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NUTRITION AND COMMONSENSE

THE NEW FOOD KNOWLEDGE AND SOME FALLACIES

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The importance of diet in relation to health has at last caught the public imagination. Doubtless the remarkable developments in physiology and biochemistry, more especially the discovery of the vitamins has had a good deal to do with this rather sudden and most welcome awakening of interest. A higher level of general health as well as a greater freedom from the more common diseases is now seen to be within the reach of all, and the man in the street may be pardoned if he is somewhat dazzled by the prospect of better health combined with lower doctor's bills. But such a situation also lends itself to exploitation and provides another opportunity for fleecing the public. It almost looks as if the present era of patent medicines is already on the wane and we are entering a new, but no less glorious era of patent foods! Obviously there is need for keeping this newer knowledge about nutrition in proper perspective and for scrupulously avoiding all exaggerated claims or statements which in the long run will bring the subject into disrepute. Already there are people who maintain that all this talk about nutrition is becoming a ramp.

A few of the more neglected aspects of this large subject may be briefly considered in the following propositions:—

(1) THE FOOD WE EAT IS ONLY ONE AMONGST MANY OTHER FACTORS RESPONSIBLE FOR PRODUCING GOOD NUTRITION

The word nutrition, like many others, has to do duty for several different conceptions and unless used with care only leads to muddled thinking. Usually we regard nutrition and food as almost synonomous terms, though most of us would admit that an adequate supply of good food is not the only thing that a child, for example, requires in order to be well nourished. Hereditary defects, lack of timely attention to minor ailments, lack of fresh air and exercise, undue fatigue caused by too much activity in our strong sunlight or too little undisturbed sleep, pressure at school together with homework often carried out in a radio-soaked atmosphere, can all play their part in causing malnutrition. Moreover, sensitive children can hardly be expected to thrive if the parent-child relationship is unsatisfactory, or for that matter if the parents themselves are at loggerheads. While the importance of food must be kept clearly in mind, only disappointment and disillusionment awaits us if we are tempted to rely on what has been well termed "effortless health through food." Indeed it is instructive to note that, provided other conditions are favourable, children may be found to flourish although the actual food available may fail to reach ideal standards.

(2) STATES OF NUTRITION ARE MUCH EASIER TO TALK ABOUT THAN TO ASSESS.

Another source of confusion arises from the difficulty of defining and the lack of reliable methods for measuring nutritional states. Our present knowledge leaves much to be desired, although the matter is receiving much attention at the present time. Moreover there is a good deal of uncertainty as to what exactly should be aimed at. Thus mere size is a questionable objective. The rosy-cheeked " well-upholstered " child, a commonly accepted ideal, may in actual fact be less vital, less resistant to infection, and less well endowed with powers of endurance than his paler, thinner yet more wiry school fellow. Are we, therefore, to judge by appearance or by function ?

(3) DIETETICS IS STILL A YOUNG SCIENCE.

Although dietetics has been called the oldest of the arts it is one of the youngest of the sciences. So far its chief triumphs have been gained mainly from the the analytical side. The food we eat has been split up more or less exhaustively into its chemical components and much has been learnt about the functions and relative importance of each constituent. It was work of this type which led to the discovery, isolation, identification and in many instances, synthetic preparation of the vitamins.

But far less is known about the inter-relationships of all these constituents, or of the amounts required for the proper functioning of the various bodily processes in health and disease. Least of all do we understand the complex series of reactions that occur when food is digested, assimilated and utilised. In fact although an amazing amount of precise knowledge has already been accumulated the chemistry of the body still remains a baffling yet fascinating study; the more light we gain the more clearly the complexity of the processes with which we shall have to deal are revealed. The discovery of the vitamins has been of immense importance from the theoretical standpoint as also for the planning of diets for special purposes and for the treatment of certain disorders, particularly those associated with the faulty assimilation of food. But *healthy* individuals living on a varied diet are unlikely to suffer from vitamin deficiency conditions, nor is there much evidence to indicate that they would be any better in health for consuming large quantities of these substances, which are normally utilised in very small amounts. Hence, whilst their essential nature should never be forgotten there is no need to become unduly vitamin-conscious, or in ordinary cases to make use of expensive artificial vitamin concentrates ; the usual rule applies, that " enough is as good as a feast." It has been well said that the most important vitamin in our diet is common sense. Nevertheless recent discoveries have been so startling and so intriguing that impressionable people may be forgiven if they hurry away to buy iodine lockets, stuff their unfortunate offsprings with calcium in quite unnecessarily expensive forms, or join the ranks of the vitamin worshippers.

Gradually our young science of dietetics will mature, but in the meantime it is surely as unwise as it is unnecessary to lose faith in the valuable body of knowledge about food and feeding that has been accumulated at great expense along the less imposing but no less solid lines of practical experience, the results of which are so often enshrined in custom and tradition. Admittedly there are bad as well as good traditions about diet, but wisdom lies in testing the new against the old, of holding on to that which has stood the test of time, rather than in being unduly carried away by the very latest pronouncement of the latest scientist. Science at any rate has learnt to respect traditional knowledge, for her function is to explain the old as well as to discover the new.

(4) A GOOD DIET CAN YET BE A SIMPLE DIET.

The many chemical substances that occur in our food and are known to be essential for proper nutrition tend to create the unfortunate impression that the good diet must include quite a large number of foodstuffs, the omission of any one being likely to be followed eventually by all sorts of dire consequences. To "eat little of much" is an excellent slogan and while efforts to enable people to carry it out would be an excellent national objective, the fact remains that even a few foodstuffs can furnish all that we require. This may be seen by referring to the diet of the uncivilised Bantu. They learnt to rely on simple mixtures of (apparently) simple foodstuffs, such as whole cereals, milk, green leaves and yeast-containing drinks, together with smaller amounts of pulses and meat. On the whole they are able to avoid the more straightforward types of malnutrition fairly satisfactorily on this simple diet, *always provided they have continued access to an adequate supply.*

In fact the practical student of nutrition soon begins to discover that it is often not nearly so much a case of what we *could* eat that matters, as what we are *willing* to eat. All over the world great changes are taking place in the type of food consumed and the general tendency is to discard tradition in favour of less monotony, greater palatability, or more attractive appearance. Many of these changes are quite sound whilst others are less satisfactory. Thus there is little doubt that our jaws and our teeth would benefit from the thorough and leisurely chewing of hard and fibrous foods, but in an age of quick-lunch counters who is prepared to pay such a price for better dental health ?

(5) A GOOD DIET IS NOT NECESSARILY EXPENSIVE.

From the foregoing it follows that adequate though simple diets can be chosen which are very inexpensive when compared with those used in the average household. Admittedly such diets tend to be monotonous and lacking in flavour and too many people have been compelled by circumstances to become experts in this miserable kind of ingenuity; indeed it is curious to reflect that it has been left for an age of plenty to discover the possibilities of that monstrous conception—the "minimum diet."

Nevertheless it is important to be clear that a good diet is not necessarily an expensive one. For example it helps to explain the fact that although poverty is the most important single cause of malnutrition, poor families are not infrequently much better nourished than might be expected. For example in his recent and careful survey at Pretoria Le Riche found that although poor children of both sexes were somewhat shorter and lighter than more favoured children in almost all the age groups examined, the incidence of measurable malnutrition was not significantly different in the two groups. Many other similar instances are on record.

No one with any social sense would use evidence of this kind to justify the continuance of such monotonous and unpalatable diets, which are far too common, and a disgrace to our civilisation; but the sweeping statement so often made by the uninformed regarding poverty and malnutrition are fortunately not always quite so serious as they sound.

(6) POVERTY OF KNOWLEDGE OR OF INDUSTRY ARE OFTEN ALMOST AS IMPORTANT IN CAUSING MALNUTRITION AS POVERTY OF PURCHASING POWER.

A surprising amount of malnutrition occurs amongst children from the higher income groups owing to ignorance. Clearly, knowledge is especially important where purchasing power is very limited, particularly if we remember that the less expensive foods are often the most nutritious. But the results of ignorance are particularly pathetic when in addition traditional knowledge has been abandoned. Thus the urbanised Bantu, with his appallingly low purchasing power has to a large extent thrown over his traditional diet and substituted a mixture consisting largely of highly refined mealie meal, white bread, sugar and tea. Such a diet not only fails to maintain good health but is not really cheap, since there is the inevitable accompaniment of pharmacists and doctors bills to be met.

On the other hand in the countryside, in spite of very real difficulties due to lack of water, soil pests, etc., there can be no doubt that far more milk, vegetables and fruit could be grown on the average farm for home consumption. Poverty of industry must be blamed here, though it should also be remembered that the traditional diet has often not attached sufficient importance to the use of these particular foodstuffs.

(7) CONSUMPTION IS LARGELY DETERMINED BY AVAILABILITY.

This is a further difficulty in South Africa. Owing to the great distances and our small and scattered population it often happens that certain foods are both desired and could be paid for, but no steady supply is available; this applies, for example, to such foodstuffs as milk, fish, vegetables and fruit. In spite of overproduction the distributor is simply not interested in a small and scattered demand. Yet there can be no question that a higher consumption of such foods would greatly improve the diet of thousands and benefit both the producer and the distributor. Clearly a better system of distribution and marketing is one of our most urgent needs.

Nearly three hundred years ago Hobbes put some of the above issues in a nutshell when he wrote in his Leviathen "The Nutrition of a Commonwealth consisteth in the Plenty and Distribution of Materials conducing to Life." As far as foodstuffs are concerned these "Materials conducing to Life" may be listed as vegetables, dairy products and fruits.

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