

It will be noted that this table agrees very closely indeed with that based on Canadian lives. The average height of British West Indian whites was 5 ft. 8.4 in., and their average weight 153.2 lbs., while the corresponding figures of the Canadian applicants of British extraction were 5 ft. 8.6 in. and 155.0 lbs. The two tables therefore practically agree, and the conclusion would appear irresistible that the Northern standard is a fair one for British West Indian whites also. An examination of the question of age, however, shows, that the average age of these cases exceeds that of the Canadians, and that the standard weight is not reached in the West Indies till a little later in life than in the North. It follows, therefore, that a somewhat greater laxity may be quite allowable there in the case of young lives. \* \* \* \*

There are certain national characteristics worth noting, as follows:—

Average of British Canadians.....	5 ft. 8.6 in.	155.0 lbs.
Average of French Canadians.....	5 " 7.3 "	149.9 "
Average of British West Indian whites..	5 " 8.4 "	153.2 "
Average of Spanish West Indian whites..	5 " 6.6 "	144.3 "

The number of female applicants was hardly sufficient to form a thoroughly reliable basis, but as far as they go they agree almost exactly with the standard for male lives.

In the "Mortuary experience of the Mutual Life of New York," published in 1877, by Drs. Winston, Gillette and Marsh, the influence of light weight on mortality was dealt with at some length. They pointed out that nearly eighty per cent. of those who had died of consumption in that Company had been under the average weight, as indicated by the "American Standard" at the time of applying for assurance. This is certainly startling, but not necessarily conclusive, since the average age at entry of consumptive cases was probably younger than that of the whole company. But no objection can apply to those who entered between the ages of 30 and 40, since the average weight at those ages should be even a little beyond the standard, and yet it was found that of 227 consumptives who assured between those ages, only 48 were over the average, while 179 or 79 per cent. were under it. This result is certainly surprising and ominous. The conclusion drawn by the authors was summed up in the following: "We consider it proved by our tables that 'a weight below the average is a very suspicious circumstance, as indicating a tendency to consumption, and would advise that all persons presenting such disproportionate figure should be most carefully scrutinized.'"

The most thorough and practical and therefore the most valuable contribution to this phase of the subject is that contained in the experience of the Washington Life Insurance Company, compiled by their actuary, the esteemed secretary of this Association, Dr. Pierson, and their medical officer, Dr. McCready. I extract a few points.

Those who died from	Average Height.	Average Weight.
All causes.....	5 ft. 8.2 in.	156.2 lbs.
Consumption.....	5 " 8.2 "	143.7 "
Other causes.....	5 " 8.2 "	158.9 "

Although the height was exactly the same in all classes, the consumptive cases were on the average 15 lbs. under those who died from other causes.

*Proportion of deaths from Consumption to total deaths, among those whose weight was*

Above standard.....	5.47 per cent.
Standard.....	17.86 "
Below standard.....	30.72 "
Whole company.....	17.65 "

In the above classification the standard group included all those whose weight was within five pounds above and five pounds below the "American Standard," while the others included those above and below this class respectively.

The following table shows how great is the importance to be attached to weight, in the way of either accentuating or annulling any predisposition towards consumption, either hereditary or personal.

*PROPORTION OF DEATHS FROM CONSUMPTION TO TOTAL DEATHS.*

Among those who were	Persons having some tubercular taint, either in family or personal history.	Persons with no taint whatever.
Over standard weight.....	6.13 per cent.	5.28 per cent.
Standard weight.....	27.27 "	15.84 "
Under standard weight....	48.39 "	24.21 "
Total.....	28.35 "	14.56 "

It is thus evident that the concurrence of light weight and bad or doubtful family history must be looked upon as a matter of the greatest importance, while, on the other hand, an excess of weight may be fairly looked upon as to a certain extent counterbalancing any taint in the family history or even in the personal record. Following up this line of thought, I have had the experience of our own Company (the Sun Life Assurance Company of Canada) worked out, with the following results:—

Total number of death claims.....	491
Death claims from consumption....	126 or 25.7 per cent.

This percentage is naturally high, owing to the fact that the vast majority of policy-holders are yet young men, and consumption of course forms a much larger proportion of the deaths at those ages than afterwards. We have moreover included as consumptive cases a number of deaths which we believe to be really due to that disease, but which in other classifications might have been placed under the names recorded in the certificate such as "Chronic Bronchitis," "Chronic Pneumonia," etc.

	Average Height.	Average Weight.
Consumptive cases.....	5 ft. 8.6 in.	150.3 lbs.
Non-consumptive cases.....	5 " 8.6 "	159.6 "

(Not including "respiratory diseases.")

Of the 126 consumptive cases there were: average weight or above, 32; below average weight 94. Just about 75 per cent. (74.6) of all consumptive cases were thus under the average weight at the time of assuring.

By arranging the cases again into three groups, one including those whose weight is within five pounds above and five pounds below the true standard, and the two others consisting of those above and below this class, we obtain the following table:—

*Proportion of consumptive cases to total deaths.*

Above standard.....	14.9 per cent.
Standard.....	24.1 "
Below standard.....	34.3 "
Whole company.....	25.6 "

The next table deals with the question of family history.

*Proportion of consumptive cases to total deaths.*

Among those who were	Family history perfect.	Family history tainted or doubtful.
	No. Per cent.	No. Per cent.
Above standard weight.....	7 8.1	14 22.5
Standard.....	14 15.9	20 42.9
Below standard.....	40 29.0	31 43.7
Whole company.....	61 19.6	65 36.3

These figures speak eloquently as to the influence of bad or doubtful family history. They also speak with no uncertain voice as to the effect of light weight in intensifying the danger from any family taint, and of any excess of weight in reducing such danger. They thus confirm strongly the conclusions deduced from the records of the Washington Life, although they on the other hand by no means go so far as to promise any practical immunity from consumption to those who are above the average weight, as the experience of that company would seem to indicate. It will, however, be noticed that the number of cases of this kind under observation is very small in both companies, and the probability is that the truth lies between the two conclusions.