



PRODUCTION RECORDS

Keeping production records is an investment of time and money and, as with all aspects of running a small food processing business, the benefits must outweigh the costs. There is no point in recording information for its own sake and records must be used if they are to have any value. This means that the owner must understand why the information is collected and what it can be used for. The time, cost and effort spent getting information and keeping records must be related to the scale and profitability of the business. Many micro-scale processors keep all the information in their heads and do not keep any written records, but the problem with this is that no-one else can help run the business during times of illness or absence. For most processors, the benefits of keeping production records outweigh the cost because:

- Records allow individual costs to be identified, which informs changes to a product or process to optimise profits.
- They allow product quality to be monitored and controlled.
- They provide a basis for product pricing and wage levels; and
- They provide evidence of any pilferage or theft so that stock control or production procedures can be modified.
- They can be used to identify trends in demand and profitability.

Any information that is collected should be accurate, and staff who are required to collect information should know its value and why it is being collected. Processors should give the responsibility for information collection and record keeping to people who have the necessary skills and aptitude, but they should also put in place systems of checks to ensure that staff keep accurate records and they are not able to falsify records to conceal theft (e.g. ensure that the same person does not have responsibility for keeping records of purchases, levels of stocks and use of materials). The owner should also ensure that all records are kept up to date and check the arithmetic for accuracy.

There is no standard or 'correct' way of keeping records and processors need to decide what types of records are appropriate their particular enterprises. For most small-scale food businesses, record keeping involves writing in books or ledgers, but larger operations may use computer spreadsheets or commercially available programmes that can save time and do more complicated analyses of the business. Production records should be linked to other documents used in the business, including customers' orders for products, quality assurance records, stockroom records and dispatch/delivery records. This allows an order for a product to be traced through each stage of production, storage and delivery using identifying numbers, such as batch numbers or Goods Received Note numbers (GRNs) as shown in Table 7.5. This traceability allows a processor to identify which raw materials and ingredients were used in a product, when it was made, and the testing that was done before the product was cleared for dispatch to the customer.

The main production records should show the following movement of materials into and out of the storeroom: when they are used in production; what is produced each day, including confirmation that the correct weights of ingredients have been added and the correct processing conditions have been used; the batch numbers for products and what happens to the products.

Products may be sold and dispatched immediately; placed into the product store; placed in quarantine if there is a problem that needs to be resolved or if awaiting quality testing; placed into a rework section if the products are not satisfactory; or sent for disposal if they are unsafe. This technical brief describes records that can be used for each stage of production: processors may need to select which of these are appropriate to their own enterprise, depending on the scale and complexity of their operation.

Records for raw materials, ingredients and packaging

Processors should use standard procedures and records for ordering all ingredients, packaging and other materials. For example at the end of each week, the storekeeper assesses the stock balances and, with the production supervisor, calculates the amounts of materials that need to be ordered to meet the production required in the following week. The storekeeper then uses a Stock Order Form (Table 1) to order the required amounts. This is then authorised by the owner and given to the finance officer to place the orders.

Table 1. Stock order form

Date:									
Stock items	Flour	Oil	Salt	Colouring	Sugar	Sachets	Labels	Cartons	Sealing tape
Unit	kg	litres	kg	g	kg	Pack of 1000	Roll of 2000	Pack of 500	Rolls
Total stock available									
Total stock required									
Balance of stock required									
Total stock to be ordered									
Authorised Date	_____ (Owner/Manager)								

If the incoming goods are satisfactory on delivery, the storekeeper completes a Goods Received Note (GRN) (Table 2) and sends a copy to the finance officer, who updates the delivery information and completes the necessary paperwork for the owner to authorise payment of the invoice.

technical brief

Table 2. Goods received note

GOODS RECEIVED NOTE				
FROM: Company Name: Address: Contact Name: Contact Number: E mail Address:	TO: Company Name: Address: Contact Name: Contact Number: E mail Address:			
Our Order Number: _____	Order Date: _____			
Goods Received Note (GRN) Number: _____	Goods Received Date: _____			
Receipt of the following products is acknowledged:				
Description	Quantity delivered (kg)	Total quantity delivered to date (kg)	Quantity to be delivered (kg)	Other delivery details
Received by (Storekeeper): _____				

A copy of the GRN is given to the delivery driver and another is filed by the storekeeper in a GRN file. Each delivery of materials is entered onto the Stock Received Record (Table 3)

Table 3. Stock received record

Received ingredients		Flour		Oil		Salt		Colouring		Sugar	
Date	Supplier	kg	GRN	litres	GRN	kg	GRN	g	GRN	kg	GRN
Total											

technical brief

Recording production

On each day of production, the production supervisor completes a Stores Requisition Form (Table 4), to request materials to be issued by the storekeeper. At the end of the day, the production supervisor returns any unused stock and the storekeeper completes and files the form. The storekeeper records the stock issued and returned on the Stock Issued Record (Table 5), including the GRN number.

Table 4. Stores Requisition Form

Order Date:		Product Batch Number:		
Item	Units	Amount Issued	GRN	Amount Returned
Flour	kg			
Oil	kg			
Salt	Litres			
Colouring	kg			
Sugar	kg			
Sachets	N°.			
Labels	N°.			
Cartons	N°.			
Sealing tape	Rolls			
Received (Production Supervisor)				
Received (Storekeeper)				

Table 5. Stock issued record

Ingredient		Flour		Oil		Salt		Colouring		Sugar	
Date	Product Batch N°s	kg	GRN	litres	GRN	kg	GRN	g	GRN	kg	GRN
Totals											

The production supervisor also maintains a Production Task Record (Table 6), on which production workers sign against the tasks they have completed that day. The production supervisor signs each record to verify that the work has been completed to the required standards.

technical brief

Table 6. Production Task Record

Date	Batch N°	Ingredients weighed by:	Verified by:	Process operated by:	Product filled and sealed by:	Verified by:

Production Reports (Table 7) record the amount of production completed in a specified period (e.g. an hour or a day). They show the ingredient and packaging GRNs, the amount of production and product batch numbers, together with details of any faults in production methods or equipment, or anything unusual about the production that occurred and the corrective actions that were taken.

Table 7. Production Report

Date	Type of product	Ingredient GRN N°			Packaging GRN	Amount of product produced (kg)	Product batch number(s)	Problem	Action taken	Signed
		1	2	3						

GRN = Goods Received Note

Please note, table 7 would be on a larger page to allow sufficient detail to be entered.

Recording orders for products

When an order for products is received from a customer, the finance officer sends a Product Order Form (Table 8) to the storekeeper. If there is sufficient product in stock, the storekeeper makes a note of the order on the Order Record Sheet (Table 9) and requests the finance officer to prepare a Delivery Note (Table 10) and invoice.

Table 8. Product order form

Customer Name _____			
Address: _____			
Order Number: _____			
Order Date: _____			
Product (s)	Quantity (cartons)	Date required	Delivery/collection or other requirements

Table 9. Order record sheet

Order Date	Order Number	Product(s)	Customer	Date Required	Quantity Required (Cartons)	Collect/deliver	Quantity supplied (Cartons)	Batch number(s)	Date of delivery	Delivery note number

Please note, table 9 would be on a larger page to allow sufficient detail to be entered.

Table 10. Delivery note

DELIVERY NOTE			
From:			
Company Name:	To:		
Address:	Company Name:		
Contact Name:	Address:		
Contact Number:	Contact Name:		
E mail Address:	Contact Number:		
	E mail Address:		
Order Number: _____	Order Date: _____		
Delivery Note Number: _____	Delivery Date: _____		
Receipt of the following products is acknowledged:			
Description	Quantity delivered (Cartons)	Quantity of order remaining to be delivered (Cartons)	Other delivery details
Delivered by:			
Received by (Customer):			

The storekeeper then prepares the order for dispatch. The storekeeper and the customer sign the Delivery Note. One copy is given to the customer, one is filed by the storekeeper with the Product Order Form, and one is given to the finance officer.

If products have to be produced to meet the order, the Product Order Form is passed to the production supervisor, and the order is then incorporated into the production plan for the following day or week. When the product has been produced and delivered to the storekeeper the above procedure is followed.

Stock management

In general, small-scale processors keep the amounts of stored ingredients, packaging and products to a minimum. Decisions on the size of stocks depend on the balance between the cost of buying the material and the cost of storing it. The materials that are most likely to be stored are high-value materials that are used most often and/or they cannot be replaced quickly. The least likely materials to be stored are the lowest value materials that are used least often and are readily available and so can be easily replaced.

Storeroom management involves monitoring and controlling material movements into and out of the stores, and checking stock levels and stock rotation. Bin Cards (Table 11) may be fixed to containers for easy identification of raw materials, work in progress and finished goods. Also defective materials such as spoiled foods and foods to be reworked can be identified in this way.

Table 11. Bin card

Item			
Date	N°/Weight/Volume received	N°/Weight/Volume used	Balance

The Storekeeper carries out a physical stock check at the end of each day and records this on a Stock Balance Record (Table 12). A full stock check of the amounts of ingredients, packaging and products is made by the production supervisor at the end of each week and by the finance officer at the end of each month. The results of these stock checks are also recorded on the Stock Balance Record and these are given to the owner each month. The production supervisor also uses the Stock Balance Records to cross-references ingredient usage with the amount of production each month to confirm that the correct amounts of ingredients have been used, or to identify if there are any discrepancies that may indicate pilferage.

Table 12. Stock Balance Record

Date	Ingredient:	Flour (kg)	Oil (litres)	Salt (kg)	Colouring (g)
	Expected balance				
	Actual amount				
	Variance				
	Expected balance				
	Actual amount				
	Variance				
	Expected balance				
	Actual amount				
	Variance				
	Expected balance				
	Actual amount				
	Variance				
Completed by(Storekeeper)		Checked by.....(Production supervisor)			

This document was written by Peter Fellows for Practical Action, March 2012.

Practical Action
The Schumacher Centre
Bourton-on-Dunsmore
Rugby, Warwickshire, CV23 9QZ
Reino Unido
Tel: +44 (0)1926 634400
Fax: +44 (0)1926 634401
E-mail: inforserv@practicalaction.org.uk
Website: <http://practicalaction.org/practicalanswers/>

Practical Action is a development charity with a difference. We know the simplest ideas can have the most profound, life-changing effect on poor people across the world. For over 40 years, we have been working closely with some of the world's poorest people - using simple technology to fight poverty and transform their lives for the better. We currently work in 15 countries in Africa, South Asia and Latin America.

technical brief