

Optimized design of infant nutrition rice noodles formula (2)

The dietary balance of the human body mainly refers to four aspects, namely, amino acid balance, thermal nutrient balance, balance between nutrients and acid-base balance. Among the 22 kinds of amino acids required by the human body, 8 kinds of amino acids cannot be synthesized in the human body. Food is provided.

[Microwave drying machine](#)



The nutritional value of protein in food depends largely on the content and proportion of these eight amino acids. The balance of thermal nutrients mainly refers to the balance between carbohydrates, fats and proteins, and the appropriate intake ratio of the three. For: Carbohydrate: Fat: Protein = (6 ~ 7): 1: (0.7 ~ 0.8) . [Baby rice flour processing machinery](#).

In addition, there are intricate relationships among various nutrients, especially their absorption, some restricting each other, and some promoting each other. However, it is generally believed that the amount of various nutrients in the diet is $\pm 10\%$ of the standard amount. Within the scope, it can be called the basic balance between nutrients. The acid-base balance is mainly regulated by the ratio between the intake of acidic foods containing non-metallic elements and alkaline foods containing metal elements. The pH value is maintained between 7.3 and 7.4. If the diet is improperly matched, it will cause physiological acid-base disorders. It can be seen that the physiological dietary formula must meet the nutritional balance of the above four aspects.

We study the formula of infant nutrition rice noodles, aiming to apply optimization technology to rationally mix a variety of foods to achieve the above four aspects of nutritional balance.

The health effects of diet are long-term. Balanced diet needs to start from infants and children, and persist for a long time. Only in this way can it fully reflect its significant promotion of health.

China's dietary structure is basically a type of "high valley", the overall nutritional level is low, especially protein intake is small, but there is waste in the dietary structure.

The optimal design allows us to make the best use of less raw materials to produce the most economical and nutritionally best products. This paper uses the mixed penalty function method to obtain the best formula for infant nutrition rice noodles, providing a theory for rational nutrition formula. According to the method, the method is stable and reliable, and can be extended to the dietary formula design of different groups of people.