

**ALIEN PROPERTY CUSTODIAN****CEREAL PRODUCT AND PROCESS FOR OBTAINING SAME**

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My invention relates to an improved cereal product, such as meal, flour and other milling products obtained from wheat, corn, maize, rice and other edible cereals. My invention also comprises a process for obtaining improved cereal products.

An object of my invention is to remove or to cover the yellowish or greyish shade of flour or the like.

A further object of my invention is to improve the undesired shade of cereal products and to improve the baking qualities of such products.

It is known in the art to improve the colour of flour by means of bleaching flour. One has proposed to subject flour to the influence of ultra-violet rays and to bleach the flour by means of electricity, nitrogen oxides being the active means in such electrical bleaching processes. Also chlorine, inorganic and organic peroxides and the like have been proposed for this purpose.

However, some of the known processes are expensive (ultra-violet rays), others give very poor results (nitrogen oxides) as the flour turns greyish, and still other processes (chlorine) have the drawback of being detrimental to the apparatus. Further it has been observed that the addition of very small proportions of the means to the flour to be improved is very difficult, in as much as it is not easy to make a uniform mixture of the flour and the addition.

Now according to my invention I have succeeded in improving flour or other cereal products without the above drawbacks being encountered. The flour obtained according to my invention will not turn yellow or grey, and an unfavorable influence on the baking qualities of the flour is not experienced. On the contrary: flour obtained according to my invention is of a bright white colour and this flour will maintain this white colour for long periods. Further the dosing can be carried out very accurately.

With the above and other objects in view my invention consists in adding a slight proportion of a blue inorganic dye to milling products before the end of the milling process.

The improved cereal product according to my invention contains intimately mixed therewith a slight proportion of a blue inorganic dye.

Further features of my invention will be apparent from the following description and are covered by the claims.

As an example of a dye to be used according to my invention ultramarine blue is mentioned, which is quite harmless especially in view of the fact that I use only very small proportions and at any rate such minor quantities that the end product will contain the addition in harmless slight traces. Instead of ultramarine blue also other blue dyes may be used for instance chrome-blue (chromo-silico-phosphate) and the like.

In general blue inorganic dyes may be used which remove or cover the undesired colour or shade by complementary working, or which improve the colour.

I may add the dye to the cereals, e. g. by treating the grains with a suspension of the dye. The dye may also be mixed with the cereals in a dry condition. I may also add the dye, if desired mixed with flour, e. g. rice flour, in the beginning of the milling process in a continuous controllable way to the cereals which have been milled already to a certain extent. When applying this method the proportion of the addition may be smaller. It is also possible to combine the different methods of adding the dye.

A further advantage of my process consists therein that I may use the dye in its quality as it commonly available in the trade. During the different treatments of the flour the dye is mixed with the product very intensively and uniformly, thus increasing the favourable effect. During the milling operations the dye will attain the necessary degree of fineness, which is necessary for obtaining a uniform and homogeneous mixture. In this connection it is remarked that milling the dye to the desired fineness before the dye is mixed with the flour would cause expenses which are not to be incurred by applying my process. Further it would be very difficult to mix two finely divided substances, i. e. the finely milled flour and the finely ground dye.

I have further made the surprising discovery that the addition according to my invention has a favourable influence on the baking quality of the flour.

When adding the dye to the cereals before removing the brans a larger quantity of the addition is necessary than when adding the dye in a further stage of the milling process, or after the brans have been removed. Depending on the shade of the flour I use e. g. 10-15 g of dye for every 100 kg of cereals, but if the dye is added after the brans have been removed 2-3 g of the dye are sufficient.

In adding the dye the well known dose-apparatus may be used which make it possible to control the addition between very narrow limits.

It is also possible to combine my process with known bleaching-processes, in which case the proportion of the addition may still be smaller. It is remarkable that the addition according to my invention does not diminish the influence of the known improvers, but in some cases even increases the effect of the known processes. It is to be observed that when using a combination of the known processes for improving the flour often the effect of the several methods is considerably diminished.