

# **THE INFLUENCE of the TYPE of PACKING and CARBOHYDRATES on SURVIVAL RATE of DILUTED RAM SPERM**

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*It was investigated dependence of the survival rate of sperm at a temperature 37 °C from the type of packing (straw or glass vial) and content of carbohydrates in solution. At dilution of sperm by 2,9% sodium citrate the incubation in straws significantly diminished the survival rate and the total survival rate by comparison with vials – 2,30±0,08 and 7,51±0,56 against 2,97±0,17 h and a 9,80±0,64 arb. un. For addition in solution a lactose and glucose (0,01 M for both) the survival rate and the total survival rate of sperm packaged in straws were reliably more than indexes of sperm packed in vials – 5,33±0,12 and 22,88±0,96 against 3,46±0,62 h and a 9,21±1,52 arb. un. Addition to solution only of lactose increased the survival rate and the total survival rate of sperm by comparison with the results of incubation in 2,9% sodium citrate only, but did not change character of dependence of indexes from the type of packing. At replacement of lactose by glucose the dependence of physiology indexes from the type of packing changed on opposite - the survival rate ( $p>0,05$ ) and the total survival rate ( $p <0,05$ ) were higher in samples packaged in straws - 7,92±0,35 and 24,63±2,30 against 4,96±1,30 h. and 10,68±2,41 arb. un. Analysis of the results showed that under anaerobic conditions sperm use glucose as an energy source. For free access of oxygen the utilization of glucose is suppressed and sperm utilizes other substrates, for example, lactose. It is planned to use the found positive effect of glucose to increase of the efficiency of sheep sperm freezing in straws.*

**Keywords:** ram, sperm, survival rate, total survival rate, glucose, lactose.