

## THE INFLUENCE OF DIFFERENT ENERGY AND PROTEIN CONTENT ON WEIGHT GAINS AND MEAT QUALITY OF YOUNG BULLS

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**Summary.** Two analogous groups of five Lithuanian Black-and-White fattening bulls were used in the trial that was carried out on the Experimental farm of the LVA Institute of Animal Science. The bulls were grown intensively from birth till 13 months of age. The diet for the experimental group of animals that were fed whole milk replacer with probiotics *Yeasture-W* and *Microbond*, also hay, green fodder, silage and compound feed contained 14.8% dry matter, 15.4% metabolizable energy and 14.5% crude protein more than that formulated for the control bulls. Daily weight gains of the experimental bulls were 953 g or 4.8% higher ( $p > 0.2$ ) than those of the control group given lower energy and protein contents. Experimental bulls gained weight more intensively and showed a tendency towards higher fat accumulation in the abdominal cavity ( $p > 0.1$ ). The carcasses of both groups met the requirements for O lean meat and second fat grades. The quality of ground meat and *M. longissimus dorsi* was higher for the bulls grown more intensively, i.e. it contained more dry matter ( $p > 0.2 - < 0.01$ ), protein ( $p > 0.1-0.2$ ) and fat ( $p > 0.1-0.4$ ) and higher water holding capacity ( $p < 0.05$ ).

**Key words:** bulls, probiotics, feeding intensity, growth, carcass, meat quality.