

"A very extensive observation has convinced us, since our first circular treatise was issued, that in the majority of cases the Anti-Fat must be taken for from two to three, and, in rare cases, even four weeks before the patient will begin to notice much reduction of flesh, after which the loss goes on rapidly—generally from three to five pounds a week. In some cases the diminution in weight commences from the first two or three days' use of it.

"The treatment of obesity has hitherto rested on no sure basis.

"Through the study of physiological chemistry, a *specific* has at length been discovered, which, from the name of the discoverer, has been called Allan's Anti-Fat.

"Directions: Take two teaspoonfuls of the Anti-Fat in a wineglassful of water or sweet milk before each meal."

A small slip is also enclosed headed "CAUTION!!" which states,—

"The colour, as well as the flavour, of the Anti-Fat varies somewhat with age and exposure to light, but neither in the least impairs its virtues. The temperature of the weather at the time of the manufacture of this remedy has also much to do with its clearness, or transparency, but does not affect its properties."

Analysis showed the presence of alcohol, glycerine, potassium-iodide, salicylic acid, and a vegetable extract which from its properties and the analysis of the ash is evidently a purified extract of *Fucus vesiculosus*. The proportion of the latter drug represented cannot, of course, be determined with certainty for the reasons referred to above; the amounts of the other ingredients were ascertained by analysis, and the formula is approximately as follows:—

Potassium-iodide	...	...	...	...	0.3 gr.
Salicylic acid	...	...	...	...	1.0 ,,
Glycerine	...	...	...	...	40 minims.
Fluid extract of <i>Fucus vesiculosus</i>	...	...	...	...	70 ,,
Water	...	...	...	...	To 1 fluid ounce.

Estimated cost of ingredients (6½ fluid ounces), 3d.

[Extract from the *British Medical Journal* of the 6th July, 1907, page 24.]

THE COMPOSITION OF CERTAIN SECRET REMEDIES.

OBESITY CURES.

The next class of nostrums which we have taken for examination consists of those advertised for the reduction of corpulence. In general, the claims that are made for these articles are less extravagant than in many other cases, and a reason for this is not far to seek; it is important that the consumer of the medicine shall be encouraged to persist in its use for a considerable time, and any statements as to the rapid cure which would very soon be found to be at variance with the facts would probably only lead to discontinuance of the medicine, and therefore defeat the maker's object. Nevertheless, the emphatic and confident statements, backed by testimonials, which are so important a weapon to the quack-medicine maker, are by no means abandoned, as some of the quotations below will show. The prices named below for the various articles described refer to the smallest size of package; in most cases larger packages, containing sufficient for several weeks' or months' consumption, are supplied at proportionally lower rates, and purchasers are urged to obtain these larger packages.

While certain of these preparations present no particular difficulty to the analyst, the majority not only contain vegetable preparations devoid of well-marked characters, but since the most important of these, extract and fluid extract of *Fucus vesiculosus*, are not prepared according to any official formula, and are naturally therefore liable to great variation, it is best to refer again to the reservations made in a previous article of this series. It is not possible to arrive with perfect certainty at the precise composition of such articles by analysis; and when, as in the case of any nostrums, the maker can draw on all unofficial and even non-medicinal substances for his ingredients, it is inevitable that some shall remain not certainly identified. It may fairly be assumed, however, that such unknown substances possessing no well-defined chemical characters will not be likely to have much, if any, therapeutic importance.

In a lecture given in 1903 at the London Hospital on patent medicines, Dr. Robert Hutchison gave the principal constituents of a number of nostrums, and it may be of interest to quote his remarks on the class of preparations here dealt with. He said,—

"The obesity preparations have given me more trouble than any of the others. In the case of some, at least, I was entirely unable to discover the exact composition. I fully expected to find that some of them would contain thyroid extract, but in that I was disappointed. One of them consisted mainly of extract of *Fucus vesiculosus* (bladderwrack), which has long been believed to have a tendency to diminish stoutness, though its claims rest on no very strict scientific basis. Another consisted chiefly of citric acid, which is interesting when one remembers the popular belief that sucking lemons makes one thin. As regards several of the others I confess to being puzzled. This, however, I must say in fairness, that I had the curiosity to write to some of the people who had supplied testimonials to the makers of these remedies, and found that, so far as I could discover, the testimonials were genuine, and that those who supplied them believed at least that their weight had been reduced by the medicine. I can only say that I wish I knew of any remedy which could be counted upon safely to reduce weight in the absence of any change of diet."