Supplementary Materials:

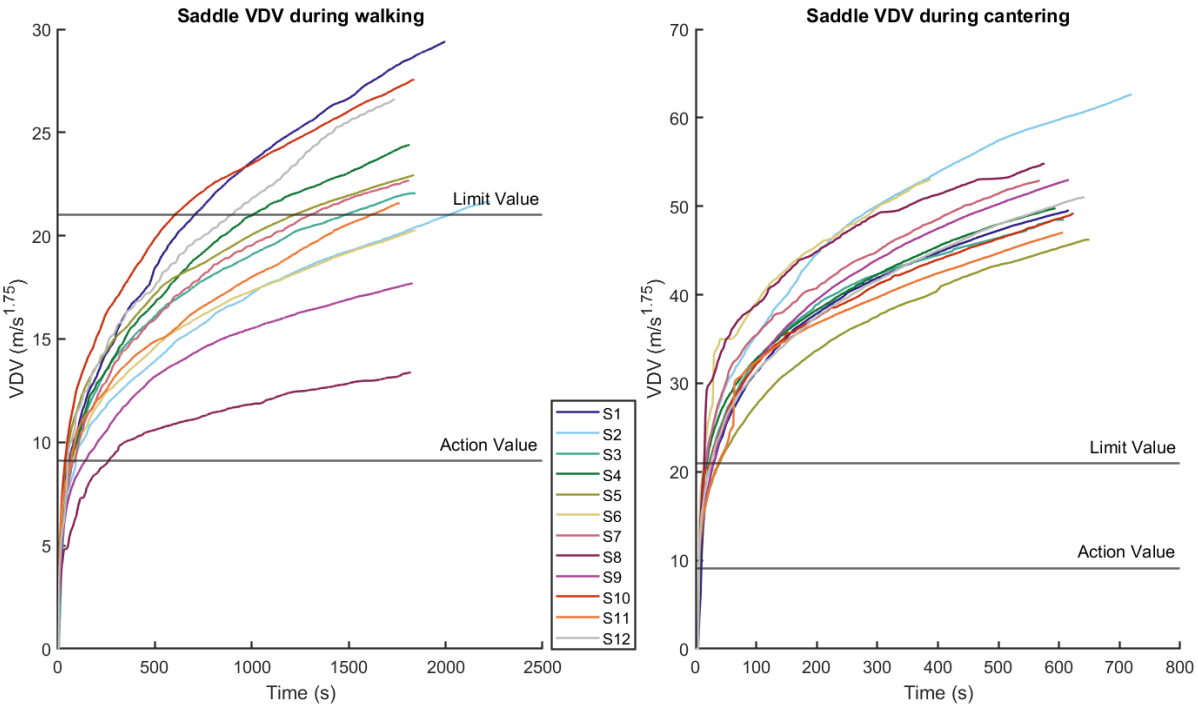


Figure S1. Total VDV accumulation of the saddle accelerations over time for walking and cantering. Each colored line represents one participant. The lower horizontal line is the action value of 9.1 m/s$^{1.75}$. The upper horizontal line is the limit value of 21 m/s$^{1.75}$.

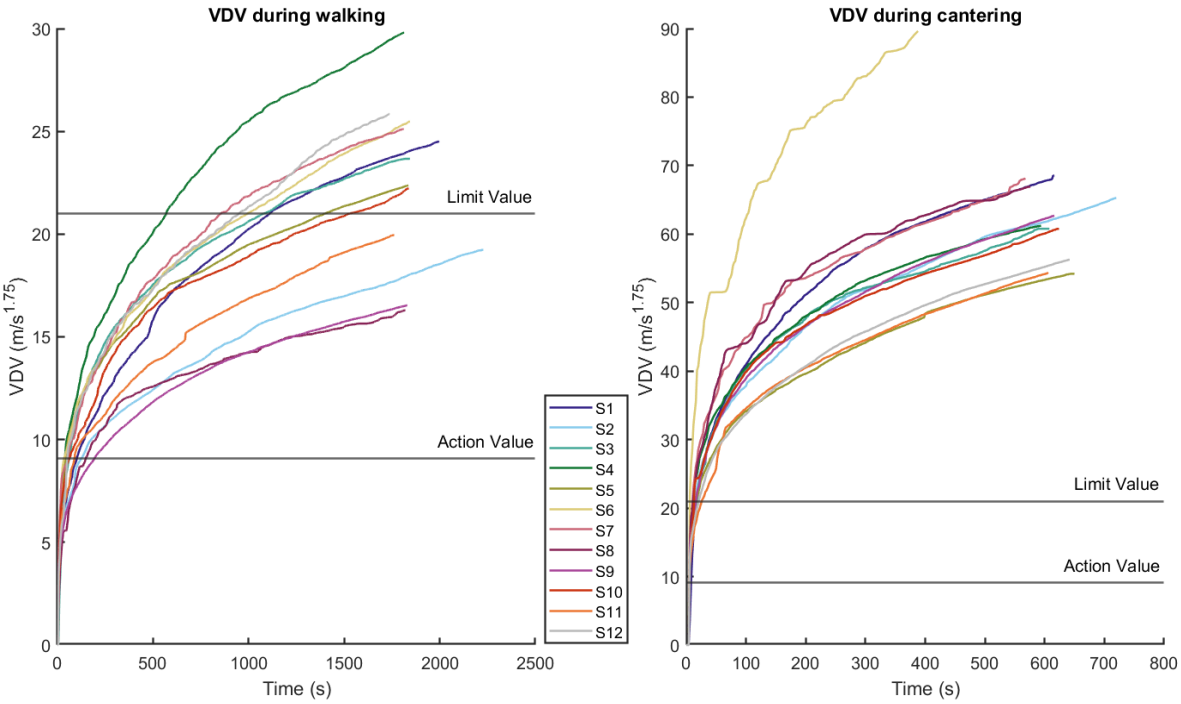


Figure S2. Total VDV accumulation of pelvis accelerations over time for walking and cantering. Each colored line represents one participant. The lower horizontal line is the action value of 9.1 m/s$^{1.75}$. The upper horizontal line is the limit value of 21 m/s$^{1.75}$.

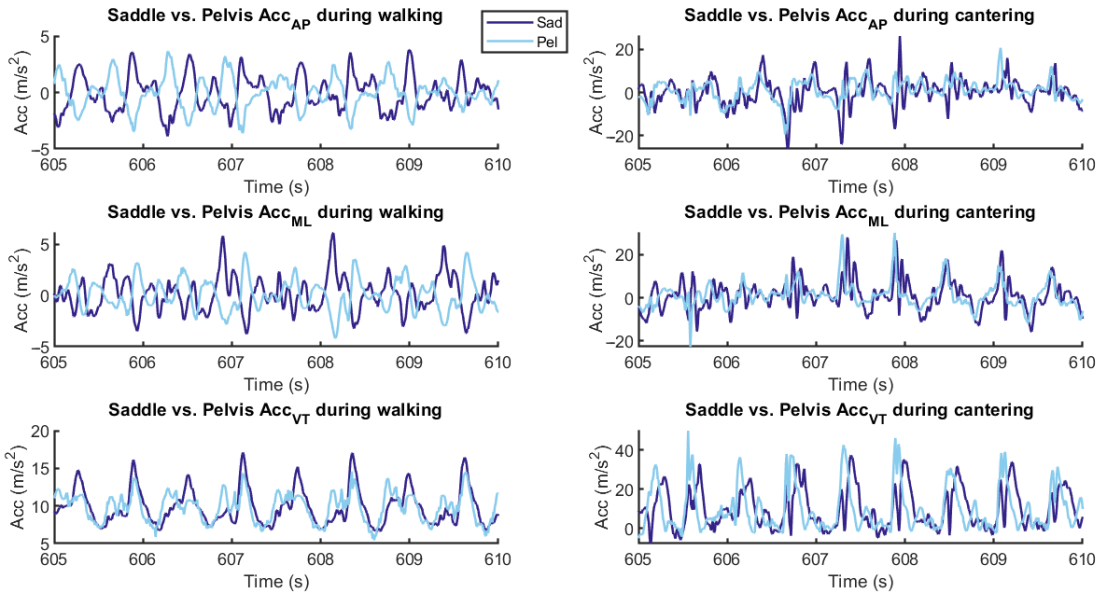


Figure S3. A sample of saddle (dark blue) and pelvis (light blue) accelerations for walking (left) and cantering (right). AP: anteroposterior, ML: mediolateral, VT: vertical.

Table S1. Saddle Vibration dose values for 30 minutes of walking for each subject in all directions. *VDV exceeds the action value of 9.1 m/s$^{1.75}$. ** VDV exceeds the limit value of 21 m/s$^{1.75}$.

	S1	**S2**	**S3**	**S4**	**S5**	**S6**	**S7**	**S8**	**S9**	**S10**	**S11**	**S12**
AP	18.4*	9.8*	13.0*	13.5*	7.4	8.5	13.6*	5.3	9.2*	17.1*	12.0*	17.4*
ML	10.4*	10.8*	6.5	8.0	8.0	11.6*	9.7*	7.8	7.2	10.3*	6.1	7.4
VT	9.8*	15.1*	12.9*	14.7*	19.0*	10.2*	8.9	7.2	11.7*	10.0*	13.4*	8.7
Tot	29.4**	21.7**	22.1**	24.4**	22.9**	20.3*	22.7**	13.4*	17.7*	27.6**	21.6**	26.6**

Table S2. Saddle Vibration dose values for 10 minutes of canter for each subject in all directions. *VDV exceeds Action Value of 9.1 $m/s^{1.75}$. ** VDV exceeds the Limit Value of 21 $m/s^{1.75}$.

	S1	**S2**	**S3**	**S4**	**S5**	**S6**	**S7**	**S8**	**S9**	**S10**	**S11**	**S12**
AP	24.4**	27.6**	19.6*	14.1*	22.1**	15.6*	22.3**	15.1*	23.4**	19.1*	25.2**	27.8**
ML	12.2*	27.7**	19.6*	20.0*	14.7*	22.8**	23.0**	20.6*	21.3**	19.9*	11.2*	12.5*
VT	42.4**	48.7**	40.4**	44.2**	35.5**	44.7**	40.4**	48.9**	42.1**	43.0**	38.4**	41.0**
Tot	49.5**	62.7**	48.6**	49.8**	46.3**	53.3**	53.0**	54.9**	53.0**	49.3**	47.1**	51.0**