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Plasma and salivary cortisol levels in transportationstressed Aardi goats

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1 SUMMARY

The objective of this study was to assess salivary and plasma cortisol levels and their correlation in Aardi goats subjected to transportation. Twenty-seven (27) healthy male goats were used in this experiment. The goats were transported for 240 km for 3 hrs, and 480 km for 6 hours, Blood and saliva samples were collected at 0.00 h (pre-transportation); at 30, 60, 120, 240 min and 24 hrs post transportation. Both distances resulted in statistically significantly (P < 0.0001) increase in cortisol plasma and salivary levels after the transportation. The correlation coefficient between saliva and plasma cortisol was 0.895. The current findings indicated that transportation is a stress challenge in Aardi goat, and salivary levels of cortisol reflect its concentration in plasma samples of Aardi goat.