

HACCP

case study no. 2

(student's version)

Fresh cream and jam gateau

WHO / ICD

HACCP STUDY (CASE 2)

EXAMPLE OF *UNAPPROVED* HACCP PLAN FRESH CREAM AND JAM GATEAU¹

a. FACILITY

The purpose-built factory produces a variety of decorated gateaux for sale to the retail industry. The factory is based on a large new industrial estate and produces both chilled and frozen products.

b. PRODUCT

The product has a fresh cream and jam filling between two sponges. It is a chilled product and must be kept below 5 °C through the distribution chain. The shelf life is 3 days from date of manufacture.

c. MANUFACTURE

Sponge batters are baked at 150-170 °C through a travelling oven for 18.5 minutes. They are then cooled to ambient, automatically sliced and filled. There are a wide variety of fillings for the sponges. The sponges are flow-wrapped and put into cartons.

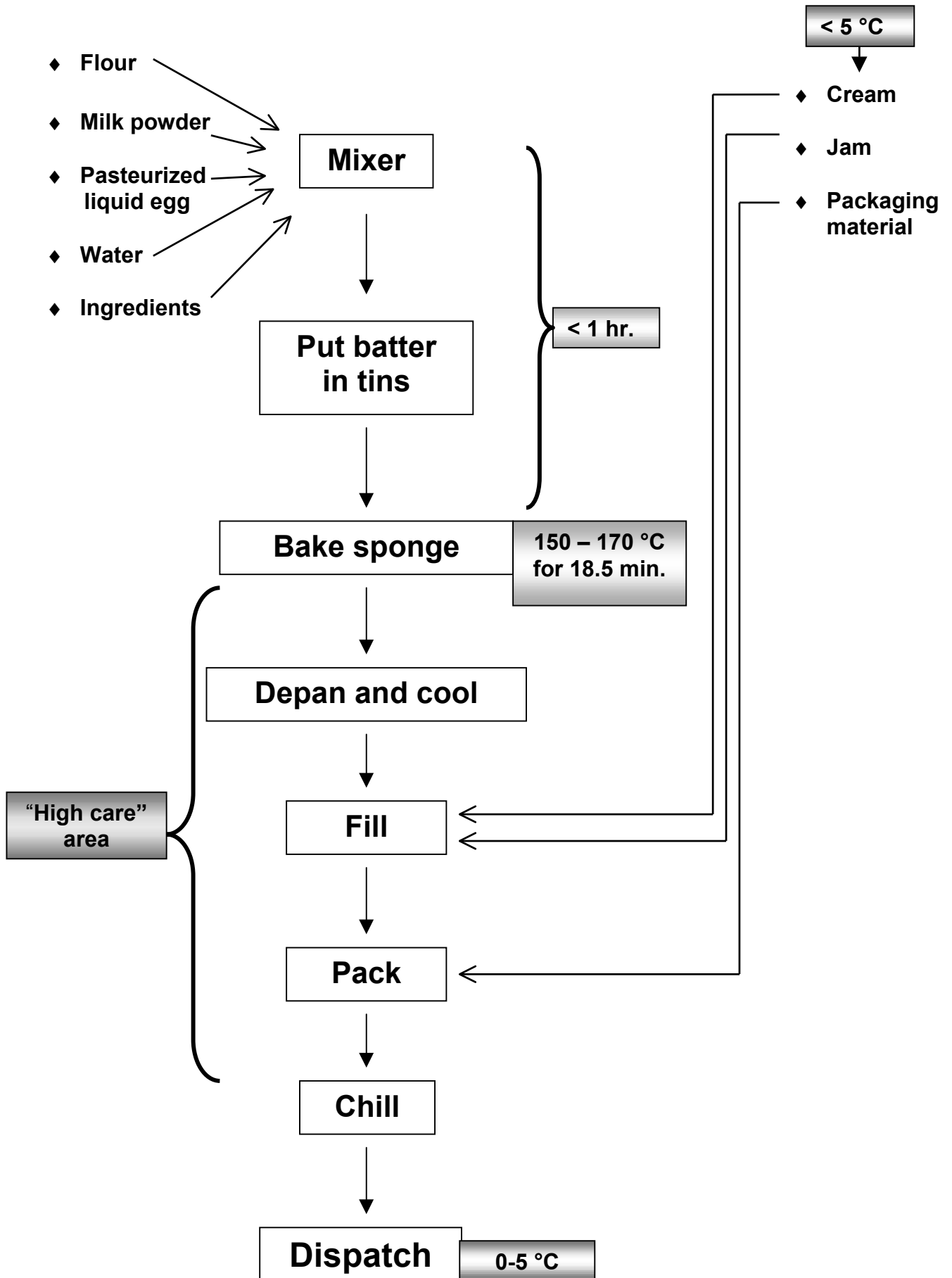
d. INTENDED USE

The product is a treat for everyone at all times at all places.

¹ The original study was published by: Sara Mortimer and Carol Wallace; HACCP, a practical approach, Chapman & Hall, 1994

◆ *It has been changed on purpose to include errors. It should not be used as a "good" example*

Fresh cream and jam gateau



Example of *unapproved* HACCP data sheet

Case 2

Raw material	CCP No.	Hazard to be controlled	Control measures	CCP parameters	Critical limits	Monitoring		Corrective actions
						Method	Frequency	
Flour	1	Insects	Sieving	Pore size	2 by 2 mm	Inspection	1x per hour	Re-sieve
Flour	2	<i>B. cereus</i>	Testing	No./g	< 1000/g	ISO method	Every delivery	Rejection
Milk powder	3	Aflatoxin	Supplier QA	Aflatoxin M ₁	< 10mg/kg	ISO method	Every delivery	Rejection
Liquid egg	4	<i>Salmonella</i>	Supplier QA	Coliforms count	< 10/g	ISO method	Every delivery	Rejection
Water	5	Chemical contamination	Carry out on-site micro checks and obtain Certificate of Analysis of local sample- Water Authority	Regulatory requirements	Chemical contamination (see spec.) Regulatory compliance	Testing to include toxic substances <i>Giardia</i> / <i>Cryptosporidium</i> Inspect Certificates of Analysis from Water Authority	Weekly	Filtrate & Chlorinate
Cream	6	<i>Listeria</i>	Testing	Absence in 10 g	5 samples of 10 g negative	ISO method	Daily	Rejection
Jam	7	Pesticides	Supplier QA	Regulatory requirements	Regulatory requirements	Supplier audit	Yearly	Sanctions
Packing material	8	Moulds	Testing	Aerobic count	< 100/cm ²	Rodac plate	Every delivery	Rejection

Example of *unapproved* HACCP data sheet (cont.)

Process step	CCP No.	Hazard to be controlled	Control measures	CCP parameters	Critical limits	Monitoring		Corrective actions
						Procedure	Frequency	
Storage of raw material	9	Physical contamination, biological growth	Store as specified, i.e. cream < 5°C, egg for specified max. time. Keep covered	Various	No physical, chemical contamination. Maintain temperature < 5°C	Automatic temperature recorder. Visually inspect label to ensure stock rotation	Daily checks – continue during use. Every batch	Hold and inform QA Manager
Ingredient weighing	10	Too much salt	Weighing	Weight/batch	0.2%	Sartorius	Each batch	Reprocess
Sponge baking	11	Survival of pathogens	Bake sponge at specified time/temperature	Time/temperature	Bake at 70°C for 2 min. minimum core temperature	Automatic chart recorder	Continuous	Stop production. Reject faulty product. Adjust oven temperature/time
Cooling	12	<i>Listeria</i>	Keep cooling area clean	Visible residues	No residues visible	Observation	After every cleaning	Clean again before start
Cream whipping	13	<i>Listeria</i>	Clean machine	Visible residues	No residues visible	Observation	After every cleaning	Clean again before start
Filling	14	<i>Salmonella</i>	Keep line clean	Visible residues	No residues visible	Observation	After every cleaning	Clean again before start

Example of *unapproved* HACCP data sheet (cont.)

Process step	CCP No.	Hazard to be controlled	Control measures	CCP parameters	Critical limits	Monitoring		Corrective actions
						Procedure	Frequency	
Flow wrapping	15	Biological contamination	Hermetic seal	No holes	Intact seal	Visual inspection	Every 15 min.	Re-sealing
Chilling	16	Growth of pathogens	Blast chilling	Time/temperature	½ hr./ 5 °C	Temperature recorder	Each batch	Rework
Metal detect	17	Metal contamination	Metal detector	Metal size	Absent – ferrous 2.0 mg, non-ferrous 2.5 mg	Metal detection check using test pieces. Calibrate metal detector	Every 30 min. Daily	Stop line, recalibrate, notify QAM. Hold stock manufactured since previous check

VERIFICATION

Case 2

What?	Why?	When?	How?	Action in case of deviation
Cream taste testing	Acceptance	Every batch	Triangle test	Reject
Finished product <i>B. cereus</i> testing	Check safety, < 100/g	Every batch	ISO method	Rework
Finished product <i>Listeria</i> testing	Check conformity with criterion Absence in 5 x 10g	1/week	ISO method	Find cause, Improve HACCP plan
Monitoring records review	Check adherence to HACCP plan	1/week	Inspection	Correct, Train, Improve