In the subjects with pre-existing pelvic unleveling, placing a lift under the low side and leveling the pelvis had the same result vis-à-vis lateral flexion as creating pelvic unleveling in subjects with a level pelvis. Increased lateral flexion to the now high or elevated side. This is evidence that the joints, ligaments, and muscles of the lumbar spine and pelvis have permanently adapted to any anatomic leg-length inequality.