

# Application of Nutrition Fortified Food in Nutrition Supplement

Yuanxin Li \*

The University of Leeds, Leeds LS2 9JT, United Kingdom. E-mail:ml1925yl@leeds.ac.uk

**Abstract:** With the development of the times, in recent years, people's basic living standards are constantly improving. More and more luxury goods and spiritual and material enjoyment appear in people's vision. At the same time, more electronic products are threatening people's health. People began to focus on food safety and their own health, and began to pay attention to the relationship between nutrition fortified food and human nutrition supplement. Only by upgrading the health and nutrition of the human body, can we better face life and challenges. This paper mainly discusses the relationship between nutrition fortified food and nutrition supplement and the specific application measures.

**Keywords:** Nutrition Fortified Food; Nutrition Supplement; Application Measures

## 1. Introduction

Food plays a leading role in people's life, and it is also a necessity of life. Reasonable food collocation can transport comprehensive nutrients for the human body. But now life is more traditional and single diet, there is no substantial help to human health. The emergence of nutrition fortified food can provide basic nutrients for people's body, but also has a certain nutritional value. But in the current market, due to the penetration of some lawless elements, many foods appear some ingredients that are not conducive to human health. So the state has also issued a series of regulations and measures to ensure people's food safety.

## 2. Basic principles of nutrition fortified food and nutrition supplement

The main way to improve people's physical fitness is to start from diet and food. Nutrition fortified food refers to adding some nutrients beneficial to human health in the food used by people, so as to improve the overall nutritional value of food. There is still a big gap between domestic and foreign research in this aspect. Some foreign developed countries put forward their opinions and ideas on food fortification in the 1930s. The United States and some European Union countries have taken practical measures on food fortification for a long time. The food fortification work in China was carried out relatively late. Since 1998, 31 kinds of nutrients, 17 kinds of vitamins, 97 kinds of compounds, and some trace elements and fatty acids were officially determined.

## 3. The basic relationship between fortified food and nutrition supplement

### 3.1 From people's nutritional deficiency to strengthen

Nutrients are very important to the human body. However, it does not mean that we can supplement it casually. It needs to be formulated according to each person's different physical conditions and nutritional requirements. We must start with the national survey and the overall nutritional status of the people in the survey area. For example, some people with congenital

malnutrition, and some children with calcium deficiency, there are all kinds of differences between each person, so we need to use scientific methods to provide people with reasonable nutrition supplement.

### **3.2 Defining the scope of use**

The specific plan of nutrition supplement should be carried out from many aspects. There are also great differences in the nutrients that people lack in different regions of China. Generally speaking, the nutrient level of some economically developed coastal areas is relatively high, which may be related to the economic situation, climate and people's living habits. It needs to be combined with the relevant national survey report to supplement nutrition. In general, iodine deficiency disorders in China are among the most serious in the world. At the same time, the trace element point is also the trace element that the human body must obtain. When adding iodine from food, it must be determined in combination with the application area, application object, process characteristics and the relationship between nutrients.

### **3.3 The related substances and fortifiers in food do not reflect each other**

The correct use of fortifier is to ensure that the human body after the use of fortified food. It can effectively obtain the use effect of nutrients. On the way, the fortifier cannot transform and react with other substances, in order to ensure human health and stable absorption of nutrients. There was no rejection. Nutrition fortifier should be inspected by relevant departments to meet the quality standard. The nutrient purity and impurity content are particularly important. It needs to be approved by the relevant health departments before it can be vigorously publicized and finally circulated in the market.

## **4. Application of nutrition fortified food in nutritional life**

### **4.1 Application status of food nutrition fortifier**

The main concept of food nutrition fortifier is to integrate natural or synthetic nutrients into food. Its main purpose is to increase nutrition. It is usually divided into vitamins, amino acids, minerals and some other microelements. Vitamins, fatty acids and minerals are important components of food nutrition fortifier. According to the nutritional status of the population in different areas, the methods of nutritional fortification can also be classified. It can be added in the raw materials and in the strengthening process. The strengthening methods can also be divided into physical methods and biological methods. Nutrition fortifier is rich in synthetic elements, which can make up for its nutritional deficiency in natural food. Most people are lack of vitamin B, in some areas where fruit and vegetable products are lacking, people are lack of vitamin C, and people in Northwest China are relatively lack of iodine. Therefore, the addition of nutrients needs to be changed according to the changes of the region. Adding some nutrients in the food can effectively improve the nutritional level and physical fitness of the local population.

### **4.2 Application of nutritional supplements**

Food nutrition fortifier and nutrition supplement are different in essence. Some people's dietary nutrition intake does not meet the standard. When people need to increase their nutrition intake according to their own nutritional status, they can use appropriate nutrition and health care methods to strengthen their nutrition intake. Therefore, we also call nutritional supplements dietary supplements. Its main components include minerals, amino acids, vitamins and fatty acids. It can also include dietary ingredients, such as meat and plant elements. It may also be the concentrate of herbaceous plants or the extract of traditional Chinese medicine. The biggest difference between food nutrition fortifier and nutrition thickener is that the former can be directly added to food, while the latter can only be taken orally, in the form of pills and capsules. In addition, to obtain nutrition, we need to follow the advice of the relevant nutritionists or doctors, focusing on our own physical condition and metabolism. Too much intake will lead to excessive nutrition in the human body. If too little, we need to supplement appropriately, and finally ensure the metabolic balance of the human body.

## **5. Application measures and precautions of nutrition fortified food in nutrition**

## composition

### 5.1 Matters needing attention in food fortification

When the food is fortified, it needs to be implemented according to the relevant health standards. Among them, the best strengthening object is the basic food used by people, which has the nature of popularization. Such as daily food, condiments and baby milk powder. At the same time, the use of nutrition fortified products should be noted to prevent consumers from excessive or unreasonable intake in the process of use, and eventually lead to their own side effects or poisoning. The staff must have scientific and professional methods when processing food. They need to judge according to the overall urea content of food, not only from the lack of nutrients in food. At the same time, it is also necessary to determine the diet structure of local residents before deciding the type of food to be fortified. Many people have a misunderstanding, that as long as the intake of fortified food, can effectively improve their own nutrients. This idea is wrong, because everyone's physical condition is different. It needs to be combined with professional nutritionists to understand their own physical condition before they can make a judgment. They should give priority to the truly reasonable nutrition formula. Finally, when choosing the nutrition fortified food, they should match scientifically and reasonably, focusing on the overall health of the human body.

### 5.2 Choosing the right carrier for nutrition supplement

Nutrition enhancement should follow scientific principles and combine with the principles of nutrition. Choose the right carrier to cooperate with nutrients. For example, if some people want to set up a certain amount of iron, they need to choose some foods that can be well combined with iron, mainly for the body to effectively absorb and transform. At the same time, we should ensure that the flavor and color of fortified food do not change, and choose the appropriate carrier to match the formula.

How to choose a nutritional supplement depends on the nutrients that everyone lacks. With the improvement of people's living standards, people want to effectively resist diabetes and other chronic diseases, and want to improve their body activity through non enhanced way. For example, the intake of certain vitamin C, E and carotene, in order to strengthen their own immunity, reduce the frequency of cardiovascular and cerebrovascular diseases.

## 6. Conclusion

Nowadays, people's living standards and material needs have reached an unprecedented height. At this time, adverse food problems emerge in endlessly. Therefore, the introduction of fortified food plays a very key role in improving people's nutritional status and physique. At this time, we need to supplement nutrition according to the relevant basic principles and the concept of scientific modernization, and strengthen it from people's daily time. At the same time, we need to choose food supplement according to our own situation, combined with the principle of nutrition, so as not to blindly choose fortified food.

## References

1. Zhang W, Liu Y, Zhou P. Effect of protein fortification on eating quality of Asian noodles. Annual Meeting of CFST 2018.
2. Zhang W, Zhang J, Qin X, *et al.* Rational diet nutrition and human health. China's Food Industry 2017; (4): 62-63.