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PROCESS FOR REDUCING VEGETABLES CONTAINING STARCH TO A DRY POWDER

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There already exist processes for reducing vegetables containing starch to a dry powder which is capable of being preserved indefinitely and utilized for preparing mashes and other like dishes without the taste of such mash differing in any way from that of mash prepared with fresh vegetables of the same nature.

In all the hitherto known processes in question, the vegetables such as potatoes are first of all cooked at an appropriate temperature and then reduced to a damp powder which is finally subjected to a suitable drying by heating.

Now, experience has shown that the damp powder obtained in the first phase of the process became sticky during the subsequent heating, particularly when it was applied in a thick layer against the heating surface, and this impaired the quality of the final product, making it useless in particular for preparing mashes.

The improvements which are the object of the present invention enable this drawback to be overcome.

According to the invention, the cooked vegetables are placed in the presence of a suitable quantity of perfectly dry powder, such as is obtained in the last phase of the process. After treating this mixture in a heated drum provided with a stirring device, it is found that the particles of the final product have no tendency to adhere to each other, even although they are placed in a very thick layer.

Another essential feature of the invention consists in the fact that the mixture of cooked vegetables and of dry powder is treated in vacuo. The same treatment in vacuo may moreover be effected in the first phase of the process in which phase the cooked vegetables are reduced to a damp powder.

Hereafter an embodiment of the improved process which is the object of the invention will be described by way of example, as applied to the preparation of potato powder or flour.

In an open or closed drum (for example of 100 litres capacity) provided with a suitable stirring device and heated by means of non-superheated steam, are introduced 40 Kgs. of a mixture of potato powder formed, for example, by 32 Kgs. of cooked potatoes and by 8 Kgs. of dry powder such as is obtained by means of the present process at the end of the treatment. The mixture thus obtained is stirred, for example for 30 minutes, and at the end of the operation 16 Kgs. of perfectly dry potato powder are obtained which is capable of being used for preparing mashes.

As previously stated, the treatment in vacuo may be carried out, according to the invention, in the two phases of the process, that is to say both during the transformation of the cooked vegetables into damp powder and during the transformation of the damp powder into dry powder.

In the example which has just been described, it was assumed that the quantity of dry powder added to the cooked potatoes was 25% by weight. It is, of course, understood, that this proportion is only given by way of example and that it may vary from one case to the other, according to the nature of the vegetables treated.

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