

# The application of cereals in sports nutrition foods in China (4)

Application of grain in sports supplements



There are usually 6 kinds of sports supplements, namely protein powder, creatine, BCAA branched chain amino acid, glutamine, nitrogen pump, and L-carnitine. The latter five are mainly used to promote muscle development and reduce fat. Protein powder is mainly used to repair muscle damage and improve muscle resistance. Cereals provide a wealth of high-quality protein resources and are therefore widely used in the production of sports supplements.

## [Microwave drying machine](#)

Using soy protein hydrolysate-soybean peptide as raw material and compound juice, a sports supplement was developed. Through bodybuilding experiments by bodybuilders and fitness enthusiasts for half a year, the results showed that compared with the control personnel, bodybuilders Significant increases in muscle mass and body fat are also reduced. [Cereal bar making machine](#)

A sports nutrition supplement was developed based on pollen hydrolysate, soy protein isolate, whey protein, aminopolysaccharide and taurine. Verification experiments show that sports nutrition supplement can effectively supplement the loss of protein after strenuous exercise, improve the motor function of muscle cells, and have the effect of resisting exercise fatigue and improving exercise ability.

Application of cereals in sports drinks

Sports drinks are the most direct food for humans to supplement their physical strength. According to the actual use, we usually divide sports drinks into peptides and fibers. Among them, fiber sports drinks are mainly fat-reducing, while peptide sports drinks have anti-oxidation and fatigue-relieving effects.

Therefore, peptide sports drinks are often used for physical recovery during professional athlete competitions or training. The grain contains a large amount of high-quality protein, and at the same time, many functional polypeptides can be obtained by proper hydrolysis.

The sports drink was made from the mung bean with higher protein content, and the product was relieved by the mouse test. The results showed that the liver glycogen reserve in the mouse was significantly increased, and the relevant negative indicators were effective. Improvement, indicating that mung bean sports drink has a certain effect of relieving fatigue.

Using soybean peptide as raw material and banana juice, a new type of sports drink was developed through process optimization. The results of sensory evaluation showed that the beverage was almost similar to the similar beverage on the market in terms of taste and texture, and the nutritional content was relatively high.

## Summary

At present, China is vigorously promoting the national sports and fitness for all. The development of grain sports nutrition foods provides an effective guarantee for the body's sports nutrition and health. However, the production of grain sports nutrition foods has not been thoroughly studied, and the product consumer market still has certain limitations. Therefore, we need to continuously improve the processing technology of sports nutrition foods, accelerate the improvement of the industry system and relevant legislation, and thus promote the vigorous development of China's sports nutrition food industry.