

Protective Colloids Found In Ancient Remedies

by Royal Lee, D.D.S.

President, Lee Foundation for Nutritional Research, Milwaukee, Wisconsin

© 1957 GODFREY THOMAS PUBLISHING CO.

The "scraped-apple" diet used by German peasants in the treatment of infantile diarrhea and constipation is an interesting example of the use of gelatin-like, moisture-absorbing substances called "hydrophilic colloids" in human nutrition. These hydrophilic colloids are just now becoming known to investigators of science, but they have long been known to the homemaker for another reason; they are the substance which gives jelly its quivery firmness or "set"; they are "pectin."



Idea not new

Perhaps it was the experience with hydrophilic colloids that gave birth to the old Devonshire rhyme: "Ait a happle avore gwain to bed, an' you'll make the doctor beg his bread." It is not a new idea that pectin will help control both diarrhea and constipation. Folklore taught that to cure constipation, scrapings from the bottom of the apple were given, and for diarrhea the top of the apple was taken. This was in accordance with the folklore law of likes and opposites. Science today knows it does not make any difference which end of the fruit is used as long as enough pectin is taken. One reason why pectin is beneficial in the treatment of constipation is its great water-absorbing ability whereby it furnishes the necessary bulk to start peristalsis. Properties of pectin are such that intestinal irritation due to many sources is eliminated, and this alone becomes important in re-establishment of "regular habits."

Clay and water

Dr. Weston A. Price, world traveler

and author of *Nutrition and Physical Degeneration*, written as a result of his world-wide studies, has the following to say: "One of the sources I have found helpful in studying primitive races is an investigation of knapsacks. Among the groups (natives) in the Andes, Central Africa and Australia . . . each knapsack contained a ball of clay, a little of which was dissolved in water. Into this they dipped their morsel of food while eating. Their explanation was to prevent 'sick stomach'."

This is the way the natives in these countries combat dysentery and food infections. An illustration of the way in which modern science is slowly adopting practices that have long been in use among primitive races is to be found in the recent extensive use that is made of clay (kaolin) in our modern medicine.

The clay-eaters distinguish between good and bad qualities of these hydrophylic colloidal clays. Such action would appear rather remarkable in view of the comparatively recent adoption of kaolin into the British and American Pharmacopoeia as protective agents for the intestinal mucosa.

Studies in comfrey

The okra and comfrey plants are other examples of hydrophilic colloids. Comfrey is of particular interest. The word "comfrey" is attributed to the old French word "to preserve." Dr. Charles J. Macallister tells of his experiences (1914-1935) with comfrey in an interesting book, *The Narratives of an Investigation Concerning an Ancient Medicinal Remedy and its Modern Utilities*. A curious suggestion arises from reports that when maggots of certain flies are placed on wounds their healing is promoted. It is said that the substance called "allantoin" given off by the mag-

gots is responsible for at least part of the healing powers. This is the same substance that Dr. Macallister states is responsible for the reputation of comfrey.

New factors

Early discoveries in nutrition were concerned with only the missing elements caused by "indiscretions of diet," but today we must consider the factors which come within the realms of enzymes, hydrophilic colloids and other activators. Substances such as pectin, comfrey and mineral-earths formerly regarded as virtually inert biologically, now are being considered in terms of nutrient value, not because they contribute calories or weight, or because they are vitamic in nature and prevent weight loss, but because they possess activities which have heretofore been unsuspected or ignored in spite of practical evidence to the contrary.

Must study foods

The organic farmer does not pretend to know how to explain the ramification and hair-splitting scientific concepts necessary to the establishment of incontrovertible proof of the need for organic foods. The burden of proof is upon those who claim that they can supersede the plan of the Creator, or beat Mother Nature to her own game in the business of organizing inert matter into living tissue. We, the human race, were fed on organic foods for eons before we became chemically half-smart enough to make counterfeit foods. We may never become smart enough to find out exactly WHY these counterfeit foods cannot support life if we use too much of such imitation foods before we learn about their shortcomings. We must develop more than a "speaking acquaintance" with this matter of "respectful observation" of the wonders of nature.

THE END

