levels of carotenoids. EP 2,488,041 describes the use of calcium ascorbate to prevent the oxidation of carotenoids and the polyunsaturated fatty acids in dried foods. EP 2,654,464 describes the use of ascorbic acid in combination with an encapsulation process to effectively stabilize carotenoids in short cooking dry pasta.

Documents CN 1 957 744, CN 103 609 946, US 4 820 529, US 5 244 689 and US 4 230 735 disclose various methods of obtaining similar noodles.

The object of the present invention is to improve the state of the art and to provide a non-fried noodle product in the form of a noodle dough or noodle cake which has an improved retention of naturally derived carotenoids from sweet potato flour. It is a further objective of the invention to provide noodle products with a visually appealing natural colour and appearance brought about by the retention of the natural carotenoids in the product.

The object of the present invention is achieved by the subject matter of the independent claims. The dependent claims further develop the idea of the present invention.

The invention relates to method for making a non-fried noodle dough comprising the steps of:

a) mixing sweet potato flour with an oil;
b) heating the mixture of step a) to a temperature from 30°C to 75°C for 5 to 30 minutes;
c) adding wheat flour, salt and water to the mixture of sweet potato flour and oil after step b), and mixing all together to form a dough mixture;

Claims

1. Method for making a non-fried noodle dough comprising the steps of:
   a) mixing sweet potato flour with an oil;
   b) heating the mixture of step a) to a temperature from 30°C to 75°C for 5 to 30 minutes;
   c) adding wheat flour, salt and water to the mixture of sweet potato flour and oil after step b), and mixing all together to form a dough mixture;
   d) processing the dough mixture by kneading, rolling into sheets, cutting into strips and/or steaming.

2. The method according to claim 1, wherein step b) is carried out at a temperature from 55°C to 75°C for 5 to 15 minutes, preferably at a temperature from 65°C to 75°C for 5 to 10 minutes.

3. The method according to claim 1 or 2, wherein the non-fried noodle dough comprises wheat flour, 5-30 wt% sweet potato flour, 1-15 wt% oil, salt and water.

4. The method according to one of the preceding claims, wherein the noodle dough comprises 14-28 wt% sweet potato flour.

5. The method according to one of the preceding claims, wherein the sweet potato is selected from an orange-fleshed sweet potato variety of the species *Ipomoea batatas*.

6. The method according to one of the preceding claims, wherein the noodle dough comprises 2.5-8.0 wt% oil, preferably from 3.0 to 7.5 wt% oil.

7. The method according to one of the preceding claims, wherein the oil is liquid oil at 25°C.

8. The method according to one of the preceding claims, wherein the oil is selected from the group consisting of palm oil, palm olein, olive oil, corn oil, sunflower oil and canola oil, or a combination thereof.

9. The method according to one of the preceding claims, wherein the ratio by weight of the oil versus the sweet potato flour in the noodle dough is from 0.1 to 0.5, preferably from 0.2 to 0.35.

10. The method according to one of the preceding claims, wherein the salt comprises a salt selected from the group consisting of sodium chloride, sodium carbonate, potassium carbonate and sodium polyphosphate, or a combination thereof.

11. The method according to one of the preceding claims, wherein the noodle dough further comprises a gum, preferably selected from the group consisting of guar gum, locust bean gum, alginate and carboxy-methyl-cellulose, or a combination thereof.

12. Method for making a non-fried noodle cake comprising the steps of first making a non-fried noodle dough according to one of the claims 1 to 11, and then drying the resulting dough mixture by air, preferably by hot air.

13. Noodle cake obtainable by the method of claim 12.

14. The noodle cake of claim 13, wherein the water content is below 7 wt%.