

Study on the Application of Natural Pigment in Baked Food



Baked food originates from western countries. It uses flour, yeast, salt, sugar and water as basic materials, and then adds appropriate amount of fat, dairy products, eggs, etc. After a series of complex manufacturing processes, the baked food is rich in nutrition and beautiful in appearance. People buy it as their staple food or feed it. Giving friends is a good choice. With the deepening of reform and opening up, the improvement of people's living standards, the improvement of baking products' quality and the increase of products' varieties, China's baking food industry will have a greater development in terms of output, production technology, quality, mechanization and automation. [macaron cookie depositor](#)

2. The Significance of Adding Natural Pigments to Baked Foods 2.1 Natural color Natural pigments are mainly extracted from animal and plant tissues. Among them, plant pigments are relatively rich, mainly from vegetables, melons and fruits, flowers, soft and elegant tone. According to statistics, there are dozens of natural pigments allowed to be used in baked food, such as curcumin, cocoa pigments, indigo pigments, amaranth red pigments, chlorophyll, carotene, Monascus pigments, etc. These pigments are natural in color, have the color and light taste of the natural extract itself, can promote human appetite, is conducive to human digestion and absorption, is an important sensory index of food. [Microwave drying machinery and equipment](#)

Application of Natural Pigment in Baking Food-Macaron 4.1 Coloring Method 4.1.1 Spray Gun Coloring Makaron is made from basic raw materials (without edible pigments). After baking and cooling, the liquid natural pigments are put into the spray gun and the makaron is sprayed to the top. Such as: chili red. 4.1.2 Mixed Coloring Mixed coloring mainly refers to mixing natural pigments and baked food - Macaron powder material evenly first, then mixing other wet raw materials, and then forming, baking mature. Such as cocoa pigment.

4.1.3 Colouring Makaron will be made from basic raw materials (without edible pigments). After completing all the steps before baking, the pigments and water will be mixed in a certain proportion, and then dipped in a brush and dried to maturity. Such as chlorophyll.

4.2 Ratio and Coloring Process 4.2.1 Proportion of powdered water-soluble natural pigments (taking cocoa pigments as an example)

(1) Proportion: Almond powder 225g, Archaeal sugar powder 225g, cocoa powder 20g, protein 80g, sugar 240g, water 80g, protein 100g. (2) Mixed coloring method was used. The first step is to mix 225g almond powder with 225g archaic sugar powder is put together and beaten a few times in the crusher to make the almond powder and sugar powder mix evenly and the quality of almond powder is fine. Then pour 20g cocoa powder into the mixture and mix it evenly by hand. In the second step, the protein 80g is added to the powder prepared in the first step and stirred with a rubber scraper until the powder and egg white are completely mixed together. In the third step, sugar and water are boiled over a fire until 118 degrees Celsius. The fourth step is to make protein cream. Put the protein 100g into the beater and whip until the neutral foam is formed. Then the boiled sugar water slowly flows into the egg white along the wall of the mixer. At this time, the mixer is at its fastest speed and can be beaten directly to the wall of the barrel to cool. The fifth step is to mix the protein frost with the powder and egg white mixture. The sixth step is to put the paste into the mounting tape and squeeze it into the silica gel pad. The seventh step is natural drying. In the eighth step, bake at 150 C for 12 minutes. 4.2.2 Ratio of Water-soluble Natural Pigments in Liquid Phase (Take Curcumin as an Example)

(1) Proportion: Almond powder 225g, Archaeal sugar powder 225g, protein 80g, sugar 240 g, 80 g water, 100 g protein. (2) The method of spray gun colouring is adopted. In the first step, the ingredients in the formula are made according to the method of making French Maka until the stirred batter is packed into the mounting tape and squeezed into the non-stick mat. The second step is to put curcumin into the mounting gun and spray the desired pattern on the extruded batter according to your own idea. The third step is natural drying. The fourth step, baking mature.

(3) The method of colouring was adopted. In the first step, the ingredients in the formula are made according to the method of making French Maka until the stirred batter is packed into the mounting tape and squeezed into the non-stick mat. The second step is to mix curcumin and water in a ratio of about 1:5, then dip them in a brush and throw them on the Macaron's batter. The third step is natural drying. The fourth step, baking mature.