

# Herd Owners Informed Consent Form

## Association of Milk Quality to Bedding Types on Medium and Large Scale Wisconsin Dairy Farms



**Study Investigator: Pamela Ruegg, DVM, MPVM, University of WI – Madison**  
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### Study Invitation:

You are invited to participate in a project that will be evaluating the association of milk quality to types of bedding used on Wisconsin dairy farms producing at least 25,000 pounds of milk daily. The study is being funded by the Grande Cheese Company which will publically share all published results. Your individual information will not be made available to the Grande Cheese Company or identified in any publications. Participation in this study is completely voluntary. If you agree to participate, we will ask you to take part in an interview lasting approximately 15 to 30 minutes where you will be asked questions about your milk quality, bedding practices, and related milk quality management practices.

There is no direct benefit guaranteed from participation in this study; however, upon completion of all dairy producer interviews and an initial data analysis, you will receive preliminary study results. If you are interested, you will also receive the final study results along with any articles published using these results.

You are free to withdraw from the project at any time. The researchers may use the information learned from this study in scientific presentations and journals. None of the information will identify you or your farm personally or be released to the Grande Cheese Company.

### Authorization to participate in the research study:

I certify that I am the owner or authorized agent (manager) of a herd of dairy cattle maintained at the following address:

\_\_\_\_\_

I certify that I have read this statement and I voluntarily agree to participate in this study. I have received a copy of this consent form.

\_\_\_\_\_  
Signature of herd owner/manager

\_\_\_\_\_  
print name

\_\_\_\_\_  
Title

DATE: \_\_\_\_\_

PHONE: \_\_\_\_\_

\_\_\_\_\_  
Signature of person obtaining consent

\_\_\_\_\_  
print name

DATE: \_\_\_\_\_

PHONE: \_\_\_\_\_

Survey Questionnaire  
STUDY DATE: \_\_\_/\_\_\_/\_\_\_\_\_

FARM ID: \_\_\_\_\_  
Interviewer: \_\_\_\_\_

**Association of Milk Quality to Bedding Types on Medium and Large Scale Wisconsin Dairy Farms**

**INSTRUCTIONS TO THE INTERVIEWER (INT):**

CAPITALIZED FONT INDICATES THAT THE QUESTION **IS NOT** TO BE READ OUT LOUD. THESE SECTIONS CONTAIN INSTRUCTIONS FOR THE INTERVIEWER OR POTENTIAL CODED ANSWERS (WHEN AN OPEN-ENDED QUESTION IS ASKED BUT THE ANSWER IS CODED AS IT IS ANSWERED).

**ALL NON-CAPITALIZED TEXT IS TO BE READ AS PART OF THE QUESTIONNAIRE**

**IDENTIFICATION OF FACILITY DESIGN**

This questionnaire is divided into two parts. The first part asks questions about your milking facilities, bedding practices, and milk quality related management practices you use on your farm. The second part asks about specific milk quality test results from the milk you sell from your farm.

1. Do you regularly produce at least 25,000 pounds of milk daily? (CIRCLE YES OR NO)

**IF NO, THANK THE PRODUCER FOR THEIR TIME, THE PROCESS IS COMPLETED**

**IF YES, PROCEED WITH THE SURVEY QUESTIONNAIRE**

2. How many cows are you currently in your milking herd? \_\_\_\_\_

3. How many of these cows currently have their milk discarded (not sold)? \_\_\_\_\_

4. How many pounds of milk did you sell yesterday (of the nearest available day)? \_\_\_\_\_

5. What is your Rolling Herd Average milk production? \_\_\_\_\_

6. How is milk stored and cooled on your farm?

A. Cooled and stored in a bulk tank

B. Cooled by a chiller and stored in a bulk tank or silo without cooling

C. Cooled by a chiller and stored in a transport trailer or truck without cooling

**IF A OR B, ASK:**

7. Does your bulk tank or silo have agitation?(CIRCLE YES OR NO)

**IF C ASK:**

8. Are your transport tankers or trucks housed under shade?(CIRCLE YES OR NO)

9. What is your on-farm milk pickup (or trailer load) temperature? \_\_\_\_\_

THIS TEMPERATURE IS TO BE READ FROM THE BULK TANK THERMOMETER OR TEMPERATURE RECORDING DEVICE  
RECORD ONE TEMPERATURE FROM EACH AVAILABLE BULK TANK OR STORAGE SILO

10. FOR EACH TEMPERATURE, IDENTIFY THE SOURCE OF THE TEMPERATURE AS:

A. BULK TANK THERMOMETER

B. TEMPERATURE RECORDER

C. UNAVAILABLE (NO EXTERNALLY READABLE THERMOMETER) OR ESTIMATE BY PRODUCER

11. How frequently is your milk picked up from your farm?

A. My milk is picked up every \_\_\_\_\_ hours.

12. How frequently is your bulk tank or silo washed?

A. My bulk tank or silo is washed every \_\_\_\_\_ hours.

B. My milk purchaser washes my transport tanker or truck at their dairy plant.

13. How frequently is your bulk tank or silo sanitized?

A. My bulk tank or silo is sanitized every \_\_\_\_\_ hours

B. My milk purchaser sanitizes my transport tanker or truck

Survey Questionnaire

STUDY DATE: \_\_\_/\_\_\_/\_\_\_\_\_

FARM ID: \_\_\_\_\_

Interviewer: \_\_\_\_\_

C. I do not sanitize my bulk tank or silo

14. How frequently do you utilize DHI (Dairy Herd Improvement) or other individual cow milk Testing?

A. I use DHI every \_\_\_\_\_ months.

B. I do not use DHI testing

**IF A, ASK:**

15. Do you receive Somatic Cell Count (SCC) data with your testing reports?

A. Always

B. Occasionally

C. Never

16. How frequently do you utilize the CMT (California Mastitis Test)

A. Daily

B. More than once per week

C. Weekly

D. Every two weeks

E. Monthly

F. Occasionally

G. Never

**IF NOT G ASK:**

17. How do you determine which cows to test using the CMT? (MORE THAN ONE ANSWER MAY BE SELECTED) (CIRCLE SOME, MOST, OR ALL WHERE AVAILABLE)

A. All cows are tested

B. Fresh cows are tested (Some, Most, All)

C. Purchased cows are tested (Some, Most, All)

D. Cows showing signs of mastitis are tested (Some, Most, All)

E. Cows with high SCC from testing are tested (Some, Most, All)

18. How often is a manager present during milking?

A. Always

B. For portions of every milking shift

C. Only during daytime milking

D. Only when problems are suspected

E. Occasionally, when it seems necessary

F. Never

G. Other \_\_\_\_\_

19. Do you use a pre-dip?

A. Always

B. Sometimes

C. Never

**IF A or B, ASK**

Survey Questionnaire

STUDY DATE: \_\_\_/\_\_\_/\_\_\_

FARM ID: \_\_\_\_\_

Interviewer: \_\_\_\_\_

20. What type and brand of teat dip is used? \_\_\_\_\_ (GET INFORMATION FROM LABEL)

21. Do you use liquid or foam dip? \_\_\_\_\_

22. Do you use a dipper or sprayer? \_\_\_\_\_

23. Do you use a post-dip?

- A. Always
- B. Sometimes
- C. Never

**IF A or B, ASK**

24. What type and brand of teat dip is used? \_\_\_\_\_ (GET INFORMATION FROM LABEL)

25. Do you use liquid or foam dip? \_\_\_\_\_

26. Do you use a dipper or sprayer? \_\_\_\_\_

27. Do you wipe the dip off prior to milking? \_\_\_\_\_

**IF YES, ASK**

28. What do you use to wipe off the dip?

- A. Paper towel
- B. Individual cloth towel
- C. Cloth towel used for two cows (one cow per side)
- D. Cloth towel used for more than two cows
- E. Other \_\_\_\_\_

29. Do you forestrip as part of your milking procedure?

- A. Always
- B. Sometimes
- C. Never

30. Do you use other teat cleaning or milk preparation devices such as teat scrubbers? (CIRCLE YES/NO)

**IF YES, ASK**

31. What other devices do you use? \_\_\_\_\_

32. How do you recognize **subclinical mastitis**?

I. INT: DO NOT READ RESPONSES. CHOOSE ALL APPROPRIATE TO CODE RESPONSE.

- A. CMT POSITIVE
- B. CONDUCTIVITY OR OTHER TEST PROVIDED BY MILKING EQUIPMENT
- C. OTHER COWSIDE SOMATIC CELL COUNT TEST
- D. MONTHLY DHIA SOMATIC CELL COUNT SCORES
- E. DON'T KNOW WHAT SUBCLINICAL MASTITIS IS → GO TO PART "II" OF QUESTION
- F. NEVER HAVE SUBCLINICAL MASTITIS
- G. DO NOT CHECK FOR SUBCLINICAL MASTITIS

II. IF THEY DO NOT KNOW WHAT SUBCLINICAL MASTITIS IS, SAY, "Some ways you might identify subclinical mastitis include CMT test, other cowside somatic cell count test, or monthly DHIA somatic cell count scores. Do you use any of these to recognize subclinical mastitis?"

Survey Questionnaire

STUDY DATE: \_\_\_/\_\_\_/\_\_\_\_\_

FARM ID: \_\_\_\_\_

Interviewer: \_\_\_\_\_

- A. CMT positive
- B. Other cowside SCC test
- C. Monthly DHIA SCC scores
- D. Never have subclinical mastitis
- E. Do not check for subclinical mastitis

33. Do you segregate or use separate milking units for high SCC cows? (CIRCLE YES or NO)

**IF YES, ASK:**

34. How do you segregate High SCC Cows?

- A. Move these cows to a separate milking facility such as a hospital barn with its own parlor
- B. Move these cows to a separate pen and milk them in the same parlor as other cows
- C. Use different milking units for these cows as they come through the parlor with other cows

**IF B, ASK:**

35. Do you milk this pen last? (CIRCLE YES OR NO)

36. What percent of cows are milking on less than four quarters? \_\_\_\_\_%

37. Do you have a written milking protocol?(CIRCLE YES OR NO)

**IF YES, ASK:**

38. Do all milkers have access to the written milking protocol in their native language?(CIRCLE YES OR NO)

39. Do you have a written mastitis treatment protocol? (CIRCLE YES OR NO)

**IF YES, ASK:**

40. Do all milkers have access to the written mastitis treatment protocol in their native language? (CIRCLE YES OR NO)

41. How many times per year do you take bulk tank cultures? \_\_\_\_\_

42. Under which conditions are individual cow bacterial cultures taken? (MULTIPLE ANSWERS MAY BE MARKED)  
CIRCLE ONE FOR EACH LINE, FILL IN LINE IF "OTHER"

- A. Fresh cows are cultured (All, Most, Some, Few, None, Other \_\_\_\_\_)
- B. Clinical Mastitis Cases are cultured (All, Most, Some, Few, None, Other \_\_\_\_\_)
- C. Cows with High SCC are cultured (All, Most, Some, Few, None, Other \_\_\_\_\_)
- D. Purchased animals are cultured (All, Most, Some, Few, None, Other \_\_\_\_\_)
- E. Other \_\_\_\_\_

43. Did you use the same type of bedding from May 2010 to April 2012? (YES / NO ) (CIRCLE ONE)

**IF YES, ASK REMAINING QUESTIONS ONCE**

**IF NO, ASK REMAINING QUESTIONS ONCE FOR EACH BEDDING TYPE AND RECORD DATES**

44. What is the base or foundation material under your cow beds (examples include, concrete, clay, dirt, sand)? \_\_\_\_\_

45. Do you use a base bedding material over the foundation and under the bedding such as mattresses or tires? (YES/NO)

**IF YES, ASK**

46. What is this layer? \_\_\_\_\_

47. What is the top layer of bedding material? \_\_\_\_\_

INTERVIEWER PRESENT LIST OF CHOICES. CHOICES NOT ON THE LIST ARE ALLOWED

Survey Questionnaire

FARM ID: \_\_\_\_\_

STUDY DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

Interviewer: \_\_\_\_\_

48. How often is the bedding completely replaced?

MORE THAN ONE ANSWER MAY BE SELECTED

- A. All bedding is replaced every \_\_\_\_\_ days/weeks/months
- B. Bedding in the back of the stall is replaced every \_\_\_\_\_ days/weeks/months
- C. Bedding is never completely replaced
- D. Other \_\_\_\_\_

49. How often is additional bedding added? \_\_\_\_\_

50. How often is bedding groomed?

MORE THAN ONE ANSWER MAY BE SELECTED

- A. Bedding is raked or manure removed from the stalls every \_\_\_\_\_ days/weeks
- B. Bedding is mechanically groomed and mixed every \_\_\_\_\_ days/weeks
- C. Bedding is not groomed
- D. Other \_\_\_\_\_

• **FOR EACH MILKING PARLOR FROM WHICH MILK IS SOLD, FILL OUT AND ATTACH ONE MILKING PARLOR QUESTIONNAIRE SHEET**

• **FOR EACH FARM, COMPLETE AN AUTHORIZATION TO RELEASE MILK QUALITY INFORMATION FORM**

• **SAMPLE BEDDING TYPES:**

- Digester Solids (Plug Flow Digester)
- Digester Solids (Complete Mix Digester)
- Composted Digester Solids (Plug Flow Digester)
- Composted Digester Solids (Complete Mix Digester)
- Manure (Composted)
- Manure (Dried)
- Manure (Raw)
- No Bedding
- Pasture
- Sand (Fresh)
- Sand (Recycled)
- Straw (Corn Stalks)
- Straw (Oat)
- Straw (Other)
- Straw (Wheat)
- Wood shavings/Sawdust (Dried)
- Wood shavings/Sawdust (Green/Wet)

Survey Questionnaire  
STUDY DATE: \_\_\_/\_\_\_/\_\_\_\_\_

FARM ID: \_\_\_\_\_  
Interviewer: \_\_\_\_\_

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**MILKING PARLOR QUESTIONNAIRE SHEET:**

**FOR EACH MILKING PARLOR FROM WHICH MILK IS SOLD, FILL OUT AND ATTACH ONE MILKING PARLOR QUESTIONNAIRE SHEET**

1. Do you sell the milk harvested in this parlor? (CIRCLE YES OR NO)

**IF NO, DO NOT COLLECT MORE DATA ABOUT THIS PARLOR**

2. ASK ONLY IF THERE IS MORE THAN ONE PARLOR ON THIS FARM

What is the name of this parlor? \_\_\_\_\_

SOME EXAMPLES ARE (MAIN PARLOR, SECOND PARLOR, HOSPITAL BARN, OLD PARLOR)

IF THE INTERVIEWEE IS UNCLEAR, YOU MAY GIVE SUGGESTED NAMES

3. What Type of a parlor do you have?

- A. Side Opening (Tandem) (Autoflow) Parlor
- B. Herringbone (Fishbone) Parlor
- C. Parallel (Side by Side) Parlor
- D. Swing (Swing-Over) Parlor
- E. Flat Barn Parlor
- F. Rotary (Carousel, Turnstile) Parlor

**IF NOT F ASK:**

4. How many stalls are on one side of your parlor? \_\_\_\_\_

5. How many sides does your parlor have? \_\_\_\_\_

TWIN DOUBLE 24 PARLORS (96 COWS TOTAL) SHOULD BE LISTED AS 24 STALLS PER SIDE AND 4 SIDES

**IF F ASK:**

6. How many stalls does your carousel have? \_\_\_\_\_

7. Does your parlor have a mechanical device to keep the milking units from falling to the parlor platform after detachment?

- A. Yes, Full support arm
- B. Yes, Other \_\_\_\_\_
- C. No, hose support only

8. What brand and model of liner are you using?

A. BRAND: \_\_\_\_\_

B. Model: \_\_\_\_\_

9. At the end of milking is your parlor:

- A. Very Clean
- B. Clean
- C. Neither clean nor dirty
- D. Slightly Dirty
- E. Very Dirty

10. Do you use this parlor all year or do you have different parlors for different seasons?

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STUDY DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

FARM ID: \_\_\_\_\_

Interviewer: \_\_\_\_\_

- A. Same parlor all year
- B. Different Parlor for Different Seasons

**IF B, ASK**

11. Which Months do you use this parlor?

- A. From \_\_\_\_\_ to \_\_\_\_\_





### Authorization to Release Milk Quality Information

I authorize \_\_\_\_\_ to release the milk quality information for milk that I have shipped in the period from May 1, 2010 to April 30, 2012 to researchers at the University of Wisconsin – Madison for inclusion in the dataset to be used for the **Association of Milk Quality to Bedding Types on Medium and Large Scale Wisconsin Dairy Farms** study.

This information will be collected and stored by Dr. Pamela Ruegg. Data made available to other researchers working on this project will not contain any personally identifying information regarding the farm or milk processor.

Only the following information is to be released:

For each month:

1. Total pounds of milk
2. Somatic Cell Count (SCC) one of the following
  - a. Weighted Average SCC for the month and the number of counts taken
  - b. Individual SCC results and the corresponding pounds for each result
    - i. Researchers will calculate a weighted average SCC
3. All Total Bacteria Counts (TBC) and pounds of milk for the pickup/delivery, and the type method of counting
  - a. Example: if there were 15 Bacteria Counts for a month, there will be 15 values for each bacteria count and pounds for the month
  - b. Examples of TBC: Specific Plate Count (SPC), Plate Loop Count (PLC), PPLC (Petri Plate Loop Count), Bactoscan or IBC electronic count reported as SPC equivalent

Farm STUDY ID: \_\_\_\_\_

Farm NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ (print)

Farm Owner/authorized agent

\_\_\_\_\_  
Signature of herd owner/authorized agent

\_\_\_\_\_  
Date