



Study on Posture and the Development of Balance in Disabled Riders

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Introduction

Thanks to the generosity of Remedi, a charitable trust, I was able to spend 2 years researching the development of posture and balance in disabled riders. Some of these riders were working with RDA groups and some were receiving hippotherapy.

I used an electronic measuring device (Penny and Giles electronic goniometer) which was fastened to the rider's lower back. This measured the angle of the pelvis in relation to the lumbar spine and recorded degrees of movement in the pelvis (both forwards - backwards, or anterior/posterior tilt and side-to-side or lateral tilt of the pelvis) with every step or movement of the horse.

The measurements were recorded and stored in a mini computer the size of a pocket calculator. This was held in place by a belt round the waist and did not interfere in any way with the movements. Riders were quickly able to forget it was there.

At the end of the ride, the information in the mini computer was transferred to the main computer, which turned the movements into graph form and allowed printouts to be made of the results.

All rides were also recorded on videocamera, so that any anomalies on the graphs could be picked up.