

Research on Key Technology of Formula Optimization and Processing of Nutritional Cereal Flours for Infants

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Abstract: Infant cereal flour is an important supplementary food for infants and young children. It plays an important role in the complementary feeding period and it can also enable infants and young children to better absorb various nutrients. There is growing evidence that eating whole grains is good for human health. People often associate a whole grain diet with health and nature. The liberalization of my country's childbirth policy has led to a faster development of domestic infant food, and in the concept of childcare, my country has also undergone great changes. The aim of this study was to review existing research about the formula optimization and processing of nutritional cereal flours for infants and young children. It is a special focus on whole grain infant cereal flour.

1. Introduction

Before processing, you must be able to understand the content of organic matter among the materials that need to be used, and be able to recognize which type of millet is more in line with the standards of natural green food and has a wider range of applications. It is necessary to be able to find a place suitable for the growth of millet, and be able to understand the positive effect of cereal flour on human health. In the process of processing, it is necessary to fully retain the nutrients in the millet, and to remove some impurities, so as to better adapt to the use of young children or some elderly people and facilitate their digestion and absorption.

2. The Significance of Formula Optimization and Processing of Nutritional Cereal Flour for Infants and Young Children

2.1 Extract Nutrients

The germ of millet and brown rice is rich in nutrients such as vitamin B and trace elements, which can reduce cardiovascular diseases in the elderly, and also can regulate cholesterol and body fat. The purpose of processing is to gather these nutritious things together so that infants and young children can better absorb them. A large amount of nutrients are contained in a relatively small

amount of cereal flour, which can enable infants and young children and the elderly to use a small amount to obtain sufficient nutrition.

2.2 Remove Impurities

Processing millet and brown rice can effectively remove impurities on it, because there will be a shell surrounding the rice, which will affect the use of infants and the elderly, it is not good for their gums, and it will also reduce the taste of cereal flour. The main ingredient of millet is starch, which contains a large amount of lactose. During processing, lactose can be combined with dietary fiber, which can effectively prevent the symptoms of lactose intolerance in infants and children, and can also promote infants and the elderly human digestive function.

3. Measures to Optimize the Formula and Processing of Nutritional Cereal Flour for Infants and Young Children

3.1 Develop New Technologies

Nutritional cereal flour for infants and young children in my country have only begun to develop in recent years. Because the country has opened up the second-child policy and improved early childhood education, nutritional cereal flour have entered the public's field of vision. However, due to the lack of support from new technologies and new processes, this As a result, nutritious cereal flour cannot be processed in large quantities, and most of the production techniques adopted are extrusion and drum drying methods. Such technologies will affect the speed of rice noodle preparation, the taste is also relatively poor, and it cannot be used independently.

In the process of making nutritious cereal flour, it is necessary to be able to fully understand each step of the grain germ, and to be able to determine the main factors such as temperature and time in the fermentation process to realize the nutrient absorption of the cereal flour. In these main processes, it is necessary to be able to make use of new technology to improve the nutrient extraction of brown rice, and also to understand which temperature and fungi can be used to better ferment the mixture of rice flour and water, and to perform every step of the operation Carry out excellent control, so that the extension of new technology can be better carried out, and the edibility of cereal flour can be improved.

For example, in the process of making cereal germ nutritious cereal flour, professionals should be invited to fully control each step of the production, such as studying the fineness of pulverization, the ratio of powder to water, the heating temperature for germination, and the types of bacteria used, etc. And so on, there must be dedicated personnel to control it. You can also learn new techniques and new methods for making cereal flour, and can find problems in the process of using them, and improve them, make accurate production, and determine the best process.

3.2 Look for Appropriate Nutritional Supplements

In the optimization process of infant cereal flour formula, the nutrients in it were not better developed, and the nutrients could not be better concentrated and exerted. The content of some nutrients such as sodium, calcium and vitamins did not meet the standard. If you want to meet the standard, you must add foreign materials. Nutrient content, which makes the cereal flour made is not a natural reserve, and also affects the natural original intention of making cereal flour for infants and young children.

In the process of configuring cereal flour, it is necessary to be able to analyze some other nutrients, and to understand whether cereal flour and these nutrients can be put together, and it is

better to adopt a combination of nutrients for different age groups. The nutritional cereal flour realize their value. Different applications of nutritional supplements can have a certain impact on the flexibility and characteristic indexes of cereal flour. Scientifically mixing nutritional supplements with cereal flour can enable the germ cereal flour to release their own nutrients to the maximum and also achieve a balanced nutrition in the formula.

For example, professionals need to find sufficient nutritious ingredients, such as yam, walnuts, rice kernels and other foods. They must be able to analyze the ingredients of these nutritious foods and understand which ingredients added to cereal flour can be developed for different groups of people, and which ones are Those who cannot be matched should understand the rules of use and develop nutrients suitable for the secondary processing of cereal flour. During the matching process, the nutrition in the cereal flour and ingredients should be fully extracted to make nutritious cereal flour for infants and young children.

3.3 Production Standard Procedures

In the technological process and processing operations of nutritional cereal flour, it is necessary to understand the technology and reference standards of the production line to achieve large-scale production. Scale-up is helpful for the production and processing of cereal flour. In this scale, production efficiency can be accelerated, and the work flow can be standardized and supervised. When a problem occurs in any process, the person in charge can be quickly found, and Make timely corrections.

For example, professionals can plan the entire procedure of nutritional cereal flour, and be able to speed up the efficiency of the production process as the main purpose, and can fully take out the cereal flour and add nutrients to the ingredients to better achieve the processing standards of the nutritional cereal flour. In the process of the process, in each production node, add the corresponding professionals to be responsible, let them supervise the process and technology of this department, better ensure the safety of raw materials, and realize the best management of the screening and production process.

4. Conclusion

In recent years, the demand for nutritional cereal flour for infants and young children in my country has gradually increased, so the development of cereal flour for infants and young children has a good prospect. Millet has many nutrients and a complete variety. If the processing flow can be optimized and technically equipped, the nutrition in it can be fully utilized, and it can also make millet adapt to the modern fast-paced lifestyle and turn it into a powder-like substance. Eat it in time, which will greatly increase the use of cereal flour in society.

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