

THE PROTEIN VALUE

of

KNOX

Plain Unflavored
Sparkling Gelatine

Analysis of
KNOX SPARKLING GELATINE (U.S.P.)

Protein	85.0—87.0 per cent
Moisture	12.0—14.0 per cent
Ash	1.0—1.25 per cent (principally Calcium and Phosphate)
Fat	(less than) 0.1 per cent
Carbohydrate	None

FOREWORD

As every physician knows, the problem of adequate nutrition resolves itself into the matter of selecting the various classes of food materials for the chemical substances needed in growth, activity and rebuilding. This folder deals with one of the most important classes of foods the human body requires . . . protein!

I. Protein — Essential Food Substance • Since protein is a component of every living cell it is necessary to maintain a supply of this valuable nitrogen-containing material. It has long been recognized that protein's importance is manifested by the colloidal properties of protoplasm, the organic structure of all tissues, and the processes of metabolism. Protein must also serve as material for the precursors of essential biological catalysts such as enzymes and hormones.

II. Protein Foods and Supplementation • But, it is also a known fact that different foods containing protein vary in their amino acid composition. Therefore, it becomes important to combine proteins from a variety of sources to insure a full quota of all the various amino acids required by the body. History indicates the highest state of physical development and vigor has been associated with those individuals and races who have had a generous quantity and variety of protein in their diets. That is one reason why nutrition experts today emphasize the desirability for liberal quantities of protein selected from a variety of sources.

III. Gelatine as a Protein Food • Knox Gelatine is a wholesome food protein with many qualities which recommend it as a special dietary source of protein. It contains seven of the ten "essential" and a majority of the twenty-three accepted amino acids making up proteins. (See table below). Gelatine has been shown to supplement the proteins of many varieties of food material.

For example, gelatine supplements proteins of both wheat and oat cereals in a practical manner. An investigation by the U. S. Department of Agriculture showed that white flour contributes almost 30% of the protein in the average American dietary. This would certainly indicate the importance of supplementation with respect to wheat protein.

Amino Acid Composition of Gelatine

A compilation from various sources

Alanine 8.7	*Leucine 7.1
*Arginine 8.2	*Lysine 5.9
Aspartic Acid 3.4	*Methionine 0.97
Cystine 0.16	*Phenylalanine 1.4
Glutamic Acid 5.8	Proline 19.7
Glycine 25.5	Serine 0.4
*Histidine 0.9	*Threonine 1.4
Hydroxyproline 14.4	*Tryptophane 0.0
*Isoleucine 0.0	*Valine 0.0

*Dietary essentials

IV. Gelatine for Variety in Meals • Knox Gelatine recipes make use of this versatile protein food in dozens of appetizing, nutritious ways. Appetizers, salads, main dishes, desserts, candies are delicious and nutritious when they're made "the Knox way." With *gelatine*, various vitamin and mineral-bearing foods can be combined into single dishes that are rich in the *three* "protective" food classifications: vitamins, minerals, proteins.

V. Gelatine in Special Diets

PEPTIC ULCER

The effectiveness of utilizing plain Knox Gelatine in treatment of peptic ulcer has been reported. ("The Effect of High Protein Diet on the Behavior of the Disease" by Windwer and Matzner, *Am. Jnl. Dig. Dis.* 5:743, 1939.) This simple food regimen has the advantage of eliminating "alkalosis hazard" and effectively inhibiting distressing hyper-acidity.

REDUCING

The Knox Gelatine drink is a convenient means of helping to keep up the liberal protein level essential in well-managed reducing diets. Gelatine, when taken in the form of desserts and salads, also gives volume to small portions without adding unwanted calories (28 calories to each envelope of Knox Gelatine).

DIABETIC DIETS

Plain unflavored gelatine contains no sugar . . . makes prescribed foods more satisfying and appetizing.

CHILDREN AND CONVALESCENTS

Gelatine is easily digestible . . . aids assimilation of milk, while adding to its food value.

VI. Drinking Knox Gelatine • Since Knox Gelatine is a supplementary protein food and not a stimulant, best results have come from regular use. Hundreds of normal men and women in many different occupations have tried drinking Knox Gelatine for twenty-eight days and said that they felt better. A significant number of these people have reported the continued use of Knox Gelatine as they have felt the need.

Drinking one or two envelopes of Knox Gelatine is a convenient way to augment the daily diet with an easily digested supplementary protein.

It is easy to increase the protein intake by drinking one-half to one ounce of Knox Gelatine daily in water or fruit juice. Although there are qualitative differences, one ounce of Knox Gelatine contains the same amount of protein as 5.1 ounces of round steak, 6.8 ounces of raw egg, 25 ounces of whole milk, or 4.5 ounces of cottage cheese.

The use of gelatine as a supplement to the regular diet will avoid increasing intake of substances associated with many food proteins that lead to the formation and possible accumulation of crystalline waste products which are held to be undesirable.

VII. How to Drink Knox Gelatine • Here are the simple directions for drinking Knox Gelatine as a supplementary protein concentrate:

Drink 4 envelopes of Knox a day for 2 weeks. Then 2 a day for 2 weeks. After that, as required. Empty 1 envelope ($\frac{1}{4}$ pkg.) Knox Gelatine into $\frac{3}{4}$ glass of water or fruit juice, not iced. Let liquid absorb gelatine. Stir briskly and drink immediately. If it thickens, stir again.



POUR IT! and STIR IT!



DRINK IT!

VIII. What Is the Difference Between Knox Gelatine and Ready-flavored Gelatine Dessert Powders? • It is important to emphasize that all gelatines are not alike. Ready-flavored gelatine dessert powders contain $\frac{7}{8}$ sugar, and only about $\frac{1}{8}$ gelatine. Knox Gelatine is *all* body-building protein; it contains no sugar, no artificial flavoring.

Buy Knox in the regular 4-envelope kitchen package or the money-saving 32-envelope package. Complete directions for drinking Knox Gelatine as an all-protein food concentrate are enclosed in every package.

For additional information or details, write
KNOX GELATINE, Dept. 403, Johnstown, N. Y.

