Anatomy a Vital Science

Dr. Samuel R. Detwiler, professor of anatomy, in an address at the opening exercises of the Medical School of Columbia University:

An anatomical laboratory is no doubt frequently thought of as a place characterized by the presence of a morgue, and large vats filled with formalin-soaked specimens; a place where rattling bones reside upon shelves to be delved out to beginning students in order to revive their powers of memory which they may have lost during the more or less carefree activities of their academic careers.

Based upon the experience of others, it may be regarded as a place where thousands of tedious facts must be learned and later forgotten before the gratifying emoluments attending the practice of medicine may be fully realized.

An anatomical laboratory does possess what I have mentioned—a lot of dead things—but if this were all that characterized the place, anatomy as a science would be as dead as the cadaver which is placed at your disposal in order that you may hack out the necessary morphological slices preparatory to the practice of surgery.

Anatomy is very old. Throughout the ages it formed the keystone around which systems of medicine were elaborated. As far back as the reign of the Yellow Emperor, Huang Ti, over 2000 years B. C., anatomical charts were assembled, which formed the basis for the curious art of needling or acupuncture which has been practiced throughout centuries and even to the present day in China.

Anatomy was studied by the Egyptians, the Alexandrians, the Persians and the Greeks—ages before its dawn in medieval and modern Europe.

With the long background which anatomy has had, it has not advanced nearly as rapidly as many of the other biological sciences. This may be due in part to the restricted sense in which anatomy has been viewed, but more probably to the failure of the anatomists in not employing, earlier, experimental methods. It is clear to everyone, I believe, that the sciences which have employed experimental methods have advanced by leaps and bounds over those in which phenomena have been studied merely as nature presents them.

Anatomy is now in the hands of various instruments of experimentation, and can truly be said to have passed from a science of statics to one of dynamics. Consequently, most modern anatomical laboratories are no longer characterized solely by the presence of cadavers, formalized specimens and bone boxes, but with such pieces of physical and physiological apparatus as are necessary to an experimental study of the dynamics of living organisms as they bear upon the problems of organic form and function.

Medicine is no doubt headed towards the stage of exact science, and its ultimate success lies not in the treatment of symptoms, but rather upon the co-operative investigation of causation. Every patient is a research subject and every malady a research problem.

The intelligent study of cause and effect in diseased organisms must be preceded by a working knowledge of cause and effect in the production of normal or essentially normal organisms. Medicine is demanding more and more the co-operative efforts of all scientists who venture to inquire into the matter of causation in the biological world.

As a result, departmental barriers are rapidly crumbling save perhaps for the purposes of administration.

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Fizz Gives Rats Appetite

Carbonated beverages may yet be on the approved list of nutritionists, recent studies indicate.

The fizzy drinks when fed to rats had no harmful effects. On the contrary, the rats grew well and reproduced, raising large litters. Instead of having their appetites spoiled by the carbonated drinks, they took more milk and more water. In fact, their increased growth and reproduction were attributed to the increased milk consumption that was stimulated by the fizzy drink, which was a grape carbonated beverage.

The study, reported to the American Public Health Association, was carried out by W. B. Cook, Lillian B. Storms, Max Levine and J. H. Buchanan of Iowa State College.

"There is no evidence in any of the work that any detrimental results occurred as a result of adding carbonated beverages to the diet of the animals," reported the scientists. This is cheering to those who like the effervescent beverages, for rats are the laboratory animals used to test new theories in nutrition before they are applied to human beings.

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Tomato seed, once regarded as a waste of the catsup industry, now are used as food and as a soap ingredient.

Keep Sweets in Own Place

Sweets must be kept in their proper place in the diet of children and that place is as a preservative and flavoring, Prof Henry C. Sherman of Columbia University, chairman of the Committee on Nutritional Problems, reported to the American Public Health Association.

"It is a sobering thought that sugar, as it now comes into commerce, is the most completely devoid of proteins, vitamins, and mineral elements of all the foods which we give our children. From the nutritional standpoint therefore it would seem that sugar should be of all foods the most cautiously used in feeding children lest it displace too much of the foods which can do what it cannot in supplying the proteins, vitamins, and mineral elements which the children need so urgently and so abundantly for their healthy growth and development," reported the committee.

The argument that candied fruits, milk chocolate and ice cream are foods that convey minerals and vitamins is true only to the extent that these foods contain milk, fruit or other foods which are good sources of minerals and vitamins. The sugar itself contributes nothing except the calories. While active children need calories, they also need minerals, proteins and vitamins to help them grow, and they should be fed largely on the foods which furnish these important substances along with the calories.

"In general the proper place of sugar in the food supplies and eating habits of children is not in such concentrated forms as candy, nor in the indiscriminate and excessive sweetening of all kinds of foods, but rather as a preservative and flavoring to facilitate the introduction into the child's dietary of larger amounts of the fruit and the milk, the importance of which to child health has been increasingly emphasized with each year's progress in our knowledge of nutrition," the report concluded.

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