hours at 37 C, caused this to lose from 26 to 36 mg. of glucose per 100 cc.

These results were published in *Journal* of the American Medical Association on June 2, 1923, together with results indicating a diminished glycolytic power of blood from diabetics.

Winter and Smith published a note in the *Journal of Physiology*, 57:40 (Nos. 3 and 4), 1922, which appeared in this country in April, 1923, and in *Nature* of March 10, 1923, that they had obtained an insulin-like substance from yeast.

Collip, in *Nature* of April 28, 1923, states that he, working independently, found an insulin-like substance in various vegetables, in yeast and in clams. Collip's studies on insulin are of inestimable value and made it possible to obtain insulin from animal pancreas in quantities for practical use. He expected to find an insulin-like substance wherever glycogen occurred in nature, and for this reason looked for it in vegetable extracts. Our belief that oxidizing ferments cause glucose metabolism led us to examine vegetables for these ferments and for substances with an insulin-like action. It seems that Collip's theory and ours dovetail. A storehouse of food (glycogen, starch, etc.) and a ferment for the metabolism of this food are necessary wherever growth occurs in vegetables.

Our studies have led us to the tentative suggestion that insulin, which is apparently not itself an oxidase or peroxidase, indirectly stimulates or activates oxidizing ferments in the tissue cells to action upon glucose, whereas vegetable extracts contain active oxidizing ferments and act directly when injected into animals.

It would seem that the work of Winter and Smith, of Collip and of ourselves was being carried on simultaneously and independently. Collip, very properly, suggests that "these authors (Winter and Smith) would, therefore, share coincident priority with me in this particular." We think that we should be included in this share of priority.

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A QUESTION OF RHETORIC

WHY do scientists like to write sentences like the following, which is quoted from the speech of a distinguished man as reported in SCIENCE, "Among the environmental factors which influence the structure and functions of the living organism, nutrition is of primary importance"? The sentence is absolutely correct, and doubtless conveyed the meaning intended to the audience of scientists. But we can sum up the substance of it in three words, "food is important." When so expressed it seems hardly worth saying. Possibly this does not express the meaning quite as accurately as the sentence used, but any doubts that might arise would be fully cleared up in the rest of the speech.

To be sure, more is implied in the sentence used than by the three words, "food is important." There is the suggestion of influencing structural changes by such means, as well as the elimination of any discussion of the effects of heredity, but it is doubtful if many of the scientists in the audience received the full value of such suggestions.

The sentence may have been all right for the audience, but the trouble is that when a person gets used to such methods of expression it is difficult to change when talking to ordinary people. A single unusual word is readily absorbed without breaking the thought. It very often adds to the force of the expression. By unusual word I am not now referring to one that is so unusual that it is not understood, but to one that is not the ordinary expression of the listener. Each such word causes a slight delay in grasping the thought. In the sentence quoted we find seven words which might not convey the thought immediately, and which would therefore be classed as unusual by this definition. Take, for example, the word "primary." The meaning is clear, but how many people would use it as used in ordinary conversation? The only use that most people make of the word "primary" is in connection with the schools.

With seven such words in so short a sentence, a certain amount of mental alertness is necessary to keep up with the speaker, or of concentration to read it. And when the thought reaches home, it is such a commonplace thought that it does not provide any stimulus for concentration on the next sentence.

But why not omit the sentence entirely? Why is it necessary to claim "primary importance" for the subject of nutrition? Would any anatomist deny it?

I do not want to criticize this speaker in particular, but am only pointing out one reason why scientists are not more often asked to explain their observations in publications that pay well. Professor Dry-as-dust is not as often the one whose learning is over the heads of his audience as the one who makes commonplace statements in language that requires an effort to understand it.

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QUOTATIONS

MEMORIES OF SIXTY YEARS

THAT a man who became a university graduate in 1859 has published in this year 1923 a volume of vig-