

BIOCHEMISTRY.

By W. S. Ensign, Phys. Ch., Battle Creek, Mich.

(From The Columbus Medical Journal.)

Biochemistry is the chemistry of life. The name has been given to a system of treatment of disease, in which only the natural elements of the human body are used. The theory is that when a person becomes ill he does so through a deficiency of one or more of the cell-salts. This deficiency is brought about by an extra demand for the particular salts, occasioned by over-exertion, continued strain of mind and body, errors in diet or mode of living, which would create a demand beyond the power of the system to supply. As the secretory organs have their own particular elements to assimilate and supply, this overwork weakens them, as it would weaken your arm to use it too much, and there would be loss of ability to assimilate or to prepare for assimilation, which causes a still greater deficiency, even after the strain is withdrawn in many cases, and matters go from bad to worse.

The above is a picture of an acquired case of cell deficiency and consequent diseases. But a child may have an inherited weakness which deprives it of functional capacity and thus occasions deficiencies in certain elements from its birth. This would mean an inability to assimilate or to take out of the food these elements, although ordinary food contains plenty. Thus a child may not take from its food enough lime to make good bone, and its bones are weak and pliable, and it does not grow, or it cannot walk, or its teeth do not come as they should, and they decay when they come.

The food contains plenty of lime, but the child

cannot assimilate it or prepare it for assimilation. And no matter how much lime you may pour into such a system, the inability to assimilate prevents any benefit being derived from it.

It is here that the biochemist introduces his triturated and potentized lime, which is ready for immediate assimilation, the deficiency is supplied, function is restored, and the system is able to take care of itself in an orderly, healthy way. This is not only a theory, but a theory substantiated by practice and fact.

Dr. Grauvogl, of Germany, was the first man to present the idea of this kind of reasonable, rational treatment, but Dr. Schuessler was the first to put it into general practice. Schuessler only used as remedies twelve tissue salts. He obtained these by analyzing the ashes of human bodies after cremation. He and his followers performed many wonderful cures with the twelve salts, and these are used generally by biochemists today. But other investigators saw a weakness in the Schuessler position. There were certainly elements used in the activities of life other than those found in the ashes of the dead body. This is very readily proven to be true.

Simply pumping out the stomach of a healthy person an hour after eating will prove this. Schuessler rejected the carbonates on the very queer ground that they did not appear in the ashes as such. Certainly not. If you burn any substance down to the dead ashes the carbons are gone, but if you leave the least cinder they are there. Carbon is a constant constituent of all organic bodies. All plants, fruits and foods contain it, and it is an invariable constituent of the human body. This is so certainly true that organic chemistry is frequently called "the

chemistry of the carbon compounds." To give reference which can be easily obtained, see Encyclopedia Britannica, vol. V., page 544. I would also call attention to lecture vii. on "The Inorganic Food-Substances" (tissue salts), page 87, of Bunge's Text-Book on Physiological and Pathological Chemistry, a paragraph of which we quote:

"Proteid contains from one-half to one and one-half per cent. of sulphur which, in the decomposition and oxidation of proteid, is converted into sulphuric acid. Eighty per cent. of the sulphur taken in food appears in this form in the urine. Under normal conditions this sulphuric acid is united with the bases which are taken up with every form of animal and vegetable food. Animal food contains basic phosphates of the alkalies, carbonates of the alkalies, and alkali-albuminates; vegetable food yields in addition the alkaline salts of vegetable acids, such as tartaric, citric, malic, etc., which in the organism are converted into carbonates by oxidation.

"These bases saturate the sulphuric acid formed from proteid. If the basic salts are removed from the food, this powerful acid finds no bases at hand to neutralize it and consequently attacks those bases which are integral constituents of the living tissues; figuratively, it may be said to wrench individual bricks out of their places, and thus to induce the destruction of the edifice."

Carbonate of soda is contained in the pancreatic secretion, and the intestinal juice is very rich in it. It is a necessary agent in emulsifying fats. The blood and lymph contain it. There may be a deficiency of hydrochloric acid in the stomach, and since this acid is now known to be intended to prevent the development of putrefactive organisms, this shortage is marked by the development of gas, the more the greater the shortage.

The deficiency of hydrochloric acid is not to be supplied by pouring the acid into the stomach, for that would give but temporary relief, but by supplying the tissue salts, the deficiency of which causes the deficiency of acid. The mineral acids are derived from alkaline bodies.

A person does not need to go very far into the subject to prove that the twelve-salt system of Schuessler and his followers is abortive, and far short of perfection. The numerous failures in the practice of this system certainly indicates that there is something lacking. It has been the practice to denominate all diseases which fail to yield to a particular system as incurable, when the real fact is that a perfect system should cure every disease, and when it fails it is because we have not discovered what is ready and waiting for us, if we will only look for it and find it. We are too prone to close the subject without proper investigation.

Biochemistry is a curative system, and when we know enough about it, it will be a science. No other system of medicine or treatment has such a promise before it.

Mrs. John McEvers, of Rennie, N. D., writes us: "We will be only too glad to have you use the case of our son in your literature. He had St. Vitus Dance and was pronounced incurable. None of our neighbors thought he would ever be cured, as he was unable to dress himself, or even feed himself, and was almost helpless. I could see an improvement in less than a week after he began taking your Remedies. He now weighs 40 lbs. more than he did when he began using the Remedies, and has no sign of the disease. We cannot express in writing how thankful we are for his cure, and hope others will receive as much benefit as he did." Only one treatment was used in this case, and the total cost was \$2.00.