

Nutritive Value of the Avocado in the Normal Diet

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The problem of nutrition is older than the human race. It began when life began upon this planet. The survival of plants, and later of animals, was conditioned upon finding proper food and a favorable environment. The physical development of man has been in no small degree dependent upon his ability to solve the food question.

We are all creatures of habit. Behaviorists tell us that habits are fairly well fixed at an early age. This is true of food habits as well as of others. One appreciates the truth of this statement as it is realized how slow adults are to change their ways of doing things. Often an indignant mother, when questioned about her undernourished child, will attempt to answer for the condition by explaining that thinness is a family trait. In many cases, close examination discloses that poor food habits are a family trait, and underweight often follows in their train.

How does all this apply to the Nutritive Value of the Avocado? The avocado is a comparatively new food. There is a close application, because it in part at least accounts for the present low consumption of avocados. There is evident need of a better understanding of the value of the avocado in the normal diet. Let us confine our thinking to the normal diet. I, as would any other person outside the medical profession, would be entirely out of my field in prescribing the avocado or any other food where a pathological condition is present.

Avocado growers are not interested in creating an artificial market for their product. They are anxious, however, that the housewives who are the buyers of food and the planners of meals have a real understanding of the value of the fruit, because they realize that knowing the product, one is sure to include it regularly in their menus.

What is a normal diet? It is one which furnishes the body with all the food essentials for growth and normal functioning of the body. To be more specific, it provides protein for growth and repair of body tissue, mineral salts for bone and tooth development, as well as to maintain normal physiological functions of the body, vitamins which are essential for growth and normal nutrition, and finally energy foods sufficient for necessary heat and energy for daily activities and to maintain normal weight for height and age.

Where does the avocado help to meet the needs of this normal diet? We have long known that fresh fruits were of very great value in the diet, and of course, we realize that the avocado is one of our fresh fruits. Going back to the definition of a normal diet, I repeat, it must furnish protein for growth and repair of body tissues. Is the avocado able to furnish any appreciable amount of protein? Yes, it is. You may be interested in knowing that the average daily need is around seventy grams a day. The avocado will run from two to three, and even four percent protein. Red meat is twenty percent

protein, and meat is a very high protein food. Another comparison, of value to you, is with other fruits, which will run .7 percent of protein content, whereas the avocado will run two, three or four percent, depending upon the varieties. Three percent is the average.

We have in the avocado a fruit which yields much more protein than do any other fresh fruits, and I think that the comparison with our food which is richest in protein, red meat, shows that you have in the avocado a food that furnishes a considerable source of protein.

I said that we must have mineral salts daily in the diet, if it is to be normal and if the individual is to maintain normal nutrition, a variety of mineral salts. The figure which tops the list of other fresh fruits is .5 percent. The average for avocados runs 1.3 percent, giving a very fine source of mineral salts. That is of importance, in the development of bones and teeth, and for maintaining normal functioning in body processes.

Avocados are alkaline in their reaction, which will be of interest to people interested in the acid-base balance in the diet. The tendency of the American diet is to be acid, as the people of this country are great consumers of protein foods, starches and other foods which give an acid reaction. The avocado makes this fine contribution to the diet in that it is alkaline in its reaction. That is well worth remembering.

We do not look to the avocado for a source of carbohydrates. It is high in energy value, but not because of sugar and starch. It runs low as a food there. However, we are never limited in our supply of starches and sugars. We have an abundant source, so that is not essential.

The avocado is especially high in fat. This is one of its great values in the diet. Those who may be interested in a reducing diet should not shy away from the avocado because of that statement. It runs from about nine percent fat up to thirty-one percent, giving an average for all varieties tested of about twenty percent, a very high fat content. It is a fat that is readily digestible and valuable "because of that characteristic. It runs about the same as ripe olives, but the ripe olive is a processed food.

Terms which are often confusing are "food value" and "fuel value" of foods. The value of a food does not vary directly with the calorie content. For instance, a pound of sugar would yield about 1800 calories. Perhaps a pound of meat will run 1000 or less. Would you compare the food value of sugar, yielding only heat and energy, to the meat, yielding protein, mineral salts, vitamins, and various other elements? We must not confuse food value with fuel value. It is true that the avocado has both. It is high in fuel value as well as food value.

I have just pointed out the value of the avocado in protein, mineral salts and fats, mentioning that it was low in carbohydrates. We must also recognize, however, that it is a food which is high in fuel value on account of its fat content. We do not look to other fresh fruits as sources of heat and energy. In this the avocado is distinctive among fruits.

The normal diet must furnish the body with sufficient vitamins for growth. "A" is one of the first vitamins that was known. It is a fat soluble vitamin which is especially essential in growth, and exercises a protection against certain infections. When the diet runs low

in Vitamin "A," we notice, especially in children, a lack of growth. The avocado is rich in Vitamin "A."

The same is true of Vitamin "B." Vitamin "B" has a decided value in preventing a loss of appetite in children, fatigue and nervousness in adults, and its lack is closely tied up with constipation. The avocado is a valuable source of Vitamin "B."

The avocado is low in Vitamin "C." However, we look to citrus fruits and tomatoes and other of our vegetables as sources of Vitamin "C." The avocado can not furnish everything, so we want to be clear on what is present, as well as to what is absent.

Vitamin "D" is a regulatory mechanism which keeps a balance between the calcium and phosphorus in the system, and which must be present if the diet is to be normal. The avocado is a real source of Vitamin "D."

Vitamin "E" is also present in the avocado. This vitamin has to do with reproduction and lactation.

These statements which have been made regarding the qualities of the avocado have all come from scientists who have made them at the end of long experimental work. There is much more to be done on the avocado, and I am sure we will learn much more as time goes on. However, I think we would be asking a great deal of the avocado if we expected it to furnish much more than it now does.

I will review briefly some of the statements which have been made, in order that they may be clear.

First, the avocado is high in fuel value. It contains over one thousand calories per pound. It may mean a little more when I tell you that the average adult needs around 2500 calories per day. One pound of avocado will yield over one thousand calories. It has an appreciable amount of protein, in that it will run from two to four percent protein. It is low in carbohydrates. It is high in fat, with an average of 20%. It is a good source of mineral salts, and it is also a fine source for Vitamins "A," "B," "D," and "E," running low in "C."

What use will the housewife make of this information? Much of it is new to her. Magazine articles will make available additional information from time to time. The use that you can best make of it is applying it to your daily menu. The menu should be based on the needs of the family. Suppose you have a boy fifteen or sixteen. The adolescent age is the time that growth is most rapid, and it takes a tremendous amount of food to furnish all the needs of the individual. Not only calories, but protein requirements are almost double that of an adult. If growth is going on at a tremendously rapid rate, you can understand why they need more protein. The same is true of calories, four or five thousand per day being required. Many women are overlooking this fact, and the diets for their growing children are inadequate. They are not only lacking in amount, but the composition is not what it should be.

You have in the avocado one of the many foods available which will furnish some of the food essentials that you and your family need, and even though it is hard to change our habits when we are past four or five years old, we should make an effort to do so, for it is a natural food and a local product, and if we are not eating avocados, who will? Information will spread through our appreciation of the fruit.

I have said nothing about the palatability of the avocado. A food may furnish all the food essentials, may be easily prepared, etc., but if we expect it to do all this, it must be palatable. One finds it easy to serve the avocado in many palatable forms. The housewife should learn to regard it as a rather staple food. She perhaps needs to work out various ways of serving it.