

## **Benzoyl Peroxide Will not Influence Nutrition of Flour Wheat**

Benzoyl peroxide can not only accelerate afterripening of wheat flour and improve greatly whiteness of flour, but also not influence nutrition of wheat flour.

The coloring matter in wheat flour is carotenoid; because benzoyl peroxide has oxidizability, which can destroy conjugated double bond of  $\beta$ -carotene; consequently, the whiteness of wheat flour will be increased. So, it is a misunderstanding that someone thinks benzoyl peroxide will destroy nutrition of wheat flour!

$\beta$ -carotene can convert to vitamin A in human body; generally speaking, by assimilation and absorption in human body, one sixth of  $\beta$ -carotene can be finally converted to vitamin A.

One adult needs 700~800 $\mu$ gRE vitamin A everyday, and after reduction to  $\beta$ -carotene, the amount is 4200-4800 $\mu$ g.

The content of vitamin A in animal food is abundant, and the best sources are liver of various animals, whole milk, egg and cod-liver oil, etc.

The best sources of  $\beta$ -carotene are vegetables and fruits, for example, carrot, broccoli, capsicum and pakchoi cabbage, etc, and their contents are among 1000 $\mu$ g/100g and 8000 $\mu$ g/100g.

Seeing from the data of vitamin A and  $\beta$ -carotene in food that supplied

by each country in the world, the content of  $\beta$ -carotene in wheat flour is zero, which is not to say that there is no  $\beta$ -carotene in wheat flour, but, the content is little; the content in wheat flour is only  $6\mu\text{g}/100\text{g}$  reported in relevant news.

Although the content of  $\beta$ -carotene in wheat flour is little, but it still is the major factor influencing color and luster of wheat flour. Adding benzoyl peroxide in wheat flour not only improves color and luster of wheat flour, but also not influences the nutrition of wheat flour.

Before adding benzoyl peroxide in wheat flour, processed wheat flour needs “afterripening”, which is to say, store newly processed wheat flour for 20~30 days to oxidize  $\beta$ -carotene in flour making use of oxygen in air and destroy sulfhydryl in flour wheat at the same time, thus, the flour wheat can be processed as flour products, such as steamed bun and bread, etc. It is the reason that the wheat flour will become much whiter if store longer.

After adding benzoyl peroxide in wheat flour, the “afterripening” of wheat flour can be completed in 2~3 days, which not only improves color and luster of flour and production level, but also shortens the afterripening time from 20~30 days of natural to 2~3 days; it reduces mildewing of wheat flour due to long time storage, meanwhile, it not destroys nutrition of wheat flour.