

June 27, 1942.

Dr. Basil G. Bibby, Dean,
Tufts College Dental School,
416 Huntington Avenue,
Boston, Mass.

Dear Dr. Bibby:

In the absence of Dr. Machle from the Laboratory, I am sending you a number of reprints and some mimeographed material which I think will be of interest to you in connection with your letter of June 22. I shall also reply to your question, but I shall return your letter and a copy of mine to Dr. Machle's file, and when he returns he may have something further to say. On the other hand, he is engaged in work which will keep him out of the Laboratory except for occasional visits for the duration of the war, and, therefore, if you wish to raise any further question which I havenot answered, perhaps you may wish to write me directly.

The question of potentially poisonous materials in dental creams has arisen with us before, and we are disposed to regard the problem as somewhat less than serious. Obviously, no very large proportion of a dentifrice used in the normal fashion is swallowed or absorbed. Some unpredictable portion may be swallowed or absorbed from day to day, and this might conceivably produce a hazard. The other possibility is that the entire contents of the tube might be swallowed by a child with the possibility of acute intoxication presenting itself. I think this would not be a serious problem with fluoride in the concentrations indicated. Moreover, it seems apparent to me that the limited absorption associated with the daily use of such a dental cream as you have referred to, would be insignificant.

We are preparing some articles for publication, giving the results of the studies of Dr. Machle and his associates, on the Metabolism of Fluoride Administered to Human Subjects under a Variety of Conditions. These results would indicate that such quantities of fluoride as you are dealing with are of little or no hygienic significance. I trust that these articles will be published at an early date, but they may be subject to considerable delay. Mean time, if there are any specific questions which might be answered by this work, I should be glad to give you our conclusions.

Cordially yours,

Robert A. Kehoe, M. D.