"FEED A COLD AND STARVE A FEVER"

ON page xiv of SCIENCE for November 22 is this statement, "Nothing could be farther from the right than the injunction, 'Feed a cold and starve a fever.'" Quite correct, if it is an injunction, as probably the great majority understand it to be, but isn't it really a warning, to the effect that if you do eat heavily when you have a cold you may expect to get worse and have a fever to starve? "Lie down with dogs and get up with fleas," "Spare the rod and spoil the child" and a lot of other similar sayings in telescoped English are not injunctions by any means, but wise maxims of the same elliptic type as the one about stuffing when you have a cold—all from the same piece of cloth, and fine cloth it is, when worn right side out.

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QUOTATIONS

BIOCHEMISTRY AND MEDICINE

THE award of the Nobel Prize for medicine jointly to Sir Frederick Hopkins, of Cambridge, and Professor C. Eijkman, of Utrecht, and for chemistry to Professor Arthur Harden, of the Lister Institute, and Professor H. von Euler, of Stockholm, can not but give the greatest satisfaction to the medical profession and to scientific workers in this country. Both of the English workers are biochemists and both are notable as pioneer workers in various fields, which, once opened up by their efforts, have produced an increasingly rich crop of knowledge. It is notable that Harden, like Pasteur before him, chose yeast as the subject of his investigations. His experiments revealed a hitherto unsuspected phase in the process of alcoholic fermentation—namely, the formation of the intermediary hexose phosphoric esters. Following his lead, other workers demonstrated that these substances played an important part in the story of muscular activity, and it is now realized that phosphoric esters have a significance in animal metabolism which was undreamed of before Harden made his fundamental observations. Hopkins and Eijkman received the prize for their work on vitamins. Eijkman first described beriberi as a clinical entity, and showed that it was in some way connected with a diet of polished rice. To Hopkins we owe the conception of "accessory food factors," and it was he who first demonstrated that these were definite physiologically necessary entities, quite distinct from all other known dietary substances. Characteristically, he was more interested in the discovery itself than in his personal claims as its author, and the facts found a place in his lectures for three or four years before the publication of his first paper on the subject. He used to say in these lectures that, while at hospital in the eighteen-nineties, he was profoundly impressed by the unsatisfactory state of knowledge about the essentials of nutrition, when only "protein" and "energy" were considered, and the profound effect of "quality" as distinct from "quantity" in diet was unrecognized alike by the physiologist and the clinician. This conviction suggested much of his later work. At first his views were not accepted, but scepticism was overwhelmed by the mass of confirmatory evidence, which has now grown into an extensive literature—so extensive, indeed, that Hopkins's earlier papers are in danger of being forgotten. It is fitting, therefore, that his work on vitamins should have been the occasion of the international recognition that he has just received. Sir Frederick Hopkins's biochemical interests have been, however, extraordinarily wide. With Sir Walter Fletcher he laid the foundations upon which has been built almost all the work on muscle physiology as we know it to-day. Early in his career he showed that the pigments of the wings of Pierid butterflies were composed of uric acid and its derivatives, and his method for the estimation of uric acid is still the most reliable at our disposal. His excursions into the realm of protein chemistry resulted in the preparation of the first animal protein to be obtained in a chemically pure state. Next, led by his work on the Adamkiewicz reaction, he discovered trytophane, and proceeded to demonstrate that its presence in the diet (and also that of a few other complex amino-acids) was essential to life; incidentally, in the course of this work he was among the first to make use of bacterial activity as a means of determining molecular constitution. He has been responsible for most valuable, though little-known, work on that curious substance, Bence-Jones protein. His investigations into the mechanisms of biological oxidizations have done much to bring order into our knowledge of a subject of fundamental importance. Among other observations, his demonstration of the presence of xanthine oxidase in milk has made possible much of the accurate quantitative work on oxidases which has of late figured prominently in the output of the Cambridge school. Finally, he has isolated from tissues a new tripeptide, glutaminyl-glycyl-cysteine, which undoubtedly plays an important part in the oxidization processes of living cells. There can be few physiologists or biochemists in this country who are not proud to acknowledge how much they owe to Hopkins's influence and teaching; and this feeling is certainly shared by all physicians who appreciate the great and increasing debt of clinical medicine to biochemistry.—*The British Medical Journal.*