

機良膝物

法有動運

Exercise for Your Knee



新界西醫院聯網 物理治療部
Physiotherapy Department, NTWC



簡介 Introduction

本小冊子旨在透過運動及護理教育，使膝痛患者能：

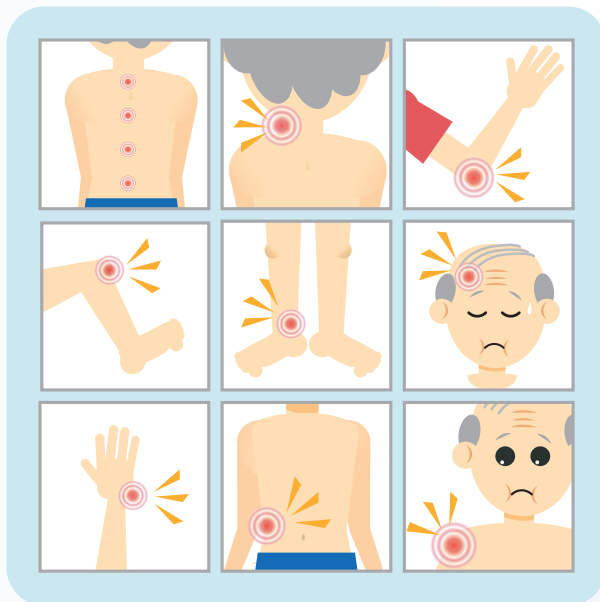
This pamphlet aims to empower you the following abilities by education and exercise.

無懼痛楚
No fear of pain

懂得處理病癥
Symptoms
Management

朝目標進發
Functional goals
achievement

生活更活躍
More active
lifestyle



70歲以上的人士中，有三份一人受慢性關節痛影響。其中，膝關節跟大多數活動功能有關，例如走路，站立。雖然不能治癒，但我們知道保持活躍能有明顯正面效果！

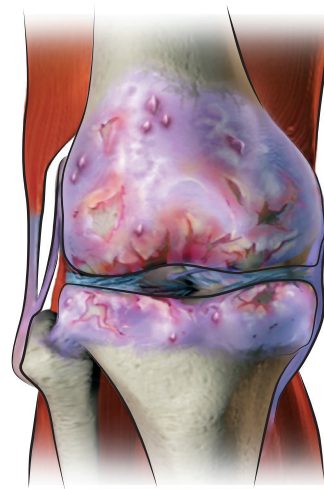
One third of people aged above 70 suffer from chronic joint pain. In those, knee involves in many functional abilities, e.g. walking, standing. Although there is no complete cure, maintaining active lifestyle does help!

退化關節的轉變

Degenerative changes of the joint



正常關節 Normal Knee



退化關節 Osteoarthritis

退化的膝關節：軟骨變薄和粗糙、關節時會腫脹；關節邊緣有骨質增生。

The cartilage of an arthritic knee can become thinner and rougher. The joint may swell. Osteophytes may form at joint edge.

關節轉變，有得醫嗎？

Is joint degeneration curable?

- 關節出現退化是無法治癒
Joint degeneration is not curable
- 在正常活動下，身體會嘗試修補關節的損壞
With normal activities, body will try to repair the joint damage
- 沒有活動，肌肉將會發軟，關節變僵硬
Without activities, muscles will be weak while joints will be stiff
- 關節退化過程會轉壞
Joint degeneration would worsen over time

如果你想幫助關節，一定要保持活躍！

If you want to help the joint, you must stay active !

運動建議 Exercises Suggestion

伸展運動 Stretching exercises

當目標肌肉感到拉緊時，停留_____秒，重複_____次。

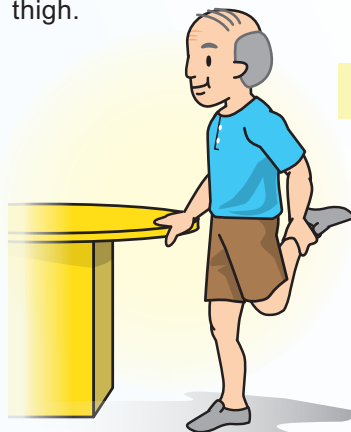
Once stretching feeling of the target muscle is felt, hold the position for _____ seconds, repeat _____ times.



大腿後方肌肉 Hamstrings

坐著，伸直其中一隻腳，保持腰挺直，然後向前傾至感到大腿後方肌肉拉緊。

In sitting, straighten one leg and keep the back straight, then lean forward until there is stretching feeling over back of the thigh.



四頭肌 Quadriceps

站立，將其中一隻腳屈曲並用手捉住腳踝向後拉，並保持腰挺直，直至感到大腿前方肌肉拉緊。

In standing, bend one leg and hold on the ankle. Keep the back straight and pull the leg backward until there is stretching feeling over the anterior thigh.



小腿肌肉 Calf muscles

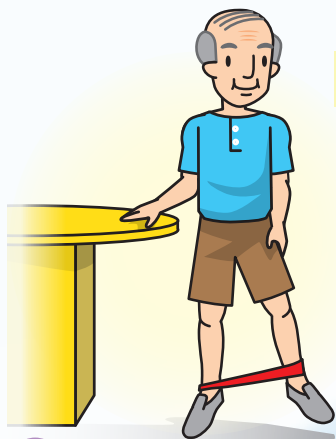
弓步站立，前膝微曲至感到後腳小腿肌肉拉緊。

Bow stance, slightly bend the knee in front until there is stretching feeling over the calf of the leg behind.

肌肉鍛鍊 Strengthening exercises

做強化運動時，每個動作停留_____秒，重複_____次。

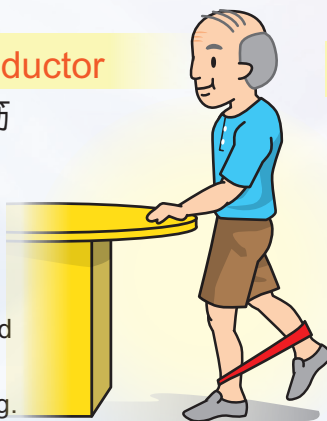
In strengthening exercises, hold the position for _____ seconds, repeat _____ times.



臀部外展肌 Hip abductor

站立，將沙包/橡筋帶綁在腳踝，將腳向外打開。左右交替。

In standing, tie the cuff-weight/elastic band around ankle level, open up the leg. Same for the other leg.



臀部伸肌 Hip extensor

站立，將沙包/橡筋帶綁在腳踝，將腳向後踢。左右交替。

In standing, tie the cuff-weight/elastic band around ankle level, pull the leg back. Same for the other leg.

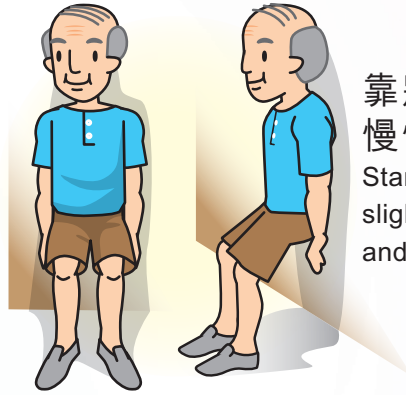
肌肉鍛鍊 Strengthening Exercises

做強化運動時，每個動作停留_____秒，重複_____次。
In strengthening exercises, hold the position for _____ seconds, repeat _____ times.

四頭肌 Quadriceps



坐著，將沙包/橡筋帶綁在腳踝，將腳舉起伸直。左右交替。
In sitting, tie the cuff-weight / elastic band around ankle level, straighten one leg. Same for the other leg.



靠牆站立，膝部慢慢微曲下蹲。
Stand against a wall, slightly bend the knees and squat down slowly.

帶氧運動 Aerobic Exercise

帶氧運動
Aerobic Exercise

急步行 Jogging

踏步 Marching

踏單車 Cycling

踏級 Stepping

你的提議？
Any suggestion?

多長時間？
How long?

- 每天30分鐘或以上
- 每次最少10分鐘
- 30 minutes or more per day
- 10 minutes or more per session

多頻密？
How frequent?

- 一星期5-7天
- 5-7 days per week

要多費力？
How hard?

- 身感微溫
- 心跳稍加快
- 仍能保持談話
- Increase in body temperature
- Increase in heart rate
- Still able to talk

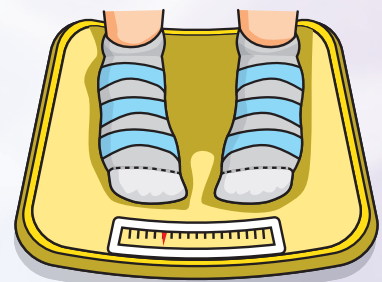
做些甚麼？
What to do?

- 按你喜好
- 融入每天生活中
- As you like
- Be parts of your daily activities

體重管理 Weight management

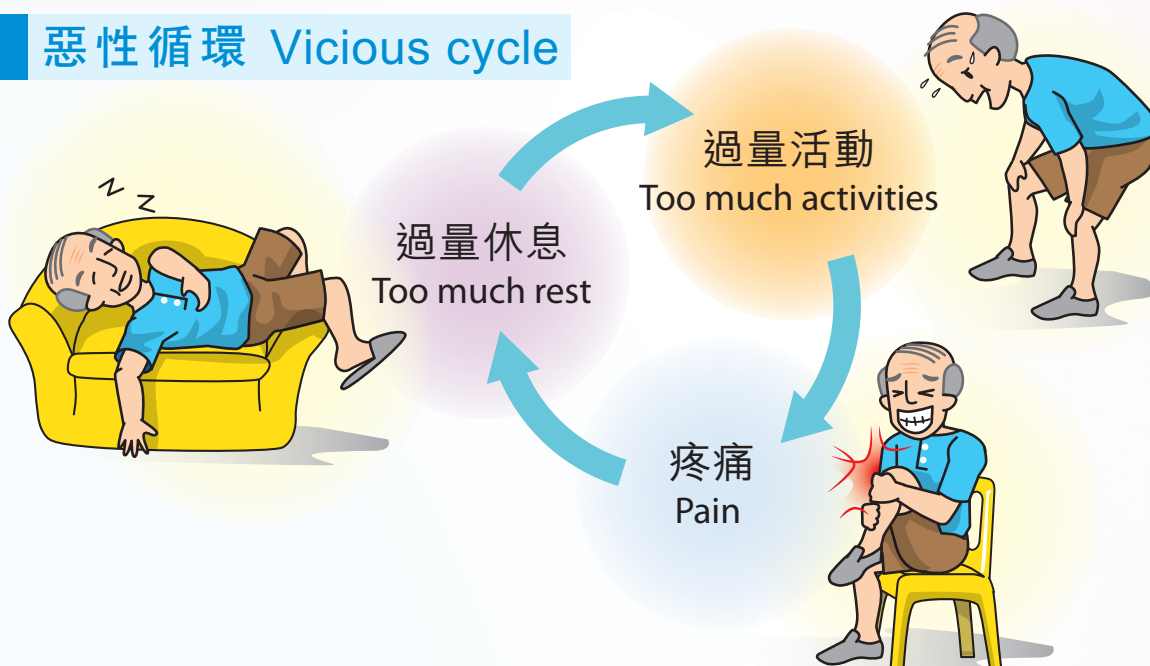
適量減輕體重，以減輕關節負擔。
增加活動 + 控制飲食

Reduce weight adequately to reduce joint loading
Adequate exercise + Diet control



逐漸遞增活動 Paced Exercise

惡性循環 Vicious cycle



如何開始逐漸遞增？

How to progress step by step ?

- 將工作/活動分拆成數份，逐漸遞增
Break exercise into parts by parts and progress slowly
- 打斷過勞 - 過少活動循環
Break the vicious cycle
- 增進活力
Be energetic
- 使你能掌控自己生活
Regain the self control of functional activities

小貼士 Tips

- 減短活動時間
Shorten duration of activities
- 留意運動期間的痛楚變化
可接受的痛楚 / 沒額外痛楚
Aware the change of pain pattern during exercises. You should feel tolerable pain or no excessive pain.
- 插入短時間休息
Introduce short break between activities.
- 運動期間可休息一會
一系列活動中有休息
Taking rest during exercise and in between a series of activities.

我的運動日誌 My exercise diary

請在下方記錄你一個月的運動種類及時間

Please mark down the details of your exercise for a month

							_____年Year	_____月Month
1	2	3	4	5	6	7		
8	9	10	11	12	13	14		
15	16	17	18	19	20	21		
22	23	24	25	26	27	28		
29	30	31						

我的飲食日誌 My food diary

試試了解自己吃喝多少，並記錄兩天

Try to understand how much you eat and record it for 2 days

	進食食物 Food	飲品 Drink
第一天 Day 1		
第二天 Day 2		

焦慮和情緒都有關嗎？

Is anxiety and emotion related to pain ?

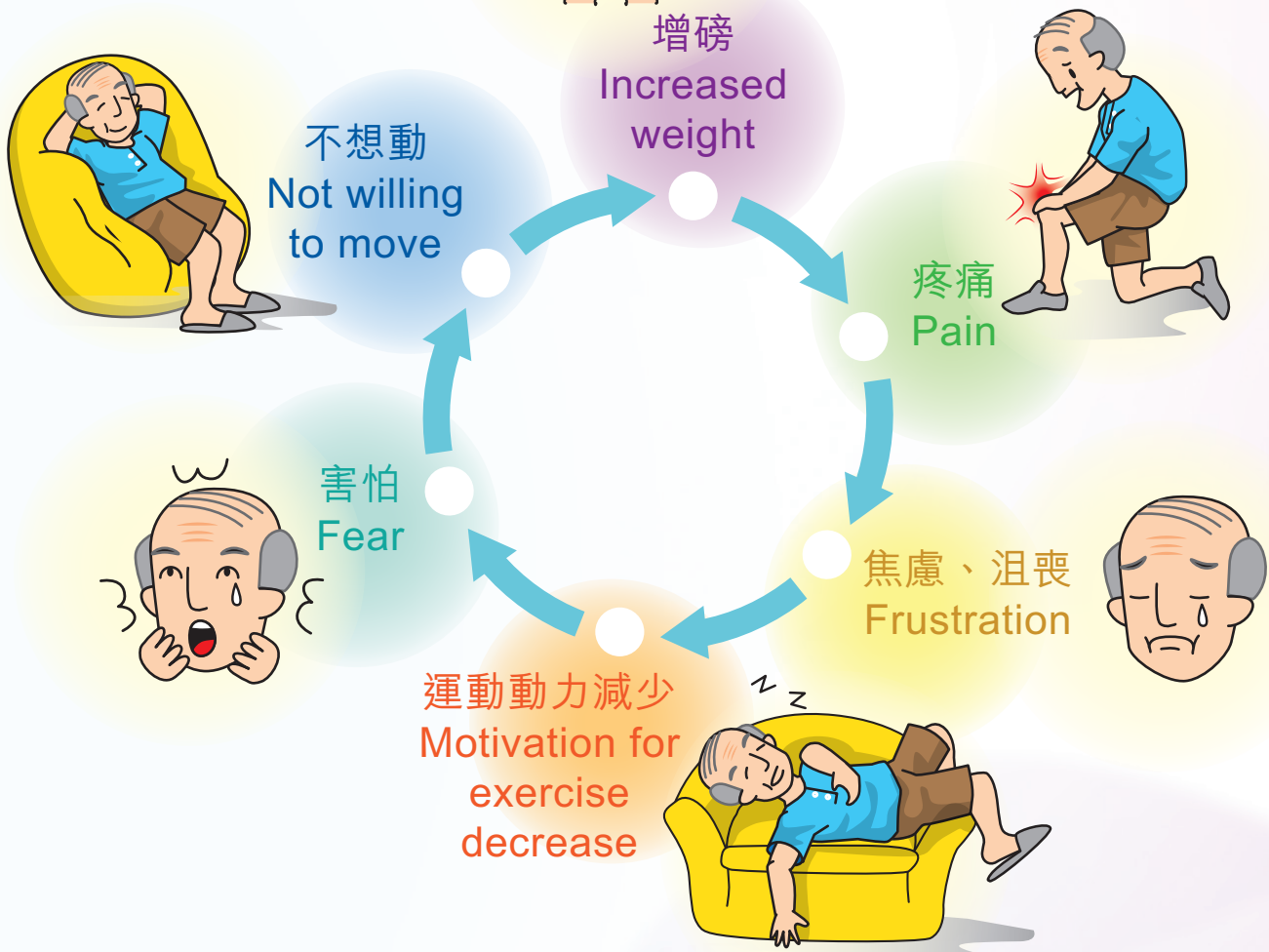
正面的想法
Positive thinking

痛楚降低 Decrease in pain
較容易處理 Easier for handling



負面的想法
Negative thinking

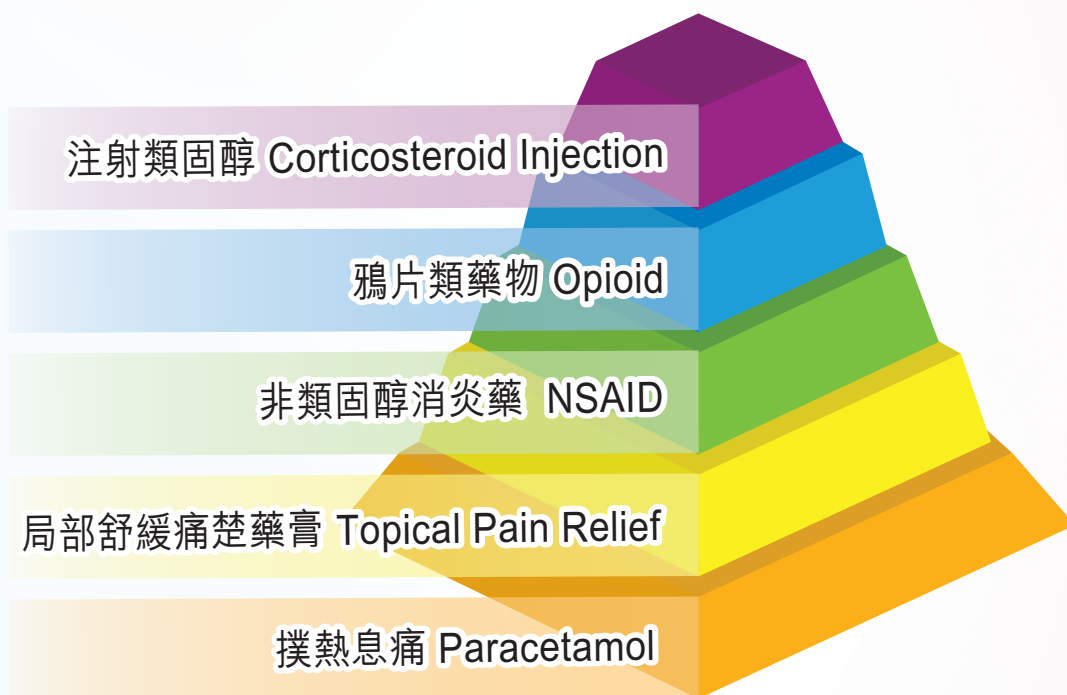
功能下降 Decline in function
病楚增加 Increase in pain



走出死胡同 Break the vicious cycle

- 保持活躍 Stay active
- 繼續做享受的事 Continue what you enjoy
- 分散注意 Distract from pain
- 持定目標 Focus on your goal
- 與人保持聯絡 Keep connected with others

藥物治療 Pharmaceutical Treatment



請按醫生處方服用藥物
Please follow doctor's prescription

營養補充劑 Nutritional Supplement

- 葡萄糖胺 (Glucosamine)
- 軟骨素 (Chondroitin)



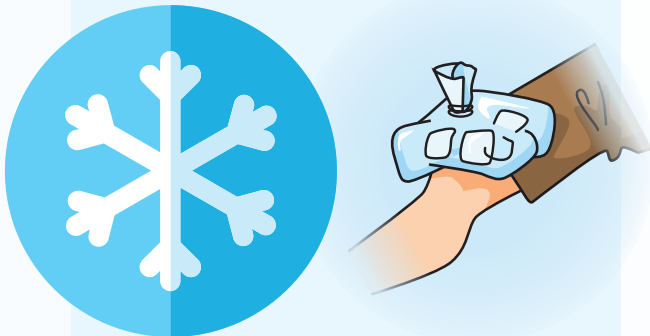
科研顯示只有少許證據對膝關節退化可能有效
Researches show little evidence in improving knee degeneration

其他舒緩方法 Other relieving methods

冰療 Ice therapy

可使用冰袋或急凍青豆
發炎是發熱，紅和腫
敷冰10分鐘

Ice pad or iced peas
The inflamed joint is increased
in temperature, red and swollen
Apply for 10 minutes



熱療 Heat therapy

可以用熱毛巾或熱水袋
溫度 ≤ 45 度
避開關節凸出位置，用毛巾墊底
暖敷約15分鐘；定時檢查

Wet towel or hot pad
Temperature $\leq 45^{\circ}\text{C}$
Avoid application to bony prominence,
applied with a towel below
Apply for 15 minutes with regular
checking of skin



若有皮膚問題，若非得到醫護允許，就不能使用
如：感覺不靈敏 / 痲痺 / 血液循環問題

If there is skin problem (e.g. impaired skin sensation/ numbness) or
circulation problem, please do not use without the medical advice.

留意! Caution!

熱療不可高於攝氏45度
Heat therapy cannot be higher than 45°C

冰和熱療都能使你燒傷
Both ice and heat therapy can cause skin burn if overtime

經常檢查皮膚
Regular skin checking

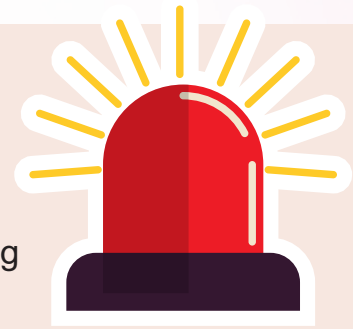
冷或熱療不能和藥膏同時使用
Cannot apply heat and cold therapy with ointment



處理發作 Exacerbation Management

甚麼是發作？ What is flare up?

- 只是組織受刺激 Maybe tissue irritation
- 警告訊號 Warning signals
- 屬正常 Normal
- 並不顯示關節惡化 Doesn't mean joint worsening
- 是暫時 Temporary



如何處理 How to manage?

- 先休息 Take a rest
- 嘗試冰療 Try ice therapy
- 看病情用藥 Take drugs accordingly
- 按症狀調節運動強度 Adjust the exercise according to the symptoms
- 鬆弛自己 Relax yourself
- 慢慢回復正常活動 Gradually restore normal activities

總結 Conclusion

了解膝痛的真相，學習運動及自我護理

Understanding knee pain, empowering yourself with exercise and self-management

緊記 Remember :

無懼痛楚 Show no fear of pain

懂得處理病癥 Manage your symptoms

生活更活躍 Maintain active lifestyle

朝目標進發 Achieve your goals





無懼痛楚 邁步前行

A step forward without fear

進行運動時，如過份用力、姿勢錯誤，速度太快或過量活動，有機會導致肌肉拉傷，嚴重可引致骨折，脫臼或摔倒，請遵從物理治療師的指示進行運動。

There is a risk of muscle sprain / fracture/ dislocation/ fall if movement is too vigorous or improper position. Please follow the instructions of physiotherapist.

如有任何疑問，請向負責治療師查詢。

Please consult your physiotherapist if there is any enquiry.

鳴謝：新界西醫院聯網 病人啟力基金

Supported by Patient Empowerment Programme,
New Territories West Cluster

2020年1月版
January 2020 Edition



醫院管理局
HOSPITAL
AUTHORITY