

New Product Design

The following points are very important about new product design

1. To understand what makes a new product.
2. To understand how new products are developed.
3. To consider how ideas are generated for new products.
4. To consider the challenges facing manufacturers.

1. What makes a new product?

- A 'new' product is simply one that has never been designed and made before. It may be a new flavor, a modification to a standard product, such as improvement, new pack size or cost reduction, or an addition to an existing range of products.
- It has been argued that no design is totally original and most designs are based on products which already exist.
- The failure rate for new products is around 90%, so companies invest large amounts of time and money in product design and carry out considerable research into what customers want. Most manufacturers have a number of different new products at various stages of development at any one time, so that all is not lost if a product fails.
- Effective new product design allows a company to respond quickly to consumer trends and potentially gain a larger 'market share' by launching new products before their competitors.
- One new product could eventually earn a company a great deal of money, so the details written in the 'product specification' are highly confidential.
- When a company launches a new product it may protect their idea by a patent so that it cannot be copied identically by other manufacturers.

Why design new products?

Food manufacturers launch many new products every year. The aim of the company is for consumers to try their new product, like it and then continue to buy it.

2. How new products are developed?

Food products are developed:

- In response to consumer trends and consumers' needs and wants
- To stay in competition with other companies to increase profits
- To make use of up-to-date food processing technologies which give rise to new or more economical products
- To meet particular markets, such as economy or luxury products, or to create new markets
- To produce 'own brand' copies of other manufacturers' products
- To replace some products which have reached the end of their life cycle

3. How do manufacturers get ideas for new products?

Manufacturers use many different methods to come up with ideas for new products. These may include:

- Looking at existing products – a company's own, or their competitors
- Responding to suggestions, comments or consumers' complaints, ethical or environmental concerns
- Examining cultural and religious influences, including customs at festivals and celebrations
- Analyzing trends in consumer eating and purchasing habits, carrying out market research to identify 'gaps' in the market
- Designing products targeted at particular groups, e.g. children or vegetarians
- Identifying fashions and fads;
- Using a popular theme, such as a blockbuster film or TV programme
- Brainstorming sessions by individuals or teams
- Responding to Government initiatives, policy or guidelines, e.g. reducing fat content
- Modeling the nutrient content of a food product to meet a specific target, e.g. athletes
- Exploring the potential of new and unusual ingredients such as those from other countries, novel foods, fat substitutes or synthetic sweeteners
- Using new food processing techniques or developments in domestic technology, e.g. frozen meals and microwave ovens

4. Challenges facing manufacturers

There are a number of points that may be considered when the potential for a new product is being explored.

Key questions to ask include:

- Is there a need?
- Is the market ready?
- Is the market already saturated?
- Will it sell?
- Will it be profitable?
- It is important to consider implications for the cost of the finished product
- Are there suitable ingredients with desirable characteristics?
- Is there suitable technology to process the food?
- Is it possible to mass produce?
- Is there the equipment to make this product on a large scale in the factory or will new equipment be needed?
- Development costs need to be calculated in order to work out trial and purchase prices.
- Will the product be successful?
- How much will the consumer pay for the product?
- What is the overall cost of development?
- What are the costs of its launch, advertising and distribution?
- Consideration of legal standards is also necessary
- Does the product meet current food legislation standards?