

day. No ill effects were felt by any of the men. After the Christmas vacation the experiment was resumed, and, at the time of writing, has continued for fifty days, without any noticeable injurious effects. This experiment was not so accurately carried out as those of Dr. Wiley; it was intended only to test the effect of the preservative on the health of the men in a general way; but it tends to prove the conclusion arrived at by the British Commission.

On the other hand, while it is doubtless true that some, possibly the large majority of people may use boron preservatives without feeling any unpleasant effects, others may be seriously affected. Further, if preservatives of various kinds are used in a number of food substances and in beverages, it may happen that in the aggregate a large enough quantity be taken into the system to be harmful.

With the present available information regarding the effects of the so-called chemical preservatives on the human system, it is apparent that it would be unwise to recommend their use except in cases where the necessity is clearly manifest, and where it can be demonstrated that other methods of preservation are not applicable. Milk and cream certainly do not come under this list; for it has been abundantly demonstrated that with proper care these substances can be placed in the consumer's hands in good condition. Long experience has also proven that it not necessary to use preservatives in butter intended for home consumption. With export butter the case is somewhat different. It does not reach the consumer so quickly, and has to be shipped long distances, sometimes under very trying condition. Moreover, the trade demands a practically saltless butter, thus preventing the use of the preserving material used in the home trade. It is evident, however, that only boron preservatives should be used, and then in the smallest amount necessary to preserve the butter.

Another point that cannot be too strongly emphasized is that preservatives do not improve the butter; they simply preserve for a longer time the flavor developed in the fresh article. The flavor is influenced by many conditions in the production of the milk, care of the milk and cream, and in the manufacture of the butter, and is practically settled before the preservative is added. The preservative only helps to retain the particular flavor developed, and cannot be used to overcome slovenliness or carelessness in the manufacture of the butter.

During the last few years various brands of butter preservatives have been extensively advertised throughout the Province. Naturally, considerable interest is being taken in them, and many requests have come to us for exact information regarding their nature and use. To answer these questions more definitely, we decided to collect and examine a number of the commercial preservatives now on the market and to study their preserving or keeping properties when used in butter. The general plan of the work at the Dairy was as follows: The regular churning, which usually consists of 200 to 300 pounds of butter made