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METHOD OF PREPARING STABLE DRY VITAMIN C

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This invention relates to a method of preparing stable dry vitamin C, which consists in adding cow's milk to concentrated solution of vitamin C or to fruit juice rich in vitamin C, spraying the mixture into air or an atmosphere of carbonic acid gas and then drying the same into powder form. The object thereof is to obtain vitamin C in dry and powder form which stands preservation and is free from an apprehension of changing its quality and losing its effect, by enveloping it with the constituents of the cow's milk such as fat, protein, etc. and thus preventing its contact with air and moisture.

Vitamin C not only in the state of an aqueous solution, but also even in dry and powder form, gradually has its quality changed by contact with air or the moisture contained therein and has its effect reduced. According to the present invention, after adding cow's milk, concentrated solution of vitamin C or fruit juice rich in vitamin C is sprayed into the air or into an atmosphere of carbonic acid gas dried by heating and is turned into the powder form enveloped by the fat, protein, etc. contained in the milk, thereby cutting off the contact of vitamin C, with air or the moisture contained therein and making it a stable nutriment which well stands preservation.

The following is an examples of carrying out this invention into practice:

Example I

By adding magnesium oxide and calcium hy-

droxide, vitamin C-containing solution is alkali-fied and vitamin C is precipitated. Then, the solution is filtered and the precipitate is suspended and dispersed in water or alcohol. Next, by passing carbonic acid gas through it in slightly acidic condition, magnesium and calcium are precipitated as carbonate and at the same time vitamin C is liberated and then the solution is filtered again. Next, after adding 1,000 cc of cow's milk to 50 cc of the concentrated solution containing 0.5 gram of vitamin C which has been obtained by concentrating the filtrate by evaporation under reduced pressure, it is sprayed into a dry chamber held at 60° C., thus dispersing it as fine sprays and drying it.

In this way, 100 grams of the powder containing more than 0.3 gram of vitamin C is produced.

Example II

To 300 c. c. of concentrated and deacidified pineapple juice (the pineapple juice generally contains 0.4 gram of vitamin C per 1,000 cc.) is added 400 cc of cow's milk and the mixture is sprayed into a dry chamber held at 65° C., thus dispersing it as fine sprays and drying it.

In this way, 100 grams of the powder containing more than 0.3 gram of vitamin C is produced.

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