Metal Packaging: Providing Nutritious, Safe Food to Consumers Worldwide

The metal can has made nutritious, high quality, shelf-stable food available to people around the world. Epoxy can coatings used in the metal packaging process are an essential enabling technology that provides consumers with safe food and beverage packaging. Through continuous innovation, metal packaging has changed the way food is produced, preserved, and consumed worldwide. Today, more than 1,500 different varieties of food are packed in metal packaging, making seasonal foods available globally year round. Thanks to the superior performance attributes of metal food packaging with epoxy resin coatings, consumers can have the utmost confidence in the canned foods and beverages they enjoy.

**Food Safety**

Canned fruits and vegetables are cleaned, packed, and thermally processed within hours of being harvested at their peak of flavor, freshness, and nutritional content. Epoxy coatings in metal packaging enable high-temperature food sterilization and long-term preservation in a durable, tamper-resistant package. The sterilization process eliminates the dangers of food poisoning from microbial contaminants such as *e.coli* and *listeria*. Put another way, metal packaging reduces the potential for serious illness. Also, tamper-proof and tamper-resistant metal packaging provides a high level of confidence for consumers that their canned products are safe.

**Nutrition**

The metal can, in combination with the protective epoxy coatings’ durability, adhesion, formability, and resistance to the wide range of food and beverage products (product resistance), provides unsurpassed food safety as well as nutritional integrity. Canned foods help bring nutritional diversity to the diet, without sacrificing nutritional quality. Canned foods help bring nutritional diversity to the diet, without sacrificing nutritional quality. Canned foods help bring nutritional diversity to the diet, without sacrificing nutritional quality. Canned fruits and vegetables are picked at the height of ripeness and since many canneries are near the fields, packed to preserve that ripe and ready state. Researchers at the University of Illinois “… determined that canned fruits and vegetables were nutritionally similar and sometimes superior for some nutrients to their fresh or frozen counterparts.”

**Disaster Preparedness**

Metal packaging increases the shelf life of packaged food and decreases food waste due to product expiration, enabling the convenient and safe distribution of nutritious food to people around the world. No other food packaging would perform as well in situations such as disaster response, storage for homeland security, or famine relief.

**Sustainability**

Food and beverage in metal packaging provide a way for consumers to maintain environmentally conscious behavior. Metal food and beverage cans are 100 percent recyclable. The recycling rate is more than two-and-a-half times higher than that of most other packaging options. Metal food and beverage containers can be recycled again and again without losing strength or quality. And every ton of recycled steel saves 2,500 pounds of iron ore, 1,000 pounds of coal, and 40 pounds of limestone. Every ton of aluminum recycled saves 10 tons of CO₂ versus making virgin aluminum.