STEPS IN NEW PRODUCT DEVELOPMENT DESIGN
Developing a new product is a step-by-step process.
At each step, a project is evaluated to determine whether it should continue.
Product design is a cyclic process.
**What is a brief?**

- A brief is a statement of the aims of the project and criteria to measure the success of the product.
- It may be broad or very specific and includes limitations such as; budget and timing.
The manufacturer must investigate the target market to find out their needs and wants.

The results will determine whether the original idea needs to be modified or dropped if consumers state that there is no need for it.
Possible ideas for the product and packaging are sketched and computer generated.

Once ideas have been developed, manufacturers look for available ingredients and investigate processing methods.
The list of ideas generated is examined and each idea is matched with the criteria given in the design brief.

The ideas that remain are investigated more closely to determine whether they will meet the budget constraints.
Laboratory experimentation is aimed at developing a prototype (model) product that satisfies the design brief.

All steps and results are recorded so that the recipe can be produced when a decision is made.

In-house sensory testing is used to evaluate colour, flavour, aroma and texture.

During this stage, the packaged and unpackaged product is tested for spoilage and deterioration under a variety of conditions.
During the production stage, the actual cost of the product is then calculated.

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\text{Ingredient Cost} + \text{Production Costs} + \text{Packaging Costs} + \text{Marketing Costs} = \text{Total Cost}
\]
The final product goes into full-scale production.

Factory production is undertaking on a small-scale first with small batches so that production costs can be fine tuned before full-scale production.
The package design occurs at the same time as product design, following a similar design process.

The development of a package for the new product is integral to its success and recognition in the market.
8. EVALUATING

- Evaluation is a continuous process undertaken at every stage of product development.
- Once the product has been developed into a successful prototype, market evaluation occurs.

Sensory Assessment

✓ Sensory analysis is used to evaluate and describe the new product in terms of its senses; flavour, texture, aroma, appearance, noise.