

# 減低腰痛

## 及其復發

### Reduce Low Back Pain and Its Recurrence

針對性強化該肌肉能改善腰痛及減低其復發

Strengthening of lumbar extensors  
using MedX low back device was found to  
reduce low back pain



超過八成人受到腰痛的折磨。流行病學的研究顯示，超過75%的腰痛是會復發的。急性腰痛發生後的一年內，其復發率甚高，估計有50%至80%的復發機會。而更重要的是當中有33%的病人有中等程度的疼痛，15%有嚴重的疼痛。

### 腰椎穩定的重要

腰椎的穩定度對於減低腰痛復發是非常重要的。有很多方法可以減低復發機會。其中有兩個方法成效較為顯著，分別為MedX伸展運動及3D Newton抗地心吸力運動。它們運用重量及地心吸力提供肌肉等長收縮訓練。MedX已被證實可減低工作時腰部受傷的機會；改善其他治療，包括外科手術都不能改善的腰痛及鑑定偽裝痛症，亦可提升腰痛的恢復時間。3D Newton則用重力（地心吸力）強化深層腰部及腹部肌肉，以穩定脊椎。

### 電腦化MedX腰椎伸展儀

研究顯示很多腰痛的困擾是由於腰部伸肌薄弱及已不被運用，因此針對性強化該肌肉能改善腰痛及減低其復發。

### 減低腰部受傷機會 3D Newton

一項為期20週的研究，為一組每星期接受一次MedX訓練的礦工與沒有訓練的另一組作比較。接受訓練的組別腰伸展肌的肌力增加了54-104%；腰痛受傷的機會亦明顯減低。



MedX 脊椎復康器材

### 解脫腰痛、重回工作崗位

627位腰痛病人，接受不同的治療方法，包括脊科治療及外科手術，但腰痛持續、幫助不大。但在接受MedX腰椎復康儀治療後，腰部的活動幅度及增加伸展肌的靜態和動態的強度均有所提升。他們對MedX的評價：46%非常滿意、30%滿意、14%普通及8%差。

另一項研究發現MedX腰椎伸展復康運動對曾經接受腰椎間盤切除手術的病人亦十分有效。手術後六星期進行為期三個月的MedX腰椎伸展復康運動能減低腰痛及加快重回工作崗位。

### 3D Newton 重力輔助式復康

此器材將軀幹固定著，然後360度轉動。這使深層腰部肌肉、腹橫肌及內斜腹肌收縮，穩定脊柱。

這復康方法可用於評估及治療。它可以加快急性及慢性腰痛的康復、提升平衡感及本體感覺。

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Low back pain afflicts over 80% of the population. Epidemiological studies showed that over 75% of the low back pain recurred. The recurrence rate is high and was estimated to be 50-80% within a year of suffering from acute low back pain. Of importance perhaps is that 33% of these patients still had moderate pain and 15% had severe pain.

### Stabilization of the lumbar spine

Studies have shown that stabilization of the lumbar spine is important to reduce the recurrence of low back pain.<sup>3</sup> There are many different methods to achieve the end. Of these, two methods produce good and reproducible results. They are the MedX extension exercises and the 3D Newton devices. Both of them provide isometric exercises using weight and gravity. MedX lumbar rehabilitation device has been found to be useful in reducing low back injuries in work place, improving recovery of low back pain refractory to other treatments including surgery and identifying malingering.<sup>2,5,6,7</sup> 3D Newton uses gravity to strengthen the deep low back muscle and the abdominal muscles involved in stabilization of the lumbar spine.<sup>1,4</sup>

### Computerized MedX Lumbar Extension Device

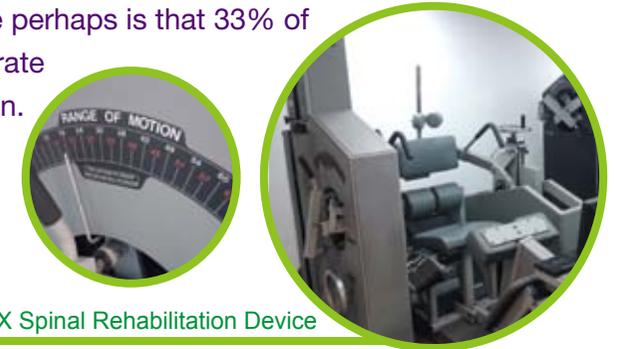
Studies have shown that many low back afflictions are due to disuse and weakness of lumbar extensors and that strengthening of these muscles improves low back pain and reduces its recurrence.



3D Newton

### Reduce Low Back Injury Rates

A study compared a group of miners who exercised once weekly using MedX with a non-exercise group showed that in 20 weeks, the lumbar extensor strength of the exercise group increased 54-104% and the injury rate reduced significantly.<sup>6</sup>



MedX Spinal Rehabilitation Device

### Recovery from Low Back Pain and Return to Work

Strengthening of lumbar extensors using MedX was found to reduce low back pain, improve lumbar range of motion and increase static and dynamic strength of lumbar extensors in a group of 627 patients with low back pain, which were refractory to different treatments, including failed chiropractic treatment and surgeries. The overall response to MedX was excellent in 46%; good in 30%; fair in 14% and poor in 8%.<sup>7</sup>

Another study showed that MedX was also effective for patients who have undergone lumbar disectomy. MedX low back extension exercises for 3 months six weeks after disectomy has been found to reduce low back pain and improve the speed of returning to work.<sup>2</sup>

### Gravity Assisted Rehabilitation (3D Newton)

The technology involved stabilizing the trunk when it is rotated in 360 degrees. Research has shown that the method recruit the deep low back muscles, the transverse abdominal muscles and the internal oblique abdominal muscles.<sup>1,4</sup>

The rehabilitation method can be used for evaluation and treatment. It speeds up recovery of acute and chronic low back pain. Furthermore, it improves balance and proprioception.<sup>1,4</sup>