

# Sampling plan

## Start - A

### How to create a sampling plan

In an annual sampling plan you have to determine the number of routine samplings for each product. You can use the recommendations of your farmhouse cheesemakers association. If more than one product is produced you should try to combine products in an intelligent way to avoid testings with the same informative value (see reason for testing)

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions												
E. coli	Check of pasteurisation and cleaning process and hygiene conditions												
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene												
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection												
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection												

# Sampling plan

## Start - B

### How to create a sampling plan

In this example the cheesemaker produces 4 different milkproducts. Three milkproducts are made with pasteurised milk, one cheese is made with raw milk. Enter your frequency of testing in the following table or use the recommendations of your farmhouse cheesemaker association. To reduce the number of samplings you can combine products in an intelligent way to avoid testings with the same informative value (check of cleaning process, check of raw milk quality, etc.)

Products	Time of testing		Entero-bacteriaceae	Escherichia coli	Coagulase Positive Staphylococci	Listeria monocytogenes	Salmonella
Lactic cheese (unripened, pasteurised milk, also with herbs and spices)		LCU		4	4	1	
Yogurt (pasteurized milk, also with different flavours)		YO	4			1	
Soft cheese (pasteurised milk, red smear)		SC		4	4	1	
Semi hard cheese (raw milk, red smear)		SHC			4	1	1

# Sampling plan

## Step 1 - A

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions												
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU			LCU			LCU			LCU	
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU			LCU			LCU			LCU	
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU										
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection												

Steps	Products		Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
<b>Step 1</b>	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU		4	4	1	
	Yogurt	YO	4			1	
	Soft cheese (pasteurised milk, red smear)	SC		4	4	1	
	Semi hard cheese (raw milk, red smear)	SHC			4	1	1

# Sampling plan

## Step 2 - A

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions		YO			YO			YO			YO	
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU			LCU			LCU			LCU	
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU			LCU			LCU			LCU	
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU						YO				
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection												

Steps	Products		Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU		4	4	1	
<b>Step 2</b>	Yogurt	YO	4			1	
	Soft cheese (pasteurised milk, red smear)	SC		4	4	1	
	Semi hard cheese (raw milk, red smear)	SHC			4	1	1

# Sampling plan

## Step 2 - B

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions		YO			YO			YO			YO	
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU			LCU			LCU			LCU	
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU			LCU			LCU			LCU	
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU or YO						YO				
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection												

Steps	Products		Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU		4	4	1	
<b>Step 2</b>	Yogurt	YO	4			1	
	Soft cheese (pasteurised milk, red smear)	SC		4	4	1	
	Semi hard cheese (raw milk, red smear)	SHC			4	1	1

# Sampling plan

## Step 2 - C

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions					YO						YO	
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU						LCU				
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU			LCU			LCU			LCU	
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU or YO										
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection												

Steps	Products		Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU		4	4	1	
<b>Step 2</b>	Yogurt	YO	4			1	
	Soft cheese (pasteurised milk, red smear)	SC		4	4	1	
	Semi hard cheese (raw milk, red smear)	SHC			4	1	1

# Sampling plan

## Step 3 - A

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions					YO						YO	
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU	SC			SC		LCU	SC			SC
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU	SC		LCU	SC		LCU	SC		LCU	SC
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU or YO						SC				
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection												

Steps	Products		Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU		4	4	1	
	Yogurt	YO	4			1	
<b>Step 3</b>	Soft cheese (pasteurised milk, red smear)	SC		4	4	1	
	Semi hard cheese (raw milk, red smear)	SHC			4	1	1

# Sampling plan

## Step 3 - B

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions					YO			YO			YO	
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU	SC		SC	SC		LCU	SC		SC	SC
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU	SC		LCU	SC		LCU	SC		LCU	SC
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU or YO						SC				
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection												

Steps	Products	Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU		4	4	1
Yogurt	YO	4			1	
<b>Step 3</b>	Soft cheese (pasteurised milk, red smear)	SC	4	4	1	
	Semi hard cheese (raw milk, red smear)	SHC		4	1	1



# Sampling plan

## Step 3 - C

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions								YO				
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU			SC						SC	
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU	SC		LCU	SC		LCU	SC		LCU	SC
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU or YO	SC (smear water)		SC (smear water)			SC (smear water)			SC (smear water)	
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection												

Steps	Products	Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU	4	4	1	
	Yogurt	YO	4		1	
<b>Step 3</b>	Soft cheese (pasteurised milk, red smear)	SC	4	4	1	
	Semi hard cheese (raw milk, red smear)	SHC		4	1	1

# Sampling plan

## Step 3 - D

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions								YO				
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU			SC						SC	
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU			SC			LCU			SC	
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU or YO SC (smear water)			SC (smear water)			SC (smear water)			SC (smear water)	
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection												

Steps	Products	Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU	4	4	1	
	Yogurt	YO	4		1	
<b>Step 3</b>	Soft cheese (pasteurised milk, red smear)	SC	4	4	1	
	Semi hard cheese (raw milk, red smear)	SHC		4	1	1

# Sampling plan

## Step 4 - A

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions								YO				
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU			SC						SC	
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU	SHC		SC	SHC		LCU	SHC		SC	SHC
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU or YO SC (smear water)			SC (smear water)			SC (smear water)			SC (smear water)	SHC
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection					SHC							

Steps	Products	Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU	4	4	1	
	Yogurt	YO	4		1	
	Soft cheese (pasteurised milk, red smear)	SC	4	4	1	
<b>Step 4</b>	Semi hard cheese (raw milk, red smear)	SHC		4	1	1

# Sampling plan

## Step 4 - B

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions								YO				
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU			SC						SC	
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU			SC			LCU			SC	
			SHC			SHC			SHC			SHC	
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU or YO			SHC (smear water)			SC (smear water)			SHC (smear water)	
			SC (smear water)										
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection					SHC							

Steps	Products	Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU	4	4	1	
	Yogurt	YO	4		1	
	Soft cheese (pasteurised milk, red smear)	SC	4	4	1	
<b>Step 4</b>	Semi hard cheese (raw milk, red smear)	SHC		4	1	1

# Sampling plan

## Step 4 - C

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions								YO				
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU			SC			Testing of the raw milk			SC	
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU			SC			LCU			SC	
			SHC (raw milk)			SHC (cheese)			SHC (raw milk)			SHC (cheese)	
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU or YO			SHC (smear water)			SC (smear water)			SHC (smear water)	
			SC (smear water)										
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection					SHC			Testing of the endproduct				

Steps	Products	Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU	4	4	1	
	Yogurt	YO	4		1	
	Soft cheese (pasteurised milk, red smear)	SC	4	4	1	
<b>Step 4</b>	Semi hard cheese (raw milk, red smear)	SHC		4	1	1

# Sampling plan

## Step 4 - D

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions								YO	Time of testing is changed to august			
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU			SC	Time of testing is changed to november					SC	
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU			SC			LCU	↔		SC	
			SHC (raw milk)			SHC (cheese)			SHC (raw milk)			SHC (cheese)	
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU or YO			SHC (smear water)			SC (smear water)			SHC (smear water)	
			SC (smear water)										
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection					SHC							

Steps	Products	Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU	4	4	1	
	Yogurt	YO	4		1	
	Soft cheese (pasteurised milk, red smear)	SC	4	4	1	
<b>Step 4</b>	Semi hard cheese (raw milk, red smear)	SHC		4	1	1

# Sampling plan

## Step 4 - E

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions								YO				
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU			SC						SC	
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU			SC			SC	←→		LCU	
			SHC (raw milk)			SHC (cheese)			SHC (raw milk)			SHC (cheese)	
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU or YO			SHC (smear water)			SC (smear water)			SHC (smear water)	
			SC (smear water)										
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection					SHC							

Steps	Products	Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU	4	4	1	
	Yogurt	YO	4		1	
	Soft cheese (pasteurised milk, red smear)	SC	4	4	1	
<b>Step 4</b>	Semi hard cheese (raw milk, red smear)	SHC		4	1	1

# Sampling plan

## Step 4 - F

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Enterobacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions								YO				
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU			SC						SC	
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU			SC			SC			LCU	
			SHC (raw milk)			SHC (cheese)			SHC (raw milk)			SHC (cheese)	
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU or YO			SHC (smear water)			SC (smear water)			SHC (smear water)	
			SC (smear water)										
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection					SHC							

Steps	Products	Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU	4	4	1	
	Yogurt	YO	4		1	
	Soft cheese (pasteurised milk, red smear)	SC	4	4	1	
<b>Step 4</b>	Semi hard cheese (raw milk, red smear)	SHC		4	1	1



# Sampling plan

## Step 4 - G

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Criteria</b>	<b>Reason for testing</b>												
Entero-bacteriaceae	Check of pasteurisation, cleaning process and hygiene conditions								YO				
E. coli	Check of pasteurisation and cleaning process and hygiene conditions		LCU			SC						SC	
Coagulase Positive Staphylococci	Check of raw milk quality or staff hygiene		LCU			SHC (cheese)			SC			SHC (cheese)	
			SHC (raw milk)				SHC (raw milk)						
Listeria monocytogenes	(Food safety) Reducing the risk of a foodborne Listeria infection		LCU or YO			SHC (smear water)			SC (smear water)			SHC (smear water)	
			SC (smear water)										
Salmonella	(Food Safety) Reducing the risk of a foodborne Salmonella infection					SHC							

Steps	Products	Enterob act.	E. coli	Staph. Aureus	Listeria	Salmonella
	Lactic cheese (unripened, pasteurised milk, also with herbs and spices)	LCU	4	4	1	
	Yogurt	YO	4		1	
	Soft cheese (pasteurised milk, red smear)	SC	4	4	1	
<b>Step 4</b>	Semi hard cheese (raw milk, red smear)	SHC		4	1	1