



BOVIMUN MAST

MORE QUALITY MILK

STREPTOCOCCUS AGALACTIAE
STREPTOCOCCUS UBERIS
STAPHYLOCOCCUS AUREUS
ESCHERICHIA COLI

INACTIVATED VACCINE FOR PREVENTION OF MASTITIS IN COWS



- > less mastitis - more milk
- > less treatment costs
- > fewer somatic cells (low SCC)

Manufacturer

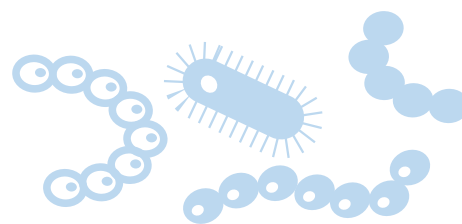


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1 DOSE OF THE VACCINE CONTAINS ACTIVE COMPONENTS (PRIOR TO INACTIVATION):

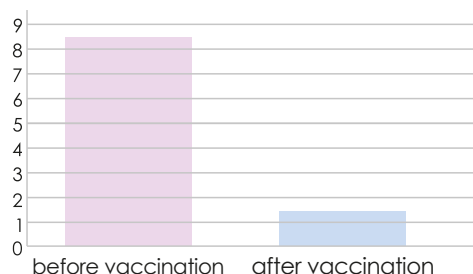
- *Streptococcus agalactiae*, strain St.ag-19 $\geq 8,0$ lg CFU;
- *Streptococcus uberis*, strain St.ub-19 $\geq 8,0$ lg CFU;
- *Staphylococcus aureus*, strain Staph.au-19 $\geq 8,0$ lg CFU;
- *Escherichia coli*, strain UA J5 $\geq 9,0$ lg CFU.



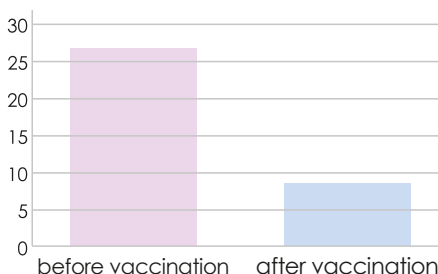
PRACTICAL EXPERIENCE WITH

In the farm of **Vinnytsia region** (301 heads of dairy herds) the **BOVIMUN MAST** vaccine was used, and positive results were obtained 6 months after the vaccination:

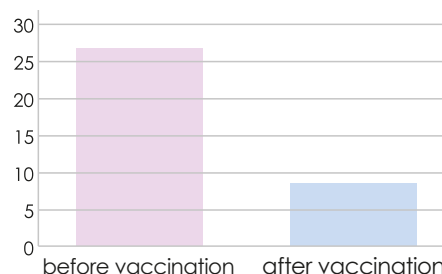
■ Number of animals with clinical mastitis, %



■ Number of animals with subclinical mastitis, %



■ Number of animals with endometritis, %



CALCULATIONS OF THE ECONOMIC FEASIBILITY OF USING **BOVIMUNE MAST** VACCINE FOR 6 MONTHS

Vaccination	Index	Treatment of cows		Culling		Labor costs		Vaccinations + studies	TOTAL	Grades of milk
		with mastitis	with endometritis	milk	cows	vet	milker			
Before	Sum, UAH	25 heads 29 400	30 heads 23 850	25 heads 250 056	5 heads 450 000	4 372,5	1 848	-	759 526,50	1 1290 028,0
After	Sum, UAH	5 heads 5 880	2 heads 1 590	5 heads 51 943,20	3 heads 270 000	556,50	235,20	57 150	387 354,90	11 726 177,40

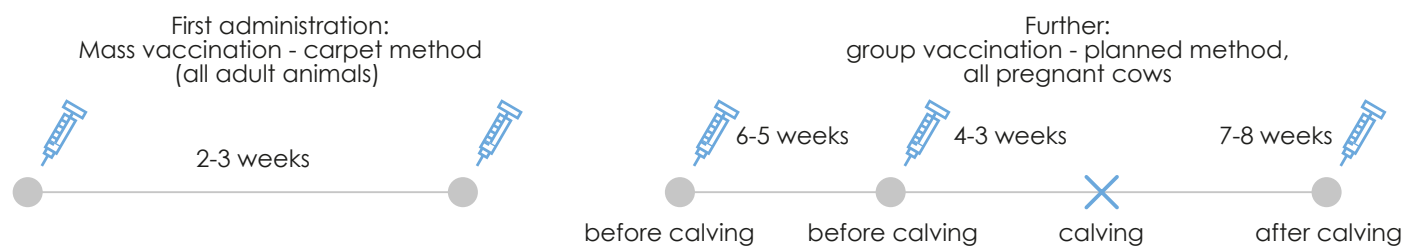
PROFIT: $372,171.60 + 436,149 = 808,320.60$ UAH. For 1 UAH of expenses, **14.14 UAH** of profit from vaccination was received.

Vaccination of animals with **BOVIMUN MAST** produced by BIOTESTLAB improves the quality of dairy raw materials on farms.

Data on the dynamics of production indicators show the effectiveness of vaccination within six months after administration and the achievement of economic efficiency by improving the quality of raw milk and the dynamics of productivity indicators.

The data of economic indicators show that the use of the vaccine for prophylactic purposes for 6 months makes it possible to prevent losses, improve the quality of raw milk and achieve significant economic benefits.

VACCINATION SCHEMES:

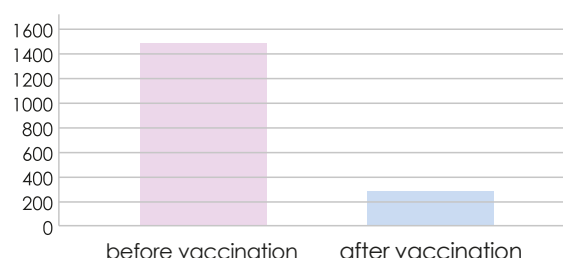


THE BOVIMUN MAST VACCINE

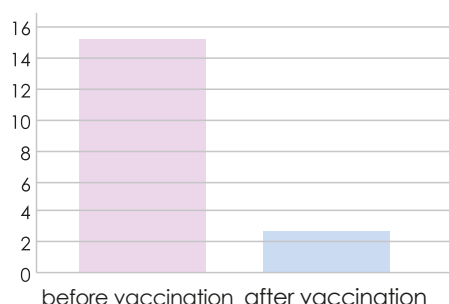
Herd productivity indicators 6 months after vaccination with **BOVIMUN MAST** were:

In the farm of the **Kyiv region** (216 heads of dairy herds), the vaccine against mastitis **BOVIMUN MAST** was also used, and 6 months after vaccination, positive results were obtained:

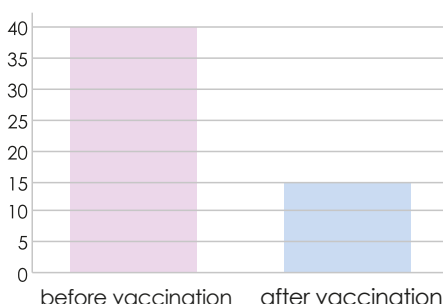
- the somatic cell count is 303,000/cm³ after vaccination



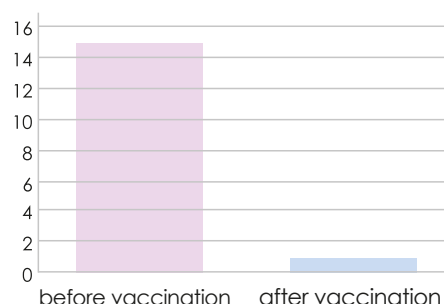
- number of animals with clinical mastitis, %



- number of animals with subclinical mastitis, %



- number of animals with endometritis, %



Vaccination of animals with the **BOVIMUN MAST** vaccine produced by BIOTESTLAB, on a farm in the Kyiv region, improves the quality of raw milk. Data on the dynamics of production indicators show the effectiveness of vaccination within six months after use.

CALCULATIONS OF THE ECONOMIC FEASIBILITY OF USING **BOVIMUNE MAST** VACCINE FOR 6 MONTHS

Vaccination	Index	Treatment of cows		Culling		Labor costs		Vaccinations + studies	TOTAL	Grades of milk
		with mastitis	with endometritis	milk	cows	vet	milker			
Before	Sum, UAH	32 heads 122 726,40	32 heads 223 976,40	32 heads 347 136	6 heads 72 000	2 542,08	2 150,40	-	770 531,28	8 806 320
After	Sum, UAH	5 heads 2 399,70	2 heads 13 998,60	5 heads 56 460	3 heads 36 000	278,04	253,20	44 400	153 789,54	9 146 520

PROFIT: 616,741.74 + 340,200 = 956,941.74 UAH. For 1 UAH of expenses, **21.55 UAH** of profit from vaccination was received.

MILK TRANSPORTATION RULES

1 IN WHICH CONTAINER SHOULD THE MILK SAMPLES BE COLLECTED?



Use sterile plastic vials (test tubes) with airtight caps.

2 WHAT ARE THE CONDITIONS FOR THE TRANSPORTATION OF MILK?



Samples should be placed in a cold pack and sent to the laboratory as soon as possible. They can be stored for up to 5 days when cooled to $+2 - +8^{\circ}\text{C}$, and at a temperature of minus 20°C - for 6 months.

3 IS IT NECESSARY TO USE PRESERVATIVES?



Preservatives should not be added to milk samples. This may affect the reliability of the results obtained.

RECOMMENDATION FOR MILK SAMPLING

BULK TANK MILK SAMPLES

It is enough to take one sample of bulk milk from each bulk tank on the farm. When it is not possible to take a sample from the tank, one sample can be taken from the milk truck. If the milk truck collects milk from more than two different farms, sampling is not recommended.

INDIVIDUAL SAMPLE

- 1 Label tubes prior to sampling (date, farm, cow, quarter)
- 2 Use a brush to clean the teats and udder of bedding, hair, and other dirt. In case of heavy soiling, thoroughly rinse, and dry teats and udders before sampling milk. Udders should be washed as a last resort.
- 3 Milk without sampling the first jets of milk. Examine milk and udder quarters for signs of clinical mastitis.
- 4 Treat all quarters of the udder with an effective pre-milking teat disinfectant and wait at least 30 seconds.
- 5 Dry teats thoroughly with an individual towel.
- 6 Starting at the teats on the far side of the udder, vigorously (10 to 15 seconds), wipe the ends of the teats with cotton or gauze swabs, or special wipes moistened with 70% alcohol. Teat ends should be cleaned until there is no dirt left on the swab. One cotton ball or swab moistened with alcohol must not be used on more than one teat. Try not to touch the clean ends of the teats. Avoid contact of clean teats with dirty limbs and tail.
- 7 Start sampling from the nearest teat and move to the teats on the far side of the udder. Remove the cap from the test tube or vial, but do not touch the inside of the cap. Always keep the open end of the cap pointing down. Hold the test tube or vial at an angle of approximately 45 degrees when sampling. Do not touch the edges of the tube to the udder teat. Take 1 to 3 jets of milk and close the test tube immediately.
- 8 To take a collective sample (milk from all four quarters of the udder into one test tube), start sampling from the nearest teats and move to the teats on the far side of the udder. From each quarter of the udder, 1 to 2 ml of milk should be collected.
- 9 Selected milk samples should be immediately cooled (placed on ice or in the refrigerator). If samples cannot be analyzed within 48 hours of sampling, they should be frozen.