# **CONTRIBUTED AND SELECTED**

## THE USE OF SYNONYMS IN THE NEW NATIONAL FORMULARY.

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We realize that it would be quite wrong at such an early period to make any broad and sweeping statements about this new edition except after almost continuous study and diligent application. Hence, with the volume in our hands only a short time, we will comment on but one of the aspects of the work.

Our topic, as the title of the paper designates, concerns the use of synonyms in official products. In considering this subject, which is a new idea for the National Formulary, we must all realize that each one of us, yes, and even groups of us are only mortal and prone, therefore, to mistakes of judgment and oversight. It is some of these possible mistakes of judgment and oversight about which we are writing—and we say "possible" intentionally, for the editors of the book may be able to advance satisfactory reasons for them although they seem inconsistent to us.

In discussing this point we wish to impart the idea to the reader that we feel that the including of the synonyms in the National Formulary IV titles is very commendatory. Since this volume will be recognized by the Federal Food and Drugs Act their proper use would tend to strengthen the work as a legal standard as is the intention implied by the paragraph on page XXXVII of the N. F. IV. This states: "Any substance used or sold under the synonym-name recognized in this book must comply with the standards set for the article under its official title." However, we think that there has been an indiscreet use of synonyms in some cases which makes the book appear very inconsistent in the eyes of the readers and thereby will tend to weaken its legal status when it has been accepted by the government.

Let us cite certain instances as illustrative of some of the difficulties which might arise after the N. F. IV has become legally official. In the N. F. IV we find a product entitled "Compound Elixir of Pepsin and Rennin" and as a synonym is given "Essentia Pepsini, N. F. III."

N. F. III.		N. F. IV.	
Pepsin	22.5 Gm.	Pepsin	22.5 Gm.
Rennin	16.5 Gm.	Rennin	16.5 Gm.
Lactic Acid	2.0 Cc.	Lactic Acid	2.0 mils
Tr. Sweet Orange Peel	10.0 Cc.	Tr. Sweet Orange Peel	15.0 mils
Glycerin	125.0 Cc.	Glycerin	150.0 mils
Alcohol	50.0 Cc.	Alcohol	200.0 mils
Syrup	65.0 Cc.	Oil of Myristica	o.1 mil
White Wine (Angelica)	365.0 Cc.	Purified Talc	20.0 Gm.
Purified Talc	15.0 Gm.	Distilled Water	q. s.
Water	q. s.		
		To make	1000 mils
To make	1000 Cc.		

In glancing over the N. F. III and N. F. IV formulas we see here that the basic features remain the same, but that the alcoholic content of the N. F. III

is about 11 percent and the N. F. IV about  $18^{1/2}$  percent. Suppose a druggist orders from a manufacturer a gallon of Essence of Pepsin, N. F. III; according to the statement regarding synonyms previously quoted from the N. F. IV, the manufacturer should furnish a product complying with the standards of the N. F. IV. If he does furnish the N. F. III product and labels it as N. F. III he is transgressing the Food and Drugs Act which makes the National Formulary legal, inasmuch as the galenical furnished should conform to the standards set for the article under its official (N. F. IV) title. As noted before, the N. F. III article does not actually conform to all the standards of the N. F. IV, to wit: the alcohol content, the statement of which is required on the label by law. Hence, really in a strictly legal sense one cannot sell the Essence of Pepsin, N. F. III without his committing an offence punishable under the Food and Drugs Act. Just what is the manufacturer to do in such a case?

Next we will mention a more flagrant example, one in which you will be given the opportunity to transgress the Patent Laws, the Federal Food and Drugs Act, and the Harrison Narcotic Law as well.

### VIOLATION OF THE PATENT LAWS.

Let us look at the title of "Elixir Terpin Hydrate and Diacetylmorphine" in the N. F. IV. Under it we note the synonym, "Elixir Terpin Hydrate with Heroine, N. F. III." Although Diacetylmorphine and Heroine may be the same chemically we are of the opinion that a person substituting Diacetylmorphine for Heroine lays himself open to prosecution by the patentees of Heroine. For this reason then the N. F. IV article would not be synonymous with the N. F. III legally.

VIOLATION OF THE FEDERAL FOOD AND DRUGS ACT.

Now let us compare the two formulas:

N. F. III.		N, F. IV.	
Heroine	0.75 Gm.	Diacetylmorphine Hydro-	
Elixir Terpin Hydrate	1000 Ce.	chloride	•
		Elixir Terpin Hydrate q. s. to	1000 mils
Av. Dose 4 Cc. (1 fluidrachm)		Av. Dose 4 mils (1 fluidrachm)	

You will see that in the N. F. IV product the amount of Heroine or Diacetylmorphine Hydrochloride is reduced from 1/3 grain of Heroine (N. F. III) to 1/8grain of Diacetylmorphine Hydrochloride to the fluidounce. Hence once more it is observed that the N. F. III elixir does not meet the standards set for the N. F. IV product and therefore one may lay himself liable according to the Food and Drugs Act when he sells this N. F. III article.

#### VIOLATION OF THE NARCOTIC LAW.

When the druggist is supplied the N. F. III product a narcotic order is required—this is not necessary in case the N. F. IV article is furnished. If the N. F. III elixir is to be considered synonymous with the N. F. IV, the manufacturer should be able to supply it, as well, to the druggist without the narcotic order—yet his doing this would be an open violation of the Harrison Law.

#### POSSIBLE CONFUSION FOR PHARMACIST AND PHYSICIAN.

The situation is certainly confusing at every angle for we also find it will permit of misunderstandings between the druggist and the physician. Consider that the druggist has the N. F. III product in stock and receives a prescription for "Elixir Terpin Hydrate and Diacetylmorphine." For example, let us reason that the doctor intended and supposed the N. F. IV product would be used. The druggist finds in his new Formulary that the N. F. IV and N. F. III titles are synonyms, and is led to believe that the products have the same composition, for the word "synonym" implies "likeness." He fills the prescription from his N. F. III stock and as a result the dose that the patient is directed to take is about three times the narcotic strength which the physician intends and undoubtedly is contraindicated in the patient's illness.

We are sure the editors did not intend to place the pharmacist, physician, or manufacturer in such a situation as we have pictured, but rather intended that this new book should be clear cut and definite in every instance. It is to be hoped therefore that our readers will have construed our remarks—as we meant them—not as criticism but for their constructive value, and we trust this article will prove its worth to the pharmacist or physician if even by merely calling his attention more closely to the synonyms of the official products.

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#### RULING OF TREASURY DECISION 2194 REVOKED.

In a recent treasury decision issued by the Commissioner of Internal Revenue and approved by the Secretary of the Treasury, the ruling contained in T. D. 2194, holding synthetic substitutes subject to the provisions of the Harrison Narcotic law has been revoked. The text of the decision, which is addressed to collectors of internal revenue and others concerned, is as follows:

The ruling contained in T. D. 2194, holding synthetic substitutes subject to the provisions of the Act of December 17, 1914, and requiring manufacturers of, dealers in, and physicians prescribing any such substitutes, as therein defined, to register and otherwise conform to the Harrison Narcotic law and the regulations issued thereunder, is hereby revoked, to take effect this date (April 10).

This ruling follows the decision of a United States Court of Appeals, which held that novocain, orthoform, anaesthesin, holocain, and other synthetic substitutes for cocaine do not come under the provisions of the Harrison Narcotic law, and that physicians, dentists, druggists and wholesalers prescribing, using, or selling such synthetics, may do so without registering or using the official blanks.