

Now as to the practical application of the study that has thus far been done on the vitamins, the following facts are important: We know that foods are affected as to the vitamin contents by the modern process of canning, by boiling or heating to the boiling point, for a certain length of time, absolutely destroying the water-soluble B if the heat is maintained for two or more hours. Fat-soluble A is injured at least in part, and water-soluble C is destroyed in a very short time.

Vegetables placed in cold storage for a great length of time injure the vitamins and dried vegetables for preservation are often injured by the process. Moreover, we know that some persons live on a one-sided diet, and that oftentimes it is difficult, in children especially, to have them eat the proper assortment of food. Eddy and others have found that even though the diet of a child contain an appreciable amount of vitamin B, there was a marked stimulation of growth when three percent of the extract of vitamins was added to the food. He explained this on a basis that an extracted vitamin is more readily available than that contained in the food.

It is thought by some authorities that the vitamins act as catalyzers, and that their mere presence enables the system to absorb and assimilate the food products. Therapeutically the vitamins are indicated in the treatment of malnutrition, and disordered metabolism in such vitamin deficiency diseases as rickets, beri-beri, pellagra and scurvy, in the convalescence from acute infectious diseases, in certain intestinal disorders and as an adjunct treatment in ill-defined disorders of nutrition, anemia and other dyscrasias.

ABSTRACT OF DISCUSSION.

Chairman H. M. Faser thanked Dr. Wilson for his address and asked him whether he would answer questions proposed by members. Replying that he would—

F. W. Nitardy inquired whether a well-balanced diet would not supply the vitamins. Dr. Wilson replied that it would, but children at the same table would differ in their preferences for food; certain individuals cannot assimilate foods containing the necessary vitamins. Experiments bearing on the question were shown.

REVISING THE NATIONAL FORMULARY.*

BY P. HENRY UTECH.

Much of that which transpired and was transacted at the City of Pittsburgh meeting of the American Pharmaceutical Association thirty-five years ago has been forgotten, or is part of the records of the Association. The outstanding feature of that Convention, which has proven to be epoch-making in character, was the appointment of the committee which later, in 1888, brought about the publication of the first edition of the National Formulary. It is, therefore, particularly fitting that you, as representative pharmacists, encourage the fine spirit of these pioneer pharmacists, and do your part in carrying on this good work, the publication of which stands out as a waymark in the onward march of pharmacy.

The revisions of the National Formulary reflect the progressive spirit of our calling. The statement is frequently heard, that pharmacy as a profession is retrograding, is fast losing its prestige; that the inroads of commercialism are demoralizing all that is fine, honorable and ethical in our calling. Statements of this character, with only slight modifications, would, perhaps, apply with equal

* Parts of an address before Pittsburgh Branch, A. Ph. A., November meeting, 1921.

force to conditions existing decades ago. The sooner we come to the realization that the business of pharmacy, the profession of pharmacy, and the trade of pharmacy have a common interest and purpose, and that all can go along together hand in hand with noble principles and high ideals, the sooner we will be on the high road of progress and establish our position and prestige as pharmacists in the community in which we live and serve. Indeed, no further testimonial to the progressive spirit dominating pharmacy to-day can be had than the large number of men of ability chosen from the rank and file of our calling—men in sufficient numbers to cover the entire field of pharmaceutical research and endeavor—who are actively and whole-heartedly engaged in this work of revision with no thought of remuneration or reward, other than that which comes of being of service to their fellow-men.

Since the last revision of the National Formulary, many States have enacted legislation inimical to the best interests of pharmacists. Your Committee, taking cognizance of this, is investigating the economic and commercial conditions affecting pharmacy, to the end that the new Formulary may be of greater practical value and at the same time consistent with the best methods of pharmaceutical practice.

Notwithstanding the National Formulary has fully justified its right to existence, the necessity for such an authoritative book of standards for preparations in common use was urgent, and yet the first three editions of the Formulary, covering a period of almost two decades, met with only partial success; but with the passage of the Federal Food and Drugs Act in June 1906, when governmental sanction was given the Formulary and it became a duly recognized book of standards, renewed interest and activity were immediately manifested in the work by pharmacists everywhere. As an index of the present popularity of the National Formulary, it might interest you to know that the sale of the present edition has reached almost 35,000 copies.

As before stated, three editions of the book appeared before it was given legal standing, and it is to the credit of its authors that although the last of these was published only a few months prior to its official adoption by the United States Government, only a few slight changes were required to make the book an acknowledged legal standard. It is interesting to know also that since the recent enactment of the Eighteenth Amendment, the National Formulary is likewise the official book of the National Prohibition Law.

The third revision of the National Formulary, completed in 1916, contained no radical changes; a chapter on Sterilization was added. The Committee felt justified in undertaking a revision at this time—just five years later—so as to keep pace with the revision of the United States Pharmacopoeia, the aim being to have the two volumes appear simultaneously, if possible.

The present Committee of fifteen members was appointed in 1919. They have held two sessions, the entire committee being present at both sessions. This Committee is divided into twelve sub-committees and the entire work has been assigned to them for the purpose of investigation and review. At this date the work is progressing rapidly and about half of the revision work is already completed.

Thus far of the 589 formulas of the present edition of the National Formulary 101 have been deleted, and other preparations have been placed on the proposed list of deletions. The titles of these have been published in the Pharmaceutical

Press in order that pharmacists throughout the United States may be given opportunity to register their opinions concerning them. The Committee endeavors to secure the widest possible publicity in this part of the work to the end that pharmacists in all sections of the country may be given an opportunity to express themselves and thereby prevent, as far as possible, unfavorable comment on the completed work.

DELETIONS, CHANGES AND IMPROVEMENTS.

The most radical step taken by the Committee in revising the National Formulary is the deletion of the entire list of medicated wines as a class; three of the more important wines, *viz.*, Antimony, Colchicum Corm and Ipecac are to be replaced by corresponding tinctures; Wine of Beef and Iron will be represented by an elixir.

A Table of U. S. P. and N. F. substances and of the official preparations in which they are contained as active ingredients, will be included. A dose table will be printed in Part III, apart from the preparations and drugs. Assay processes will be given for many of the potent drugs and preparations. The alcoholic content by volume will be stated wherever same is practicable; for each preparation a variable range of alcoholic strength will be given. The volume of alcohol necessary for each preparation is being studied, with a view of using the minimum amount required for permanency, preservation or therapeutic activity of the preparations containing alcohol.

A standard of 12 grains per fluidounce with an acidity of 0.05% HCl or its equivalent of other acids, based on H ion concentration, will be provided for pepsin preparations.

Monographs for liquid preparations of chemicals wherever practicable will be included, giving description of physical properties, identification tests, assays, etc.

Ampuls will be officially recognized and special directions given for proper cleaning and sterilization. The chapter on tablet-making will be limited to their extemporaneous preparation. Troches of Gambir and of Peppermint are in the list of deletions, and the following are to be included as tablets: Charcoal, Phenolphthalein, Quinine Tannate, Santonin, Santonin Compound, Sulphur and Cream Tartar.

Additions or important changes in formulas are to be indicated in the text by some distinctive sign. Preparations employed in veterinary practice and preparations used in dental practice are to be included.

THE NEW ITALIAN PHARMACOPOEIA.*

The Italian pharmacy law of 1913 stipulates that every five years the Minister of the Interior shall cause the official Pharmacopoeia to be revised and a new edition published. The third edition of the Italian Pharmacopoeia was issued in 1909, and in 1914 a commission was appointed for its revision, consisting of Professors E. Paterno, V. Cervello, L. Pesci, and C. Manuelli, three of whom had already figured as the compilers of this work. Later, during the same year, the Commission was strengthened by the appointment of two pharmacists—an innovation—the gentlemen selected being Sig. T. Bosio, President of the Association of Pharmacists of the Province of Turin, and Sig. A. Quercia, President of the Association of Pharmacists of the Province of Bari.

* A review reprinted from *The Chemist and Druggist*, December 31, 1921, pp. 57-60.