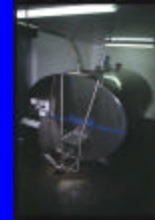


What does Bulk Tank Culture Involve ?

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The Sample

- Well agitated – for 5 minutes
- From the top of the tank, avoid sampling through the spigot
- Sterile technique
- Daily for 3 - 5 days
- Freeze until analyzed



Effect of Bulk Tank Agitation

BT Agitation	Mean SCC (x000)	High/Low
None	486	620-380
30 secs	222	314-174
2 mins	119	124-116

- Somatic cells concentrate in butterfat !
(Edmondson, 1998)

Why Sample on Multiple Days...

- Composite picture if milkings carried out by several people
- Increases sensitivity of test if pathogens are excreted intermittently eg. *Staph aureus*

Percent samples positive for pathogen

Treatment	<i>S.ag</i>	<i>S.aur</i>	<i>Coli</i>
Fresh	91	73	41
Refrig	94*	85	34
Refrig/Inc	90	85	77*
Froz/Thaw	82	86	16
Froz/Thaw/ Inc	89	98*	63

Bushnell 1999

Volume is Critical !

No. of Labs	Volume of Inoculum / ml
8	0.01
1	0.05
2	0.1
1	0.2
5	Cotton wool swab

Survey of 20 Labs by NMC 1999

Media

<u>Streps</u>	<u>Staphs</u>	<u>Coliforms</u>	<u>Others</u>
B-toxin (2)	Vogel Johnson	MacConkey	Blood
Esculin (5)	Mannitol Salt	(VRBA)	Calf (1)
eg TKTFC	KLMB		Sheep (6)
	Baird Parker		Washed cow (11)
5 labs	7 labs	5 labs	

NMC Survey 20 labs, 1999

Know what you're getting !

Get a good sample but don't
fall in the tank getting it !!