

<b>A. Introduction</b>	<b>1</b>
<b>B. Uses</b>	<b>1</b>
<b>C. Kit Storage</b>	<b>2</b>
<b>D. Conditions for running the test</b>	<b>2</b>
<b>E. Milk samples</b>	<b>3</b>
<b>F. Test strips</b>	<b>3</b>
<b>G. Contact information</b>	<b>3</b>

## A. Introduction

UdderCheck™ is a simple on-farm test to screen for udder infection in its earliest detectable stages. It measures the level of lactate dehydrogenase (LDH) in milk, an enzyme that is released when inflammation of the udder is present. LDH is used in some automated milkers and is less sensitive to factors that could easily affect SCC such as stress, parity, and stage of lactation. UdderCheck is an ideal on-farm tool to check for the presence of udder infection in dairy cows.

## B. Uses

When should you use UdderCheck?

UdderCheck can be used to:

- Monitor problem cows
- Check cows at Freshening and Dry Off
- Monitor sick and treated cows
- Check before insemination
- Monthly herd screening
- Screen cows at auction

What are the differences between UdderCheck and the PortaSCC® test?

The main difference lies in the enzyme that causes the color reaction. The PortaSCC tests screen for the level of esterase which is closely correlated with somatic cell count, a common milk quality indicator. UdderCheck screens for Lactate Dehydrogenase which is released when there is an infection in the udder. Other differences are shown in the table below:

	PortaSCC Milk Test	PortaSCC Quick Test	UdderCheck
Use the following test to:	Estimate somatic cell count (SCC), best for many samples at once	Estimate somatic cell count (SCC), ideal for a few samples at once	Screen for udder infection
Reaction Time	45 – 60 minutes	5 – 6 minutes	2 minutes
Protocol	1 drop of milk + 3 drops of activator solution	4 drops of milk + 4 drops of activator solution	Squirt on the test strip, or dip the test strip in milk

## B. Uses - continued

How does UdderCheck differ from CMT?

UdderCheck and CMT use different methods to screen for mastitis. UdderCheck measures the level of Lactate Dehydrogenase (LDH) in milk. LDH is an indicator of tissue damage caused by udder infection. The CMT reaction depends on the presence of somatic cells in milk. An increase in SCC may or may not be caused by infection and can also increase due to other environmental factors such as stress, parity, and stage of lactation. UdderCheck requires no additional liquid reagent.

How does UdderCheck compare to reference lab testing?

Composite milk samples were tested on-farm with the UdderCheck dipstick test and then sent to a reference laboratory for analysis of LDH. The reliability of UdderCheck for the detection of mastitis in dairy cows, when compared to an LDH concentration of >103.5 U/L is shown below. Results can vary depending on interpretation of the color chart.

UdderCheck	Sensitivity (%)	Specificity (%)
+	93	94

What if I already use a monthly screening program, such as DHIA?

UdderCheck works well in conjunction with monthly screenings (DHIA or other), allowing you to monitor a hot list or to test fresh and treated cows between screenings.

Can I use the UdderCheck test to assay dairy goat and sheep samples?

No. UdderCheck has not been tested for use with any other animals.

## C. Kit storage

How do I store the test kit?

Store the test kit at 2°C – 25°C (36°F – 77°F). Use by the *Best if Used by* date on the back of the vial. If the expected storage area is normally above 25°C (77°F), refrigeration is recommended in order to maintain the *Best if Used by* dating.

## D. Conditions for running the test

At what temperature should I test the samples?

We recommend testing the milk samples at a place where the temperature is between 7°C and 35°C (45°F and 95°F).

Can the test be done outside?

Yes. Run the test in a shaded area, out of direct sunlight.

Can I squirt milk directly onto the test strip, or should I dip it in a milk sample?

Yes, you can either squirt milk onto a test strip or dip a test strip in a milk sample. Shake off excess milk before reading the results.

## E. Milk samples

How fresh must the milk be?	We recommend using the freshest milk possible. However, the test has been successfully used with 12 hour old unrefrigerated and 1 week old refrigerated milk.
Will the temperature of the milk affect the test?	Yes. If the milk is refrigerated, allow it to warm to room temperature before testing.
Should I mix the sample before testing?	Yes. It is recommended that the milk sample be mixed before testing.
Can samples with preservatives be tested?	No. The preservatives interfere with the test and may alter the results.
Can samples with antibiotics be tested?	Yes. Antibiotics will not interfere with the test.
Can samples with hormones be tested?	Yes. Hormones will not interfere with the test.

## F. Test strips

How long can I use test strips after removing from the vial?	We recommend using test strips within 15 minutes of their removal from the vial. Remember to close the vial after removing test strips and to keep the test strips out of direct light.
Where are the test kit's <i>Lot Number</i> and <i>Best if Used by date</i> ?	The <i>Lot Number</i> and <i>Best if Used by date</i> are printed on the label on the side of the vial.
What if the test strip is dropped or disturbed during color development?	If the test strip does not pick up dirt or water, it should be fine.
What if dirt gets onto reagent pad? Can I blow it off?	No. Do not blow on the test strips and avoid any visible dirt settling on the reagent pad.
What if the test strip was exposed to direct sunlight or high humidity? What if I left the vial in the sun or inside a vehicle during hot weather?	If the pad on the test strip appears discolored or purple, discard.

## G. Contact information

If you have any other questions or concerns regarding UdderCheck or other PortaCheck products, or your question is not listed above, please check our web site at [www.portacheck.com](http://www.portacheck.com), or contact us at 866.500.7722 (toll-free) or at 856.231.8894. You can also write to us by e-mail at [info@portacheck.com](mailto:info@portacheck.com).