NOTES ON HOSPITAL DIETARIES.

BY ELLEN H. RICHARDS,
Instructor in Sanitary Chemistry, Massachusetts Institute of Technology.

The plan of guiding the officers of public institutions in the choice of their supplies is being tried in New York, where the State Commission in Lunacy obtained, in 1893, from the best authority attainable — Dr. Austin Flint — a suggested dietary. By sending this to the institutions for the care of the insane, with the request for modifications as shown by experience, the commission has secured a report of great value, not only to the State of New York, but also to all the country.

An exhaustive study of the German hospital dietaries has been made by Dr. W. Prausnitz of Munich, and the results are given in an able article in the *Deutsche Vierteljahreschrift für Öffentliche Gesundheitspflege*, 1893, p. 563. This should be studied by all who are concerned in hospital management; but we find that the habits of the people and the food they eat are so different that only general help can be gained from any foreign source.

Dr. Prausnitz, however, clearly defines the lines on which the work should progress, and recommends that the house diet be a good, normal one, suitable for the majority of cases, and one from which the liquid diets may be largely taken. To this additions may be made in especial cases.

It is common in Germany to divide the patients into three groups:

1. Those suffering from accidents, skin diseases, or other local troubles, who require the diet of an adult in rest (not a full work diet).
2. Those severely ill, who require specially appetizing and digestible food in rather large quantity.
3. Those suffering from acute fever or chronic disease of the digestive organs, for whom liquid or other special diet is prescribed.

Prausnitz states that, for the first class, food equivalent to —

	Proteid.	Fat.	Carbohydrates.
	Grammes.	Grammes.	Grammes.
For a man.....	110	50	350 to 400
For a woman.....	100	50	300 to 350

— should be prescribed.

For the second, the proteid and fat should be increased to 130 and 70, respectively, but the starch should be limited.

For the third, no rule can be given, for here the physician must individualize.

In Leipzig, a specially hearty eater is allowed a half more of everything. Sometimes extra bread is given, to the amount of 100 to 200 grammes, furnishing 9 to 18 grammes of proteid, and 50 to 100 of carbohydrates.

The food value of Dr. Flint's revised dietary is not given in his report, and, therefore, we may not be correct in our assumptions; but we find the figures, as estimated by the factors which we are in the habit of using for other work, to be about —

Proteid.	Fat.	Carbohydrates.	Calories.
Grammes. 138.4	Grammes. 128.5	Grammes. 412.3	3433

A comparison of these figures with those given above will show, either that the German physicians very much underfeed their patients, or that there is a great waste in American establishments. We need many more exact figures, and consideration of questions of climate, mode of life, etc., before this point can be settled. At present we feel inclined to consider the proposed dietary to be somewhat in excess of the necessary requirements of a well-managed institution.

The quantities of eggs and butter proposed in Dr. Flint's dietary are beyond the means of a State institution, and in a charity hospital the expense of these articles should be guarded.

In passing, it may be remarked that we have not been able to persuade American people to eat the quantities of peas, beans, and cheese which the report calls for, even with the most careful cooking and flavoring.

As a basis for comparison, we give in the following table the quantities of some other dietaries which have been under our control or direct observation.

The cost of No. 1 we estimate as from 20 to 25 cents per day; the cost of No. 2 was 22 cents; of No. 3, 14 cents; of No. 4, 10 cents.

The number of persons included in the family was, for No. 2, 130; for No. 3, 600; for No. 4, 2,400. This is an important factor in the cost.

AVERAGE DAILY DIETARY AS GIVEN BY DR. FLINT, IN NEW YORK, COM-
PARED WITH THAT FROM VARIOUS OTHER PLACES.

	Dr. Flint, N. Y. Insane Hospitals.	Chicago Univer- sity—6 months.	Valparaiso (Ind.) Normal School— 3 months.	Kaukaee (Ill.) Hospital.
	Oz.	Oz.	Oz.	Oz.
Meats (with bone), salted meats, fresh and salt fish	12	14.6	7.3	11.2
Flour, corn meal, and macaroni.....	12	7	9.2	14
Potatoes.....	12	10.9	15	8
Milk.....	16	19.4	8.5	12.7
Cream.....		1.9		
Egg.....	2 (1)	0.6	0.05	0.17
Sugar.....	2	2.1	2.1	1.8
Butter (and lard).....	2	1.6	1.8	1.4
Cheese.....	1	0.06	0.02	0.18
Rice, hominy, and oatmeal.....	1.5	0.8	1.3	1.4
Beans or peas	1.5	0.2	0.6	0.64
Dried fruits.....		1.4	1.4	1.5
Fresh fruits and vegetables.....		3.5	8.8	5
Molasses and syrup.....		0.8	1.8	0.94
Cost (cents).....	20 to 25	22	14	10

It is a comparatively simple matter to sit at one's desk and make out a good and sufficient menu, covering the physiological requirements for any given class of people. A complication arises when this menu must be furnished for a definite and limited sum; but the crucial test, and the one which proves fatal to nearly all of our attempts to put well-thought-out theories into practice is the refusal of the people to eat the good things thus carefully provided for them. Who has not seen a dog refuse the dainty morsel from his mistress' dainty hands, and then go straightway to a neighbor's swill-pail and ferret out some scrap which satisfied his craving?

We sometimes forget that the habit of eating civilized food is as truly a matter of education as is the wearing of well-fitting and becoming clothes, or the suitable furnishing of one's house. We are apt to think that our food should seem a luxury to those in the so-called lower classes, or to people poorer than ourselves. This is not the case, as one finds when one begins to cater to the inmates of an institution, school, or boarding-house. People like best that to which they are accustomed.

It is true that the attitude of mind has much to do with the food habit, and, if one will, one can learn to like almost anything.

Therefore the strongest hope of the provider for a mass of people lies in persuading them that the prescribed food is very good in itself, and not merely good for them. To this end the "pills" must be not only sugar-coated, they must look like candy. In these facts may be found the reason why food reformers have hitherto failed, and why most of us reasonable "food cranks" may be worsted any day by a really good cook who will give the people what they like.

It is not enough, therefore, to calculate the food value; not enough to select the best recipes; not enough to have the food served in a manner that is attractive to us. The food must have a familiar look and taste, or enough so that the question will not be raised whether it is a new dish or not.

A study, therefore, of existing habits and customs is essential to success in catering to any large body of people, especially those who have not been accustomed to variety. If they could be fed with their eyes bandaged it would be easier.

In hospitals these considerations are especially important, and in hospitals for the insane they are particularly so, for there the nutrition is of the utmost consequence.

The steward of any institution should, therefore, be familiar with the idiosyncrasies of the inmates, and should introduce slowly, and in small quantities, any new article, and not force a carload of cheap but unacceptable food upon the unwilling cook. The cook feels the pulse of the institution, and the practice of having a steward who does the buying and ordering, and a cook who only prepares the materials provided by others, who do not come in contact with the kitchen, is not to be recommended.

The matter of waste is often a serious one, but it must be carefully considered whether it does not cost 10 cents to save 1. Even if one-third of the potatoes are wasted in careless paring, it will not pay to hire high-priced help to save the potato parings, however it may vex the economist to see them fed to the hogs. A very nice balance must be kept in this way between the theoretical and the practical. But the great struggle comes with the attitude of the patients toward their food, and this again is largely in the hands of the nurses and attendants. If there is confidence in the kitchen management, so that the doctors, nurses, and patients feel that the food is chosen and prepared with the best knowledge, care, and skill available, then, and only then, will there be some hope of improvement in the present unsatisfactory conditions.