

START

1 What do the following quality-related abbreviations stand for:

- a BSI
- b ISO
- c IIP

2 State two reasons why quality management would be especially important to Christy's business.

3 Explain what is meant by 'continuous improvement'.

4 State two benefits for Christy's business of lean manufacturing.

12 The factory manufacturing Christy's ready meals produced 5,000 units per week, and 2% were rejected at final inspection. Calculate how many of the ready meals would be rejected per week.

## BUSINESS PROFILE

### Quality management

#### Christy's Free-From Foods

When Christy Prior found that her young daughter Polly was allergic to nuts and intolerant to gluten and dairy, she decided to make all her food herself, to make sure that it was both safe and healthy. She soon realised that there was a gap in the market for Polly's favourite: her healthy, free-from-allergen ice cream. Christy found an investor willing to back her, got some great publicity on TV, and things then moved fast.

Because her foods had to be safe for people with allergies, the quality of the product was the most important feature; she could not afford to risk complaints from customers. As sales rose, she moved to a bigger factory but made sure that she kept close contact with all her suppliers so that quality standards were maintained. In 2012, she listened to customers' suggestions and decided to extend her range to healthy, allergy-free ready meals. It was a good move, as her products are now stocked in supermarkets like Sainsbury's, Morrisons and Waitrose. In order to compete, she has to keep costs down so lean manufacturing and JIT are vital, and she relies on her factory staff to make suggestions for small improvements to the production process. Customer satisfaction is high, and the future looks bright for the business.



11 Explain two possible costs of raising quality standards.

10 Which of these is **not** a benefit of quality management:

- a Improved output quality
- b Less communication
- c Improved efficiency and profitability
- d Customer involvement and satisfaction

9 Before a business improves its quality management, its cost per unit are £2.40. A new, successful quality regime results in costs reducing by 25%. Calculate the new cost per unit.

8 Explain how quality circles might help to improve output at a factory?

5 State two possible disadvantages for Christy's business of just-in-time supply of materials.

6 State two ways in which close partnership with suppliers might help with quality management of Christy's ready meals.

7 Explain the 'six sigma' method of quality control.



# PRINCIPLES OF MANAGEMENT SUGGESTED ANSWERS

- 1 **a** BSI: British Standards Institution  
**d** ISO: International Organisation for Standardisation  
**b** IIP: Investors in People

2 Her USP is that the food is 'allergy-free'; if this is not maintained, the product will be dangerous for the customers.  
As she sells to the main supermarkets, they will require consistent standards which keep up customer demand.

3 Involves all employees in making suggestions for small improvements to the production process; also known as 'Kaizen'.

4 Reduces costs of holding raw materials and stock; improved product quality as fresh ingredients are less likely to deteriorate or 'go off'; shorter production times.

12  $5,000 \times \frac{2}{100}$   
 $= 100$   
Or  
 $5,000 \times 0.02$   
 $= 100$

11 Higher costs of training.  
Investment in measurement and quality control.  
More raw materials may be rejected (depends on relations with suppliers).

10 **b** Less communication

9 25% of £2.40 =  $(£2.40 \times \frac{25}{100}) = £0.60$  saved  
therefore new cost is  $(2.40 - 0.60) = £1.80$

Or  $£2.40 \times \frac{75}{100}$   
 $= £1.80$

## EXTENSION ACTIVITY

Now you have checked your answers to the consolidation questions, complete the extension activity below.

1 Identify the key quality management issues for Christy's Free-From Foods.

2 You are Christy Prior and you have a meeting with the Directors of Tastebury's Supermarkets, to persuade them to stock your products in their 300 stores throughout the UK. Prepare a presentation to explain your Quality Management process to them. Your presentation must be accompanied by speaker's notes or a script, and must show your understanding of the importance of quality management for your business, and the methods that you use to ensure that quality.

8 Quality circles (small groups of employees who meet to identify problems and suggest and try out solutions) involve people who are working in the process and know and understand it the best, so they can see the improvements which are needed.

5 No stocks available to respond to short-term increase in demand; any delay in delivery of ingredients will hold up production.

6 Greater assurance about the quality, and free-from' safety, of ingredients; more certainty of the availability of ingredients; easier to respond to changes in demand.

- 7 An approach (introduced at Motorola in the 1980's) to identify and eliminate the causes of defects, and therefore reduce costs:
- Define the system
  - Measure key aspects of the current process and collect relevant data
  - Analyse the data to find key causes.
  - Improve or optimise the current process
  - Control the future process