existence of any evidence of life. The question hinges on degree of power, and what is of concern in the matter is the capacity of the blood for drawing off the carbon dioxide from the tissues whilst it is normally traversing the capillaries. There is nothing to show the degree of carbon dioxide tension in the tissues that is detrimental to bioplasmic activity, but I should think it may be taken that the gas, as it is produced, requires at once to be removed.

The agents producing the acidosis are the B-oxybutyric and diacetic acids. The former is the acid started with, and from it the latter is evolved by oxidation, and this, by escape of carbon dioxide, passes into acetone. The bodies are thus linked together into a series, and in speaking of their source, the question resolves itself into that of B-oxybutyric acid.

From chemistry we learn that butyric acid stands as a lower member of the class of fatty acids to the higher members of which belong stearic, palmitic, and oleic acids, components of the fats largely occurring in the human body. In the process of oxidation, it is usually the B-carbon atom of the fatty acids which primarily, both inside and outside the living organism, becomes oxidised. By oxidations in the B position, followed by hydrolytic cleavage, descent can be made from a higher to a lower member of the fatty acid series. A succession of these downward steps leads to the formation of butyric acid, which subsequently passes, by oxidation, into B-oxybutyric acid. In this way, the derivation of B-oxybutyric acid from the normally occurring higher fatty acids can intelligibly be accounted for.

Now, such being the chemical position in which oxybutyric acid stands, ought we not to look to fat for its clinical source? Fat has been already spoken of as a constituent of the bioplasmic complex, thereby standing in the same position as carbohydrate. By wrong katabolism, we have seen that sugar is thrown off, and it is only an analogous procedure for the throwing off of oxybutyric acid likewise to occur. Under the existence of a redundancy, fat and glycogen are thrown off as a normal occurrence for storage purposes, and they are both of them principles suitable for storage on account of the non-diffusible property they possess. In the case, on the other hand, of abnormal dissociation, in each instance alike the product thrown off is of a diffusible nature and thereby incapable of retention in the system. Hence the elimination of both the sugar and the oxybutyric acid with the urine.

Sugar, under the circumstances, is the result of a faulty molecular breaking-down, and must not the same be said of oxybutyric acid? The two seem to stand in a parallel position, carbohydrate in the one case,