meals a day; there are still, however, hospitals in which only one cooked meal a day is provided and for this a general weekly menu often serves, varied only when restriction of supplies makes a change necessary. This practice cannot fail to result in a very low standard of feeding. If, as is often true in such cases, the standard of cooking is also poor, it is not surprising that the public speak with bitterness of the food in these hospitals.

Menus should be planned weekly and with the following objects in view :—

1. Meals should tempt the appetite and please the palate.
2. Meals should satisfy hunger.
3. The day's meals should be nutritionally adequate.
4. Meals should be compatible with good digestion.

If meals are to provide what the body needs to maintain health and strength, consideration must be given to the classification of the various foods.

Foods can be classified according to their more important functions. Such a classification is usually determined by the quality and value of the chief constituents of a food.

1. **The Body-building foods.** These are relatively rich in proteins.

Meat
Fish

Pulses { Peas, Beans, Lentils

Dairy foods { Milk, dried, fresh or canned; Cheese; Eggs, dried or fresh

Oatmeal
Wheatmeal flour

2. **The Energy and Warmth-producing foods** are rich in one or other of starch, sugar or fats.

Starchy foods { Bread, Flour, Oatmeal, Potatoes, Cereals, Rice

Sugars { Sugar, Jam, Syrup, Honey, Treacle, Dried fruits

Pulses { Peas, Beans, Lentils

Fats { Butter, Margarine, Dripping, Suet, Lard, Bacon, Cheese

3. **The Protective Foods** supply the vitamins and mineral salts.

Dairy foods { Milk, dried, fresh or canned; Butter; Margarine; Cheese; Eggs

Liver

Vegetable foods { Potatoes; Green vegetables; Root vegetables; Fruit

Fat fish { Herrings, Kippers, Salmon, Sardines

Oatmeal

Wheatmeal and wholemeal bread and flour.

To ensure that a meal is well balanced, it should contain an appropriate choice of foods from all these groups. The present shortage of citrus fruits, viz., oranges and lemons, calls for special attention being given to the provision of green vegetables and salads in the diet for patients and staff, in order that their requirement of Vitamin C may be maintained (see pages 6-11). Nutritional sufficiency should be the primary aim in hospital menu-planning.

Dietary Standards

For guidance in planning meals of appropriate nutritive value two Appendices are given in this report.

Appendix D (page 25) sets out the " Recommended Dietary Allowances " published by the National Research Council of the U.S.A. in 1941. These figures represent the most recent authoritative survey of the scientific data regarding human needs for nutrients and they have been widely accepted in expert circles. In many respects the figures agree with those put forward in 1935 and 1938 by the Technical Commission on Nutrition of the League of Nations, but the National Research Council assessed the needs for Vitamins A, B and C as considerably greater than did the League of Nations Commission. The latter body did not publish figures for riboflavin or nicotinic acid requirements.

Some experts are inclined to think that the N.R.C. full daily allowances for Vitamins A, B and C are unnecessarily large and there is not yet satisfactory agreement. Until this is reached it is useful to point out that a compromise in respect to some of the estimates has been found of practical value in making assessments of the food situation in this country during the war. The Ministry of Food has used in its calculations both the full recommended dietary allowance set out in the Tables in Appendix D and what have come to be known as " restricted " allowances. These are more acceptable by the experts who regard some of the N.R.C. full allowances as being on the high side. The derivation of the " restricted " allowances is given in the note preceding the Table in Appendix D.

Appendix E (page 27) provides what it is hoped will be a useful Table of nutrient contents of foods. The values have been checked against those submitted to the Accessory Food Factors Committee of the Medical Research Council. These can be used to calculate the nutritive value of meals and diets.

In planning menus consideration must be given to the types of meals required for the different groups to be catered for, namely, patients, medical staff, nursing staff, lay staff, both resident and non-resident.

The Patients. The patients form the biggest group in the hospital. Their requirements vary considerably, depending on whether they are on full diet, on light diet, or on special diet.

The planning of menus for the patients is, therefore, difficult and needs care, as sick patients require relatively light meals of the highest possible nutritive value. Convalescent patients require a full diet especially rich in constructive and protective foods. Under prevailing conditions this calls for wise and skilful use of rations and allowances of foods of good nutritional worth.

Resident Staff. When preparing menus for the staff, it must be borne in mind that, unlike the patients, they are living in the hospital for a period of years, not weeks. It is important to provide them with appetising meals of good nutritional value and in reasonable variety. Moreover, the staff lead active lives, putting in long hours of duty, and generally need more substantial meals than the patients. It is particularly important to remember that the long hours of duty nurses perform often justify the provision of supplementary meals. Day nurses eat a very early breakfast, after which comes the most strenuous part of their day's work. A supplementary meal in the mid-morning is a real necessity, justified by physiological considerations. The medical staff are busy throughout the day and usually prefer their most substantial meal in the evening. It should, however, be remembered that the times of meals for the resident medical staff cannot be regulated as for the nursing staff, and arrangements should be made to serve their meal in a proper fashion at whatever hour they require it within reason. It is not sufficient merely to cook their meal and put it in their room on a hot plate. Provision should also be made for supplementary meals for medical staff who may be working late or who may be called up for emergency work during the night. The nurses, on the other hand, often prefer their most substantial meal at mid-day ; they are more often on duty at that time of day and off duty in the evenings, when they wish to be out. This varies between hospitals, and those in charge must decide for themselves which arrangement is better suited to the needs of the staff of their own hospital.

Night Staff. For night nurses there is a clear case for a well-cooked, hot meal during the night. In the past it was seldom provided, but it has been introduced in several hospitals where it is proving most successful and is, of course, appreciated. When possible, this should be served in the dining-room.

Menus for night nurses should be carefully planned as a distinct and special feature of the catering programme. Under no circumstances should they be expected to eat reheated remains of the meals cooked for the day staff. Refreshment similar in character to the day nurses' mid-morning snack should be available for night nurses at appropriate times, such as mid-day, before they retire to bed.

Equipment. Many hospitals are restricted in their work for lack of adequate equipment. Until the deficiencies can be remedied, it will be necessary to use great care in planning menus, so that the cooking of the dishes is divided between the available steamers, ovens, boilers and grillers.

Seasons. Foods which are available only during certain seasons in the year, particularly certain fruits and vegetables, should be given special attention, so that no chance is lost to make the best use of them while they are available. Every effort should be made to bottle fruit while it is in season and so build up a reserve for the winter. Eggs, too, should be preserved when they are plentiful.

Variety. There are five ways in which variety may be considered :—

1. Weekly. Meals on one day in the week should not be the same on the same day in the following week.

2. Daily. The meals should never be the same on two consecutive days.

3. Meals. There should not be similarity between two meals on the same day. For example—bacon for breakfast should not be followed by ham for lunch, nor should kippers which are salt be followed by salt beef for lunch.

4. Consistency. It should be remembered that mastication is important, and, except in special cases, a meal should not consist of two soft dishes, e.g., mince should not be followed by rice pudding.

5. Colour. There is a great psychological effect in planning meals which are colourful. Much can be done to introduce colour by the use of garnishes. Thus a meal of steamed fish, white sauce, mashed potato, followed by rice pudding, could be made more appetising if colour is introduced into the sauce or the pudding.

Menu Book.

New dishes are frequently appearing in the press and in cookery books. Hospitals should experiment with these.

It will be found useful to keep a book in which new dishes are entered, the cost recorded and a note made of the success or otherwise of its reception.

Expense.

Food varies considerably in cost and expensive meals must be offset by less expensive meals. Similarly, certain seasons in the year are more expensive than others and the cost of meals should be considered as an average over a period of time and not restricted to a certain sum each day.

Rations and Allowances.

It should not be forgotten by those in charge of hospital catering at the present time that the rations and allowances that can be drawn for each person resident in the institution are intended for that person's use. There is, therefore, an obligation on the part of the hospital authorities to draw the full entitlement in respect of those rations and allowances and there is also implicit in the arrangements an obligation to distribute the food as equitably as circumstances permit. It was not unusual before the war to find that senior members of the medical and nursing staff enjoyed more liberal and more varied meals than came to the table of the junior staff. Whatever justification there may have been for such a practice in the days of plenty has been dispelled by the conditions under which we are now obliged to live. If preferential treatment is given to some members of the hospital community today, it can only be done at the expense of rations or points allowances of others. It is essential that those in charge of hospital catering should distribute their limited supplies of the more desirable foods—meat, fish, "points foods," fruits—equitably among all groups of the hospital community. The division of the rations of fat, sugar and preserves between the individual and what is needed in the cooking varies in the different hospitals, and is a matter that should be left to the Catering Officer. It is, however, very important to ensure that the division is made fairly and that the amounts retained in the kitchen are used for the groups entitled to receive them. The Catering Officer should so plan the menus that the rations are well spread out over the whole week.

THE VALUE OF SALADS WITH SPECIAL REFERENCE TO THE LOSS OF VITAMIN C IN COOKING MEALS

Many of the operations employed in large-scale catering may lead to loss of nutrients. Care is needed to ensure that these losses are reduced to a minimum or that measures are taken to compensate for them. Broadly speaking, there are two ways in which the nutritional value of food is reduced by its treatment in the kitchen. In the first place, there is wastage. Although the soaking for a reasonable period of raw vegetables, the cells of which still remain living, is unlikely to cause harm, vegetables soaked for long periods lose a considerable proportion of their vitamin content, particularly the vitamin C, and their soluble mineral salts by solution in the water. Similarly, these nutrients are dissolved if the food is cooked in large volumes of water. In the first case, what is dissolved in the water is a total loss ; in the second, the loss is prevented only if the cooking water is used for

preparation of soups and stews. Another example of kitchen wastage of valuable nutrients is the throwing away of the outer leaves of green vegetables, such as cabbages, savoys and kale. These are rich in vitamins A and C, as well as in iron and calcium If they are used in the preparation of soups, much of their nutritional value is retained.

The second cause of losses is the destruction that occurs during cooking and the subsequent handling of food. These losses primarily concern vitamin C, but, to a less important extent, losses of some minerals and vitamins of the B group come into the picture. It is the losses affecting vitamin C that are of outstanding importance. The national wheatmeal flour and bread eaten today provide such good sources of the B group of vitamins that it is not a serious matter that cooking vegetables may reduce their vitamin B1 content by 20 or 30 per cent.

The case of vitamin C is, however, entirely different. Raw vegetables are, for the most part, a good source of this nutrient; in fact, better as a class of foods than the ordinary fruits that come to the market today. (See list at end of section.) The scarcity of fruit, particularly the citrus fruits of high C content, brings into greater prominence our dependence on vegetables as the chief source of this vitamin during wartime. But, to obtain the best value from these vegetables, they must either be eaten raw in substantial amounts, or they must be cooked and handled so that as much vitamin as possible survives the treatment. Under conditions imposed by large-scale catering the latter is by no means easy.

In the first Memorandum on Hospital Diet, attention was drawn to the very small amount of vitamin C in some hospital meals. Poor menu planning and serious losses of vitamins in cooking were responsible. Although further reference is made below to the causes of loss during cooking, the first essential for the provision of adequate vitamin C is to ensure that enough vegetables of the right kind and of good quality are included in the diet.

The reports gathered together during the past eighteen months provide a great deal more evidence that too few and badly handled vegetables are factors which often contribute to make the nutritional value of hospital meals unreasonably low, particularly in respect to vitamin C.

The following data illustrate some of the important points concerning vitamin C in cooking.

Potatoes.

The vitamin C content of raw potatoes changes with season. New potatoes have the highest value. The following are average figures :—

	m.g. Vitamin C per 100 g. potatoes.
Early and main crop before October	30
October and November	20
December	15
January and February	10
March to new crop	7

The influence of the relatively high vitamin C content of early summer and autumn main-crop potatoes is the most important seasonal factor affecting the war-time diet. It is often clearly reflected in analyses for plasma ascorbic acid.

Cooking of potatoes on a large scale reduces the vitamin C by from 30 to 50 per cent., even when carefully carried out. For example, in one test the reduction was from 9 mg. to 4.8 mg. per hundred grams during boiling. When the cooking is good, it is wise to allow for a loss of 50 per cent. When it is bad, the loss may be as high as 80 per cent. When cooked (boiled) potatoes are kept hot, there is further loss. In the experiment given as an example, the vitamin C fell from 4.8 mg. per hundred grams of freshly cooked material to 2.3 mg. after keeping hot in an insulated container for $2\frac{1}{2}$ hours. When it is impossible to avoid keeping potatoes hot, less vitamin C is lost if they are kept whole and covered than if they are mashed or exposed to air.

Cabbage.

Raw cabbage is an excellent source of vitamin C, hence the recommendation under " Salads " that it should be widely used in the preparation of salads. An average value is 70 mg. per hundred grams, a figure higher than that for any fruit, except black currants (200 mg.). Even orange and lemon juices have lower vitamin C values (about 50 mg. per 100 g.).

Good cooking of cabbage results in a loss of 50 to 60 per cent. of the vitamin C. Actual analyses of well-cooked cabbage, freshly prepared, gave values ranging from 28 to 19 mg. per 100 g. Cabbage overcooked in a large bulk of water gave values as low as 7 to 2 mg. per 100 g.

Keeping the well-cooked cabbage hot in insulated containers for $2\frac{1}{2}$ hours led to further loss and gave figures ranging from 10 to 5 mg. per 100 g. It has been found that, when cabbage is kept hot for an hour under ordinary kitchen conditions, it loses 60 per cent. of the vitamin C it contained when freshly cooked and this amount, it must be remembered, is only 40 to 50 per cent. of that present in the raw state.

Vitamin C in Cooked Meals.

It will be appreciated, from what has been said above, that the amount of vitamin C in the meal actually eaten may be very much less than that originally present in the raw materials. The following figures illustrate how the character of the cooking may impair the nutritive value of the meal as a whole :—

Helping.	mgs. Vitamin C in raw foods.	mgs. Vitamin C in well-cooked, served at once.	mgs. Vitamin C in badly-cooked kept hot 1 hour.
Potatoes 170 g.	17	8	2
Cabbage 80 g.	49	26	6
Total	66	34	8

The important point to bear in mind is that, however good the cooking may be, it is impossible, in large-scale catering, to avoid losses of vitamin C of the order of 50 per cent. Since the extent to which these losses can be made good by providing fruit is greatly restricted in war-time it is necessary to seek an alternative. Vegetable salads can be made very attractive if trouble is taken in preparing them carefully and popularising them among patients and staff. The following figures illustrate how large is the contribution to the daily need for vitamin C that can be made by salads.

	List of Salads. (Single servings.)	Vitamin C content. mgs.
Recipe 1.	1 oz. carrot ; ¼ oz. celery ; ¾ oz. turnip ; ½ oz. watercress ; 1½ ozs. shredded cabbage ...	47
Recipe 2.	1 oz. shredded cabbage ; 1½ ozs. carrot ; ¾ oz. swede ...	33
Recipe 3.	½ oz. shredded cabbage ; 1½ ozs. cooked potato ; 1 oz. celery ; ¼ oz. watercress	19

The losses of vitamin C which occur in large-scale catering, and which have been mentioned so far, are the loss due to the washing away of the vitamin in the cooking water or in the water in which vegetables are put to soak and left over-long, and the destruction due to the heat of cooking and, more important still, due to the conditions existing when cooked vegetables are kept hot. There is, in addition, perhaps, an amplification of the cause of cooking loss which it is also important to mention. Raw vegetables, let us say, for example, cabbage, is composed of still living cells. Vitamin C plays a part in the life of the cells. If these cells are broken, whether by the bruising and wilting of vegetables

in transit or by hot—but not very hot—water, an enzyme also present in the living plant rapidly destroys vitamin C. Thus, if cabbage, or potato, is placed in cold or tepid water to cook and heat is gradually applied, a point is reached when the temperature of the water breaks open the cells and the enzyme destroys vitamin C. When, however, the water becomes hotter still, the enzyme itself is destroyed and can then cause no further loss. The practical application of this information is to ensure that vegetables are put to cook in water which is already boiling. Experiments have been carried out which showed that, if the whole quantity of cabbage to be cooked in a boiler were thrown into it in one lot, thus cooling the water for a considerable time to well below boiling point, the resulting cooked material contained only one-seventh the amount of vitamin C of a second batch added to the water in small quantities so that its temperature was maintained throughout the cooking process.

SALADS

Preparation. Cleanliness is necessary in handling all food; it is particularly important in preparing and serving raw vegetables since they are not subjected to the heat of cooking, which destroys most bacteria.

Vegetables should be as fresh and as unbruised as possible. Wash, but do not soak, the vegetables in cold water, changing it several times to make sure all grit is removed. Scrub root vegetables. Peel only those with tough skins, e.g., swedes and turnips. Dry in a colander or chip basket.

Vegetables should be sliced or shredded. Where slicing machines are not available vegetables can be sliced by hand with a sharp "cook's knife." Vegetables should not be grated or put through a mincer.

After slicing or shredding, vegetables should be covered or kept cool until served. Bruising or exposure to air causes loss of food value. Method of preparing:

Cabbage, Sprouts, Endive, Kale, Spinach, Turnip-tops, Dandelion	Shred the leaves with a sharp knife or put through a slicing machine.
Lettuce	Keep the tender leaves whole. Tear up the outer leaves.
Spring onions ... ... Leeks	Cut or chop into small pieces.
Parsley, Mint	Chop coarsely.
Mustard and cress, Watercress ...	Wash only.
Tomatoes	Slice.
Carrots, Parsnips, Beetroot, Swedes, Turnips, Radishes	Slice with a sharp knife or household shredder (as used for suet) or put through a slicing machine. Do not use a cheese grater or mincing machine.

Raw Vegetable Salad.

1½ lb. cabbage; ½ lb. watercress; ¼ lb. parsley or mint; ½ lb. carrots; ½ lb. parsnips; ½ lb. turnips; ½ lb. radishes; ½ lb. spring onions or leeks.

Prepare vegetables. After slicing, toss well together in a bowl with vinegar dressing. Serve a ladleful with the meat dish instead of a second cooked vegetable.

SALADS (for serving as a main dish) :—

Egg. (To be made with scrambled dried egg served cold.)

¾ lb. dried egg; 1¼ pints water; 3 oz. margarine; 2½ lb. lettuce; 1 lb. tomatoes; ¾ lb. watercress; ½ lb. raw beetroot; ½ pint dressing; pepper and salt to taste.

Place the dried egg in a mixing bowl, add the water and push the egg under water. Allow to stand for about 5 minutes, then beat until smooth and free from lumps. This mixture should be used at once. Melt the margarine in a saucepan on the stove, add the seasoned egg mixture and cook, stirring slowly.. Do not over-cook the egg; it should be creamy. Leave to cool before serving.

Fish.

3¼ lb. cooked or canned flaked fish (salmon, pilchard, herring, haddock, cod); 1½ lb. raw cabbage; 1 lb. raw carrot; 1 lb. raw swedes; 1 lb. watercress; ¼ lb. parsley; ½ pint dressing.

Cheese.

Cheese (grated or shredded); 1 lb. raw cabbage or young kale; ½ lb. turnip tops; 1½ lb. tomatoes; ¾ lb. raw beetroot; ½ lb. spring onions; ½ lb. radishes; ½ pint dressing.

Meat.

3 lb. cold sliced cooked meat; 2½ lb. lettuce; ½ lb. watercress; ¾ lb. endive; ½ lb. parsnips; ½ lb. carrots; ½ pint salad dressing.

Potato. (With egg, fish, cheese or meat as above.)

6¼ lb. cold cooked potato (sliced or diced); ½ lb. parsley (coarsely chopped); 1½ lb. cooked beetroot (sliced or diced); ½ lb. spring onions; ½ pint thick dressing; or

6¼ lb. cold cooked potato (sliced or diced); ½ lb. parsley (coarsely chopped); 1 lb. raw carrot (shredded); 1 lb. raw swedes (shredded); ½ pint thick dressing.

Quantities given in the above recipes are sufficient for 50 portions.

N.B.—In some hospitals difficulty has been found in popularising raw vegetables. This can be overcome :—

1. By ensuring that salads are carefully washed and prepared, and are attractively served;
2. By serving small portions only;
3. By serving chopped raw vegetables in small portions with hot meals.

APPENDIX A

The menus set out in the following pages are suggested as suitable outlines on which to plan meals for patients on full and light diets. They can be attained with the present day foods; when conditions improve, more variety may be introduced. There should always be an alternative dish for those who do not like the main dish of the day.

SUGGESTED MENU FOR FULL DIET

WHICH CAN BE PROVIDED UNDER PRESENT CONDITIONS.

6 *a.m. or when called.*	Cup of tea.
8 *a.m. Breakfast.*	Porridge or cereal. Breakfast dish. (See List A.) Bread and butter/margarine. Tea, coffee. Marmalade once or twice a week. Occasionally fresh fruit, hot rolls.
Midmorning.	Milk; meat or yeast extract; fruit drink cocoa.
12-12.30 *Dinner.*	Meat (occasionally fish). (See List B.) Potatoes. Cooked vegetables or salad. Sweets; pudding and milk pudding as alternative. (See List C.)
4 *p.m. Tea.*	Bread and butter/margarine. Jam, honey, syrup or paste or salad, cake, scones or buns. Tea.
7 *p.m. Supper.*	Cooked dish. (See List D.) Sweet. (See List C.) Bread and butter/margarine. Milk, cocoa, etc.

LIST A

BREAKFAST DISHES

Bacon and fried bread or potatoes or tomato.
Sausage.
Eggs—scrambled, boiled, fried or poached.
Fish cake.
Ham and potato cake.
Smoked haddock
Kipper.
Grilled herrings.
Cold ham
Kedgeree
Breakfast sausage.

LIST B

DINNER DISHES

Beef	Roast, braised, sauté, hash, boiled, silverside, steak and kidney pie or pudding, minced, curried, grilled, stewed or braised steak, rissoles, shepherd's pie, cottage pie, Vienna steak, timbale of beef, individual meat pies.
Mutton	Roast, boiled, grilled, chops, cutlets, haricot mutton, hot pot.
Lamb	Roast, Irish stew, stuffed shoulder, curry, mutton pies.
Pork	Roast, boiled, grilled chops.
Veal	Roast, sauté, stewed, braised, stuffed shoulder, timbale, pie, blanquette.
Ham	Boiled and grilled gammon, boiled hock of bacon.
Offal	Mixed grill, liver grilled and braised, stuffed hearts, tripe, kidney, oxtail, sweetbreads, brains.
Fish	Fried, grilled, boiled, baked, au gratin, fish salad, fish pie, fish cake, fish cream, fish soufflé, curried.
Poultry	Roast, boiled, minced, croquette, fricassée, sauté.
Rabbit	Baked, boiled, minced, croquette, fricassée, sauté.

COLD DISHES

Steak, veal, pork-pies, galantine, ham, pressed ham, bacon, brisket, silverside, corned beef.

POTATOES

Boiled, mashed, snow, duchess, rissoles, sauté, chipped, baked in jacket, roast.

SALADS

Green, winter, Russian, brawn, fish, egg, ham, meat, Spam.

LIST C

SWEETS

Apple baked
Apple Charlotte
Apple dumpling
Apple fritters
Apple Suzette
Bakewell tarts
Banbury cakes
Baked jam roll
Baked bread and butter pudding
Baked raisin pudding
Baked custard
Guards pudding
Gateaux various
Ice Cream
Jellies various, plain, fruit
Jelly cream
Jam or treacle tart
Junket
Lardy cake
Meringues
Manchester tart
Moulds various

Batter pudding
Bread and butter pudding
Castle pudding (jam or nutmeg sauce)
Cabinet pudding
Canary pudding
Custard lemon curd
Congress tart
Charlotte Russe
Cream puffs
Chocolate meringue pie
Cream of rice
Chocolate profit rolls
Creams (coffee, raspberry, lemon, etc.)
Caramel cream
Custard
College pudding
Doughnuts and jam sauce
Eve's pudding
Fruit Condé
Fruit flan
Fruit fools
Fruit tart and tartlets
Fruit salad
Fruit, stewed, dried, fresh, bottled or tinned
Fruit, rice or semolina mould
Fresh fruit
Mincemeat tart or pies
Milk puddings, rice, sago, semolina, tapioca, ground rice
Plum pudding
Pancakes
Pineapple fritters
Rice custard
Rum Baba
Suet puddings with sultanas, jam, syrup or jam or honey sauce
Sponge cake jelly
Surprise eggs
Summer pudding
Steamed puddings, chocolate, coffee, ginger, fruit, raspberry
Trifles
Turnovers, jam or fruit
Wholemeal pudding

LIST D

SUPPER DISHES

Beef	Minced, rissoles, shepherd's pie, cottage pie, timbale of beef, individual meat pies.
Mutton	Mutton pies.
Veal	Timbale, pie.
Offal	Tripe, sweetbreads, brains.
Fish	Fried, grilled, boiled, baked, au gratin, fish salad, fish pie, fish cake, fish cream, fish soufflé, herrings, pilchards (fresh or tinned).
Poultry	Minced, croquette.
Rabbit	Minced, croquette.

COLD DISHES

Pork-pies, ham, bacon, brisket, silverside, corned beef, Spam, tongue, brawn, sausage, luncheon sausage, breakfast sausage, sausage rolls.

CHEESE DISHES

Welsh rarebit, cauliflower au gratin, macaroni cheese, cheese pie, cheese croquettes, cheese soufflé, potato hash and cheese pie, cheese fritters, cheese balls in batter.

EGGS

Fried egg and chipped potatoes, poached or scrambled egg on spinach or sweet corn, baked egg, stuffed egg, Scotch egg, egg mornay, egg patty.

MISCELLANEOUS DISHES

Vol au vent or duchess potatoes with various fillings :—

Cheese Mixture	Fish
Ham	Mince
Rabbit	Salmon
Sausage meat	Veal

SOUPS

Beef tea	Mulligatawny
Celery	Mutton broth
Chicken broth	Oxtail
Cream of celery	Pea
Cream of spinach	Potato
Kidney	Scotch broth
Leek	Tomato
Minestrone	

LIGHT DIETS

6 *a.m. or when called*	Cup of tea
8 *a.m. Breakfast*	Porridge or cereal and/or cooked dish.* Bread and butter/margarine. Tea. Marmalade once or twice a week. Occasionally fresh fruit.
Midmorning	Milk ; meat or yeast extract ; fruit drink ; cocoa, if required.
12-12.30 *Dinner*	Meat, poultry or fish.† Potatoes, boiled, mashed, snow, duchess, baked in jacket. Vegetables (whole or purée), salad Sweets‡ : pudding and milk pudding.
4 *p.m. Tea*	Tea. Bread and butter/margarine. Jam, honey, syrup, cake, scones or buns.

*, †, ‡, See following lists.

Supper	Soup,¶ and/or Cooked dish (see dishes printed below in italics) and/or Sweet Bread and butter/margarine. Cocoa.

**BREAKFAST DISHES*

Egg	Boiled, poached, scrambled, baked.
Fish	Fresh fish, grilled. Finnan haddock poached or creamed on toast. Herring soft roe on toast. Kedgeree. Fish cake.

†DINNER DISHES

Mutton	Cutlets.
Beef	Minced.
Ham	Boiled, hot or *cold.*
Offal	*Tripe, sweetbreads,* liver, *brain.*
Fish	Steamed, grilled, fish pie, *fish cream, fish soufflë.*
Poultry	Roast, *boiled, minced, creamed.*
Rabbit	Roast, boiled, *minced, creamed.*
Eggs	Boiled, *poached on toast or spinach, omelette, baked, scrambled.*
Cheese	Soufflé.
Salads	

Dishes suitable for supper printed in italics.

‡SWEETS

Apple baked or stewed
Apple snow
Baked custard
Castle pudding
Charlotte Russe
Caramel cream
Creams (coffee, chocolate, raspberry)
Cream of rice
Chocolate profit rolls
Custard
Fruit fools
Fruit salad
Fruit stewed, dried, fresh or tinned
Gateaux various
Ice cream
Jellies, plain or fruit
Jelly cream
Junket
Moulds various
Milk puddings, rice, sago, tapioca, semolina, ground rice
Rice custard
Surprise eggs
Sponge cake jelly
Trifle

¶ See following list.

¶*SOUPS*

Beef tea
Celery
Chicken broth
Cream of celery
Cream of spinach
Kidney
Leek
Minestrone
Mulligatawny
Mutton broth
Oxtail
Pea
Potato
Scotch broth
Tomato

SPECIAL DIETS

In addition to the ordinary menu, the following dishes should be available for patients on special diet :—

Soup : Mutton broth ; chicken broth ; beef tea.

Chicken or rabbit boiled, creamed, minced.

Beef or mutton minced. Mutton cutlets.

Fish fried, steamed with sauce, creamed.

Green vegetables whole and purée.

Salad.

Jellies ; junket ; blancmange ; baked custard ; ice cream.

APPENDIX B

EXAMPLES OF RECIPES
FOR FIFTY PEOPLE UNLESS OTHERWISE STATED

SAVOURY DISHES

1. *MINCED MEAT, TOMATO, MACARONI ON TOAST*

Ingredients :

3 lb. minced meat (cooked) ; 2 lb. macaroni ; 1 tin tomato purée ; seasoning ; toast.

Method : Cook macaroni and chop into small pieces. Mix with minced meat, add tomato purée and season well. Heat well in a pan and spread on toast.

2. *FISH CAKES*

Ingredients :

4 lbs. tinned fish or 8 lbs. fresh fish ; 10 lbs. potatoes ; 1½ pints milk or vegetable stock ; seasoning ; 8 ozs. margarine ; breadcrumbs.

Method : Cook fish and potatoes separately. Remove fish from bones and flake. (Fish scraps left over from service can be used). Mash potatoes with milk or stock and margarine ; add the fish and seasoning ; mix well ; form into cakes, roll in breadcrumbs and fry. Serve with sauce.

3. *KEDGEREE.*

Ingredients :

15-20 lb. fish (fresh, dried or tinned) ; 2 lb. rice ; ½ lb. dried egg ; 5 pints white sauce ; seasoning.

Method : Wash and boil the rice in salted water. Prepare the white sauce. Mix into this the boned, flaked fish. Add the reconstituted egg and seasoning. Put into greased dishes and bake in moderate oven.

4. *SALMON ROLLS*

Ingredients :

6 lb. biscuit pastry (see Recipe 22) ; 10 lb. potatoes (cooked) ; 6 oz. dried egg ; 7 lb. Grade III salmon ; ¼ lb. parsley, chopped ; 4 pints mayonnaise (see Recipe 28) ; cochineal—a little ; salt and pepper to taste.

Method : Mash the potatoes with the mayonnaise. Add the dried eggs (reconstituted), the fish and the parsley and beat well. Season to taste and colour a good pink with the cochineal. Roll out the pastry into oblong pieces. Put some of the fish mixture on each and fold the pastry over like an envelope. Glaze with beaten egg and bake in a hot oven for 30 minutes. Serve with potatoes and a fresh vegetable or salad.

5. *SALMON MOULD*

Ingredients :

8 lb. tins Grade III salmon ; 4 lb. mixed root vegetables, grated raw ; 4 lb. cooked mashed potato ; 2 lb. rolled oats or oatmeal ; salt and pepper ; chopped parsley.

Method : Flake up the fish and mix well with all ingredients, moistening with the juice from the tin, and a little egg or water if necessary. Press it into a greased tin or basin and steam 1½ hours to 2 hours. Turn out and serve hot or cold.

6. *SALMON PUDDING*

Ingredients

8 tins Grade III salmon (No. 1 talls) ; 4 oz. egg (reconstituted) ; 1 lb. soaked stale bread, or mashed potato ; ½ lb. margarine ; 1 lb. grated cheese ; seasoning and vinegar.

Method : Flake up fish, beat up soaked bread (or potato) and mix together. Add half the cheese (grated) the egg (reconstituted) and the margarine (melted). Season well. Moisten with the juice from the fish, some vinegar and water to make quite a moist mixture. Put into a greased dish, sprinkle with the rest of the grated cheese and bake in a moderate oven till firm and brown on top.

7. *SAVOURY RICE*

Ingredients :

3 lb. rice ; ½ lb. onion ; 1½ lb. tinned tomatoes ; ¾ lb. cheese ; ½ lb. fat ; 1 quart stock seasoning.

Method : Peel the onions and chop into small pieces. Wash the rice. Brown the onions and rice in the fat. Stir in all the other ingredients except the cheese, and cook gently for about 20 minutes. Add the cheese just before serving. Season well.

8. *SAVOURY RICE AND EGG DISH*

Ingredients :

2 lb. rice ; ½ lb. cheese ; ¼ lb. margarine ; 2 tablespoons tomato sauce ; 2 level tablespoons curry powder ; 1 lb. dried egg (reconstituted) ; 1 pint milk and water ; ¼ lb. margarine ; ¼ lb. flour or soya flour ; seasoning.

Method : Wash and cook the rice, strain and add the curry powder, tomato sauce and grated cheese. Beat in the margarine, season well and spread thickly over the dish. Heat together milk and margarine, add the reconstituted egg, the flour or soya mixed with a little water and season well. Scramble carefully and pile on the savoury rice. Serve at once.

9. *SAVOURY EGG PATTY*

Ingredients :

5 lb. biscuit pastry ; 1 lb. dried egg ; 2½ lb potato (cooked) ; 6 lb. sausage meat ; about 2½ pints milk or vegetable water ; 1½ lb. onions ; ¼ lb. fat ; 2 oz. parsley, chopped ; seasoning to taste.

Method : Mince the onions and fry them in the fat. When cooked, add the sausage meat and let it cook for about 15 minutes. Work in the potato, add parsley and seasoning and enough liquid to make a fairly soft consistency.

Roll the pastry thin and line deep patty tins or baking trays. Half fill the pastry cases with sausage mixture. Reconstitute the eggs, season well, and pour over the sausage meat. Bake in a moderate oven until set and brown.

10. *RUSSIAN PIE*

Ingredients :

1 lb. dried egg ; 1 lb. onions or leeks ; 2 lb. cooked vegetables ; 1 lb. cooked potatoes ; ¾ lb. cheese ; 2 oz. parsley ; 12 pints milk ; salt and pepper.

Method : Reconstitute the dried egg, whisk thoroughly with the milk and seasoning. Chop the onion finely, dice the vegetables. Add these and the grated cheese to the custard and bake in a hot oven until set. Serve with potatoes and fresh vegetables or a salad.

11. *POTATO CHEESE SOUFFLÉ*

Ingredients :

¾ lb. dried egg ; 10 lb. potatoes (cooked) ; 1 lb. cheese ; 1½ lb. flour ; 2 tablespoons baking powder ; milk to mix ; salt and pepper.

Method : Mash the potatoes, sieving them if possible. Reconstitute the dried egg and add to the potatoes with the other ingredients, with enough milk to make a soft consistency. Bake in greased dishes and serve hot with potatoes and a fresh vegetable or salad.

12. *WELSH RAREBIT*

Ingredients :

12 oz. flour ; 4 oz. margarine ; 6 pints milk ; 3 lb. cheese ; 1 oz. made mustard ; seasoning.

Method : Grate the cheese. Prepare white sauce with flour, margarine and milk. When cooked add the mustard and seasoning. Stir in the grated cheese. When melted pour on slices of toast and brown under the grill. It is advisable to have this mixture prepared beforehand. It will keep for two or three days.

13. *VEGETABLE HOT POT*

Ingredients :

4 lb. haricot beans or dried peas ; 9 lb. mixed carrots, onions, turnips, celery or cauliflower ; 8 lb. potato ; 1½ quarts brown gravy or sauce ; fat ; seasoning.

Method : Wash the beans or dried peas, soak them overnight, cook until tender. Prepare, cut up and cook all the other vegetables except the potatoes. The remains of any cooked vegetables may be used. Peel and partly cook the potatoes. Mix the vegetables and seasoning together in the sauce and cover with sliced potatoes. Put a few pieces of fat on the top and bake in a moderate oven until brown.

SWEETS

14. *APPLE SUZETTE*

Core and bake the number of apples required, fill with hot jam sauce and serve hot.

15. *CONGRESS TART*

Ingredients :

½ lb. margarine ; 2 oz. dried egg ; 1 lb. finely sieved plain cake crumbs ; 6 oz. sugar ; 1 teaspoonful baking powder ; 4 oz. flour ; 1 gill milk ; jam.

Method : Line baking tray with sweet paste as recipe No. 24. Cream the fat and sugar, add the reconstituted dried egg, sifted flour and baking powder and finally cake crumbs. Add milk until mixture is of a soft consistency. Spread jam on pastry, pour on mixture and bake for 25 minutes in a medium oven—temperature 280 degrees. (36 *portions*)

16. *GATEAUX*

Ingredients :

¾ lb. flour ; 1 teaspoonful baking powder ; ½ lb. margarine ; 1 gill milk ; 2½ oz. dried egg ; 2 oz. dried milk powder ; 6-8 oz. sugar ; cream substitute as recipe 25.

Method : Cream margarine and sugar, and dried milk powder and dried egg. Sift flour and baking powder and add to mixture. Gradually add milk until the mixture is of a dropping consistency. Pour into a greased tin and bake in a moderate oven (280 degrees) for 20-30 minutes. When cold—split, fill with jam and cream. Decorate with cream and cake crumbs, etc. (20 *portions*)

17. *GUARDS PUDDING*

Ingredients :

2 lb. flour ; 2 oz. baking powder ; ¼ lb. lard ; 1 lb. jam ; ¾ lb. suet ; 1 lb. white breadcrumbs, sifted ; 4 oz. dried egg ; ½ lb. milk powder—reconstituted.

Method : Mix flour and dried egg, rub in lard, add suet, baking powder, breadcrumbs and jam. Mix thoroughly with reconstituted milk. Pour into well-greased basins, cover and steam for 1¾ hours. Serve with jam sauce, made with 1 lb. jam, 1 quart water. (40 *portions*)

18. *ICE CREAM*

Ingredients :

6½ oz. margarine ; 10 oz. sugar ; vanilla essence ; 5 oz. soya flour ; 3¼ pints water ; ½ oz. gelatine ; 8 oz. dried skimmed milk powder.

Method : Mix 4 ozs. skimmed milk powder and the soya flour to a paste with a little water, add to the boiling water. Remove from heat immediately. Add sugar and dissolved gelatine. Melt fat and whisk into the mixture. When cool add the remainder of the dried milk powder. Whisk well for 10 minutes. Freeze.

(36 *portions*)

19. *LARDY CAKE*

Ingredients :

2 lb. flour ; 1 oz. margarine ; ½ lb. golden syrup ; 2 oz. sugar ; 2 oz. yeast ; pinch of salt ; 3 oz. lard ; 6 oz. dried fruit.

Method : Mix dry ingredients—rub in 2 oz. lard and 1 oz. margarine. Cream the yeast, add 12 oz. water at 98 degrees. Add to dry ingredients and mix to a stiff dough. Add fruit. Prove for 50 minutes. Spread 1 oz. lard thickly over a baking tray. Spread half the syrup over the lard. Roll out the dough—1 in. thick. Place on a tray. Prove for 20 minutes. Bake in a fairly hot oven (350 degrees) for 10 minutes. Brush over with remaining syrup and finish baking. (30 *portions*)

20. *RUM BABA*

Ingredients :

2 lb. flour ; 1½ oz. yeast ; rum essence ; 2 oz. sugar ; 4 oz. dried egg ; pinch of salt ; 6 oz. fat ; 1 pint of milk.

Method : Make a sponge with 1 lb. flour and 1½ ozs. yeast dissolved in 1 gill of water at 120 degrees. Stand to prove in a warm place for 10 minutes. Mix remaining dry ingredients. Melt fat and add to dry ingredients, then add the reconstituted egg and sponge dough. Knead thoroughly into a soft dough. Half fill well greased dariole moulds. Prove for 15 minutes. Bake thoroughly until dry in the centre. Allow to cool. Soak in hot syrup made from :—

2 oz. golden syrup ; 1 pint water ; rum essence.

Allow to drain and brush with apricot jam sauce and decorate.

21. *SURPRISE EGGS*

Ingredients :

1 Swiss roll ; tinned apricots ; 4 oz. jelly crystals.

Cornflour sauce made of :—
4 oz. milk powder, reconstituted ; 2 oz. cornflour ; 1½ oz. sugar.

Method : Cut swiss roll into ten portions, place half an apricot on each, outer side uppermost. Cover with a thin coating of cornflour sauce. Allow to cool, then pour prepared jelly over the whole and allow to set. (10 *portions*)

PASTRY, SAUCES, ETC.

22. *BISCUIT PASTRY*

Ingredients :

¼ lb. dried egg ; 4½ lb. flour (self-raising) ; 1¼ lb. cooking fat ; salt to taste ; water to mix.

Method : Mix the flour, salt and dried egg ; rub in the fat. Mix to a stiff dough. *Use for flans, tarts, etc.*

23. *PROFIT ROLLS*

Ingredients :

12 oz. margarine ; 1½ pints water ; 12 oz. flour ; 12 oz. dried egg reconstituted.

Method : Heat margarine and water, add flour and boil. Whisk in the egg while still hot.

Use for eclairs, or shortcake foundation for cream buns.

24. *SWEET PASTRY*

Ingredients :

2 lb. flour ; 6 oz. sugar ; 10 oz. fat (5 margarine, 5 lard) ; ½ gill water.

Method : Rub fat into flour, mix in sugar and make stiff dough with water. *Use for flans, tarts, etc.*

25. *CREAM*

Ingredients :

4 pints custard (made as in Recipe 27, or with custard powder) ;

2 lb. dried milk.

Method : Beat the dried milk into the custard and continue to beat until white.

26. *CHOCOLATE SAUCE*

Ingredients :

1 lb. golden syrup ; 8 pints water ; 1 lb. cocoa ; 12 oz. custard powder or cornflour.

Method : Heat golden syrup and water. Mix the custard powder to paste with cold water, add the syrup and cook until it thickens—beat in the cocoa.

27. *CUSTARD*

Ingredients :

12 pints milk (dried milk) ; 8 oz. dried egg ; 8 oz. flour.

Method : Mix the dried egg and flour to a paste with milk, put the remainder on to heat. Stir in the mixture and heat until it thickens.

28. *MAYONNAISE SAUCE*

Ingredients :

2 oz. dried egg ; 4 oz. margarine ; ½ tablespoon sugar ; ½ tablespoon salt ; ½ tablespoon mustard ; pepper to taste ; 4 oz. flour ; 1½ pints milk and water ; vinegar to taste.

Method : Mix all the dry ingredients except the dried egg to a paste with some of the milk. Beat the rest of the milk on to the blended ingredients and bring to the boil. Boil for a few minutes. Whisk in the reconstituted dried eggs and the margarine and cook for five minutes more. Cool and add vinegar.

N.B.—Reconstituted dried milk can be used in all recipes containing milk.

APPENDIX D

HUMAN NUTRIENT REQUIREMENTS

Reference is made on page 3 to the " dietary allowances " on which can be based estimates of the needs of a particular class of individual for a range of nutrients. The Table below gives both the " full dietary allowances " and the " restricted intake requirements."

The following note taken from " Food Consumption Levels in the United States, Canada and the United Kingdom " (H.M. Stationery Office, 1944) will explain the relation between these two sets of figures :—

> " Average (restricted) Intake Requirements
>
> The National Research Council ' recommended Dietary allowances ' are stated to be a ' tentative goal toward which to aim in planning practical dietaries.' They are recognised as liberal and difficult of fulfilment under prevailing conditions. Experience in the United Kingdom has shown that somewhat lower levels of intake of minerals and vitamins are compatible with a good general state of nutrition, although doubtless health could be improved if the full allowances were obtainable. We have therefore adopted as ' average ' (restricted) intake requirements, the National Research Council figures for calories and protein in all cases and for minerals and vitamins in respect of the groups up to the age of 20 and expectant and nursing mothers, and 70 per cent. of the National Research Council allowances for minerals and vitamins for adult men and for adult women (other than expectant mothers)."

The figures in brackets in the following table give the lower levels of intake of minerals and vitamins which are compatible with a good general state of health :—

RECOMMENDED DIETARY ALLOWANCES

Food and Nutrition Board, National Research Council

	Calories	*Protein* gms.	*Calcium* gms.	*Iron* mgs.	*Vitamin A* I.U.	*Thiamin (B1)* mgs.*	*Riboflavin (B2)* mgs.	*Nicotinic Acid* mgs.	*Ascorbic Acid (C)* mgs.	*Vitamin D* I.U.
Man (70 kg.)										
Moderately active	3000	70	0.8 (0.56)	12 (8.5)	5000 (3500)	1.8 (1.3)	2.7 (1.9)	18 (13)	75 (52)	†
Very active ...	4500					2.3 (1.6)	3.3 (2.3)	23 (16)		
Sedentary	2500					1.5 (1.1)	2.2 (1.5)	15 (10.5)		
Woman (56 kg.)										
Moderately active	2500	60	0.8 (0.56)	12 (8.5)	5000 (3500)	1.5 (1.1)	2.2 (1.5)	15 (10)	70 (49)	†
Very active ...	3000					1.8 (1.3)	2.7 (1.9)	18 (13)		
Sedentary	2100					1.2 (0.8)	1.8 (1.3)	12 (8)		
Pregnancy (latter half)	2500	85	1.5	15	6000	1.8	2.5	18	100	400-800
Lactation	3000	100	2.0		8000	2.3	3.0	23	150	400-800
Children up to 12 years										
Under 1 year ...	100 per kg.	3-4 per kg.	1.0	6	1500	0.4	0.6	4	30	400-800
1-3 years	1200	40	1.0	7	2000	0.6	0.9	6	35	
4-6 years	1600	50	1.0	8	2500	0.8	1.2	8	50	†
7-9 years	2000	60	1.0	10	3500	1.0	1.5	10	60	
10-12 years ...	2500	70	1.2	12	4500	1.2	1.8	12	75	
Children over 12 years										
Girls : 13-15 years	2800	80	1.3	15	5000	1.4	2.0	14	80	†
16-20 years	2400	75	1.0	15	5000	1.2	1.8	12	80	
Boys : 13-15 years	3200	85	1.4	15	5000	1.6	2.4	16	90	
16-20 years	3800	100	1.4	15	6000	2.0	3.0	20	100	

A gram in the international metric system of weights and measures is about 1/28th oz. A kilogram, which is 1,000 grams, is equal to 2.2 lb. A milligram is 1/1,000th of a gram. A calorie is a unit of measurement used to express the heat-producing or energy-producing value of food.

* 1 mg. thiamin equals 333 international units ; 1 mg. ascorbic acid equals 20 I.Us. (1 international unit equals 1 U.S.P. unit).

† Vitamin D is undoubtedly necessary for older children and adults. When not available from sunshine it should be provided probably up to the minimum amounts recommended for infants.

APPENDIX E.

TABLE OF NUTRITIVE VALUE OF FOODSTUFFS

All values are given per ounce of edible portion (uncooked)

The values in this table have been compiled, after consultation with the Ministry of Food, from data which is used by them for calculating the Nutritive value of meals.

FOODSTUFF	Description	Percentage Waste	Protein gms.	Fat gms.	Carbohydrate gms.	Calories	Calcium mgs.	Iron mgs.	Vitamins A I.U.	Vitamins B1 I.U.	Vitamins B2 Riboflavin mgs.	Vitamins Nicotinic Acid mgs.	Vitamins C Ascorbic Acid. mgs	Vitamins D I.U.
1. *Cereals*														
Bread, National ...	80% extraction		2.4	0.3	14.7	71	16.8	0.34	0	14	0.017	0.33	0	0
Flour, National ...	80% extraction		3.4	0.4	20.3	98	23.4	0.45	0	23	0.24	0.45	0	0
Biscuits	1. Plain (water)		3.4	0.9	21.3	107	23.0	0.6	0	12	(0.03)	(0.3)	0	0
	2. Sweet		2.0	6.8	16.8	136	14.0	0.3	0	6	(0.03)	(0.3)	0	0
Barley			2.2	0.5	20.8	97	3.0	0.2	0	11	(0.01)	(0.7)	0	0
Cornflour			0.2	0.1	24.4	99	11.0	0.1	0	0	(0.02)	(0.3)	0	0
Custard powder (as cornflour) ...			0.2	0.1	24.4	99	11.0	0.1	0	0	(0.02)	(0.3)	0	0
Sago			0.1	0.1	24.0	97	3.0	0.3	0	0	—	—	0	0
Semolina			3.0	0.5	19.8	96	5.0	0.30	0	9	(0.01)	(0.3)	0	0
Soya flour ...			11.5	6.7	3.8	122	62.0	2.0	0	62	0.09	1.1	0	0
Tapioca			0.1		24.3	98	2.0	0.1	0	0	—	—	0	0
Cornflakes			3.9	0.7	18.7	97	10.0	1.4	0	4	0.02	0.3	0	0
Shredded Wheat ...			3.5	0.7	19.1	97	7.0	1.2	0	19	(0.02)	(0.3)	0	0
Oatmeal			3.4	2.5	18.6	111	16.0	1.2	0	43	0.04	0.3	0	0
Rice, highly milled ...			1.8	0.3	22.2	99	1.0	0.1	0	8	0.02	0.3	0	0
2. *Dairy Products*														
Butter			0.1	23.4	0	211	4	—	1136	0	0	0	0	17
Cheese	Cheddar	5	7.1	9.8	0	117	230	0.2	369	3	0.14	(0.1)	0	10
Egg	Raw or boiled	12 (shell)	3.5	3.3	0.2	45	17	0.8	284	14	0.11	tr.	0	17
Dried egg			13.0	11.9	0.9	163	62	3.1	852	38	0.37	0.1	0	68
Milk, whole	Fresh		0.9	1.0	1.2	17	34	Trace	[*] [†]	4	0.04	tr.	[0.4] [0.3]	0.3
Milk, whole	Condensed unsw. U.K.		2.4	2.6	3.3	46	83	0.1	105	6	0.10	0.1	0	1
Milk, whole	Dried		7.3	7.6	10.1	138	254	0.2	304	28	0.33	0.2	0	3
Milk, skimmed ...	Dried		10.2	0.2	13.6	97	348	0.3	9	37	0.45	0.3	0	0
3. *Fats and oils*														
Margarine	Vitaminised			24.2	0	218	1	0.1	568	0	0	0	0	56
Cooking fat	Animal origin		0	28.1	0	253	0	0	0	0	0	0	0	0

* May - Nov. 40. † Dec. - April 29

NUTRITIVE VALUE OF FOODSTUFFS—*cont.*

FOODSTUFF	Description	Percentage Waste	Protein gms.	Fat gms.	Carbohydrate gms.	Calories	Calcium mgs.	Iron mgs.	Vitamins					
									A I.U.	B1 I.U.	B2 Riboflavin mgs.	Nicotinic Acid mgs.	C Ascorbic Acid mgs	D I.U.
4 *Meat*														
Bacon		12	3.2	12.7	0	127	3	0.3	0	57	0.06	1.2	0	0
Beef	Fresh. Average of good quality carcase. (Bone in)	17 (Bone)	4.3	8.0	0	89	2	1.1	14	8	0.07	1.3	0	0
Beef	Frozen		5.8	2.1	0	43	2.3	1.05	14	7	0.07	1.3	0	0
Beef, corned ...			7.1	4.5	0	69	3	3.1	0	0	(0.04)	(0.5)	0	0
Liver, ox			4.8	1.7	1.4	40	3	3.9	4260	38	0.85	3.8	0	0
Kidney			4.5	2.0	0	36	3	3.8	284	23	0.37	3.8	0	0
Pork		15	3.4	11.4	0	116	4	0.4	0	68	(0.06)	1.7	0	0
Sausage	Beef		3.3	3.7	3.7	61	9	0.6	3	14	(0.02)	(0.5)	0	0
Sausage	Pork		2.6	12.2	0.3	121	3	0.6	0	43	(0.02)	(0.5)	0	0
Mutton		17	3.7	8.8	0	94	2	0.6	14	15	0.05	1.2	0	0
Variety meats (Average) Spam, etc.	Luncheon meat		4.3	6.0	0	71	3	0.6	0	43	—	—	—	—
5. *Fish*														
White fish	Cod, haddock, ling, etc.	45	4.5	0.1	0	20	7	0.3	0	6	0.04	0.6	0	0
Salmon	Tinned		5.7	2.8	0	48	85	0.4	71	11	0.06	1.8	0	170
Sardines	Tinned		5.7	6.8	0	84	114	1.1	77	0	(0.08)	1.3	0	280
Herring (Jan.-Aug.)	Fresh	35	4.5	4.3	0	57	28	0.4	43	1	—	—	0	240
Herring (Sep.-Dec.)	Fresh	40	4.5	2.3	0	39	28	0.4	43	1	—	—	0	—
Herring	Canned in tomato sauce		4.5	2.8	0	43	28	0.4	9	0	(0.08)	(1.0)	0	50
6. *Fruit*														
Apple...	English eating	20	0.1	0	3.0	12	1	0.1	4	4	tr.	0.1	1	0
Apple...	Dried		0.6	0	12.5	52	9	0.6	9	0	(0.01)	(0.4)	0	0
Apricot	Fresh	8	0.2	0	1.7	8	5	0.1	71	3	0.02	(0.1)	3	0
Apricot	Tinned		0.1	0	3.5	14	4	0.1	47	2	(0.02)	(0.1)	1	0
Apricot	Dried		1.4	0	11.1	50	26	1.2	473	0	(0.12)	(0.6)	0	0
Banana		40	0.3	0	5.0	21	2	0.2	8	5	0.01	(0.2)	3	0
Currants, black ...	Raw		0.3	0	1.7	8	17	0.4	9	4	(0.01)	(0.1)	57	0
Dates	Dried	14	0.6	0	16.4	68	19	0.5	9	0	0.01	(0.1)	0	0

NUTRITIVE VALUE OF FOODSTUFFS—*cont.*

FOODSTUFF	Description	Percentage Waste	Protein gms.	Fat gms.	Carbohydrate gms.	Calories	Calcium mgs.	Iron mgs.	Vitamins A I.U.	Vitamins B1 I.U.	Vitamins B2 Riboflavin mgs.	Vitamins Nicotinic Acid mgs.	Vitamins C Ascorbic Acid mgs	Vitamins D. I.U
Figs	Dried		1.0	0	13.5	58	81	1.2	9	0	0.08	0.5	0	0
Lemon		64	0.1	0	0.4	2	2		0	3	0	0	14	0
Orange	Sweet	25	0.3	0	2.1	10	12	0.1	28	7	0.01	0.1	16	0
Peach...	Fresh	13	0.1	0	2.3	10	1	0.1	71	2	0	0.2	3	0
Peach...	Tinned		0.1	0	3.9	16	2	0.2	47	1	0	0	1	0
Pear	Eating	25	0.1	0	2.7	11	1	0.1	1	2	0.01	0.1	1	0
Pear	Tinned		0.1	0	3.6	15	3	0.2	0	1	(0.01)	0	0	0
Pineapple	Tinned		0.1	0	4.9	20	3	0.2	6	5	(0.02)	0	3	0
Plum	Fresh { Rd, Yllw / Victoria }	6	0.1	0	{ 1.6 / 2.4 }	7 / 10	4 / 3	0.1	38	4	0.01	0.2	1	0
Prune...	Dried	17	0.7	0	10.2	44	11	0.8	237	0	0.04	0.6	0	0
Raisins	Dried	8	0.3	0	16.5	67	17	0.5	5	0	0.01	0.1	0	0
7. *Nuts*														
Almonds		65	5.7	15.1	1.1	163	69	1.1	0	23	—	0.4	0	0
Groundnut / Peanut		30	8.0	13.9	2.2	166	17	0.7	0	84	0.08	2.6	0	0
Walnuts	Dried	40	3.6	14.6	1.3	151	17	0.7	0	28	—	(0.4)	0	0
8. *Vegetables*														
Beans, baked... ...	Tinned		1.7	0	4.5	25	16	0.7	47	6	0.01	0.2	0	0
Beans, haricot ...	Dried		6.1	0	11.6	71	51	1.9	0	43	0.08	0.6	0	0
Cabbage	Fresh	30	0.4	0	1.4	7	18	0.3	85	7	0.02	0.1	20	0
Cabbage	Dehydrated		5.3	0.4	15.2	88	188	0.3	1130	0	(0.15)	(0.7)	90	0
Carrot	Fresh	5 to 20	0.2	0	1.4	6	14	0.2	{ * / † }	6	0.01	0.2	3	0
Carrot	Dehydrated		1.7	0.4	20.5	94	120	1.4	11600	0	(0.05)	(1.0)	6	0
Cauliflower	Fresh	30	0.7	0	0.9	6	14	0.3	0	9	0.02	0.2	20	0
Celery		25	0.3	0	0.3	2	15	0.2	0	3	—	—	1	0
Artichokes, Jerusalem (boiled) (3)			0.5	tr.	0.8	5	8.6	0.12	—	—	—	—	—	—
Lentils			6.8	0	13.6	82	11	2.2	5	43	0.02	0.9	0	0
Lettuce	Raw	20	0.3	0	0.5	3	7	0.2	379	7	0.02	0.1	4	0
Onion	Bulb	5	0.3	0	1.3	6	9	0.1	0	3	0.01	tr.	3	0
Peas	Fresh raw	60	1.6	0	2.7	17	4	0.5	47	40	0.03	0.2	9	0
Peas	Dried		7.0	0	14.2	85	17	1.3	19	43	0.08	0.6	0	0
Potato		early 7 old 25	0.6	0	4.6	21	2	0.2	0	11	0.02	0.3	early 9 old 2	0

* July-Aug. 947. † Sept. 1893.

NUTRITIVE VALUE OF FOODSTUFFS—*cont.*

FOODSTUFF	Description	Percentage Waste	Protein gms.	Fat gms.	Carbohydrate gms.	Calories	Calcium mgs.	Iron mgs.	Vitamins A I.U.	Vitamins B1 I.U.	Vitamins B2 Riboflavin mgs.	Vitamins Nicotinic Acid mgs.	Vitamins C Ascorbic Acid mgs	Vitamins D I.U.
Potato	Dehydrated		2.5	0	23.0	101	24	0.9	0	27	(0.10)	(1.5)	12	0
Pumpkin		19	0.2	tr.	0.9	4	11	0.1	15	3	0.01	0.2	3	0
Spinach	Fresh	25	0.8	0	0.7	6	20	0.9	1231	9	0.06	0.1	18	0
Swedes	Raw	35	0.3	0	1.1	6	16	0.10	—	3	(0.01)	(0.3)	11	0
Tomato	Fresh	15	0.3	0	0.7	4	4	0.1	284	6	0.01	0.1	7	0
Turnip ...	Fresh	35	0.2	0	1.0	5	17	0.1	0	3	0.01	0.3	7	0
9. *Sugar, preserves and sweets*														
Jam (4)			0.1	0	17.6	71	3	0.3	2	tr.	0	0	1	0
Marmalade ...			0.1	0	17.6	71	3	0	0	0	—	—	2	0
Sugar...	White		0	0	27.0	108	0	0	0	0	0	0	0	0
Syrup, golden ...			0.1	0	20.2	81	7	0.4	0	0	0	0	0	0
10. *Beverages*														
Cocoa	Powder		5.8	7.3	8.9	125	14	4.1	14	11	0.08	(0.3)	0	0
Horlick's Malted Milk			4.1	2.4	18.1	110	77.2	0.37	—	—	—	—	0	0
Marmite			2.8	0	0	11	22	1.5	0	140	1.70	19	0	0
Meat Extract ...			8.6	0.6	0	41	22	3.7	0	25	0.48	17	0	0
Ovaltine	Powder		3.8	2.2	15.8	98	96	1.0	114	37	0.17	—	0	0

(1) ( ) means that the figure is calculated from a similar food or that a factor has been applied.

(2) This includes roes and milts.

(3) This vegetable contains inulin—50% total CHO taken to be available.

(4) Black currant jam 6 mgs. Ascorbic Acid. Blackberry, Raspberry and Red currant jelly, 1 mgm. Ascorbic Acid. Gooseberry and Strawberry jam, 1 mgm. Ascorbic Acid. All other jams do not contain Ascorbic Acid.

(5) — means that the figure is unknown.

Published 1943:

MEMORANDUM ON THE SUPERVISION OF NURSES' HEALTH.
Price 3d., post free.

MEMORANDUM ON HOSPITAL DIET.
Price 6d., post free,
For consideration by hospitals.

Published 1945:

NURSING STAFF—CONSIDERATIONS ON STANDARDS OF STAFFING.
Price 6d. net, post free.

SECOND MEMORANDUM ON HOSPITAL DIET.
For consideration by hospitals.
Price 9d., post free.

Obtainable from Messrs. GEO. BARBER & SON, LTD.,
Furnival Street, London, E.C.4.