# How to choose appropriate exercise for yourself 如何選擇合適你的運動

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- ▶ Exercise options 運動選擇
- ► Common Concerns 常見 關注事項
- ▶ Practice 實習

## Fitness Concept

# 體適能概念

- ▶ Cardiorespiratory endurance 心肺耐力
- ▶ Muscle strength and endurance 肌力及肌耐力
- ▶ Flexibility 柔軟度
- ▶ Body composition 身體成份

### Physical Activity Pyramid 活動金字塔

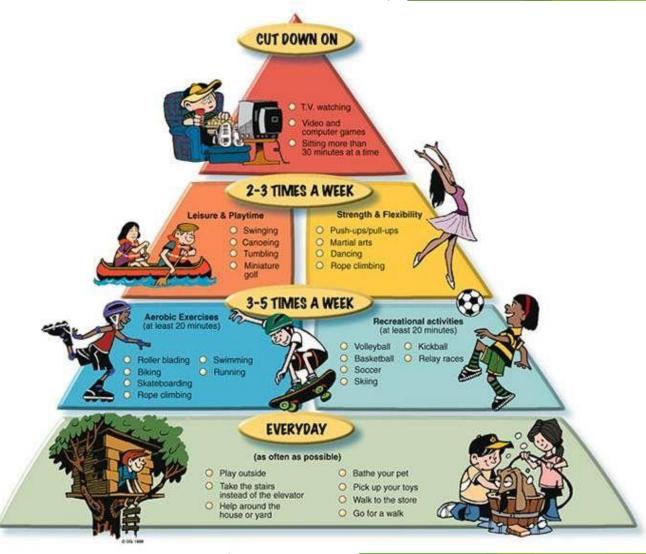
- ► Cardio exercise: 150min/week moderate-intensity exercise 心肺功能運動: 每星期150分鐘,中等難度
- Resistance exercise: moderate or highintensity activities for all major muscle groups twice per week

負重運動:中至高等難度,每星期 兩次, 包括 主要肌肉組群

Flexibility exercise: stretching of major muscle groups

伸展運動,包括主要肌肉組群

► Active lifestyle 活躍生活模式



# Exercise Guidelines for Cancer Survivors

#### 康復者運動指引

- American College of Sports Medicine 2009
  - 美國運動醫學學會 2009
- ► Evaluated the strength of the evidence for the safety and benefits of exercise as a therapeutic intervention for survivors
  - 實證醫療評估: 有關運動對康復者的 好處及安全風險
- ► Exercise is safe and offers benefits for survivors 評估結果發現: 運動對於康復者 不但安全, 而且還有好處
- Improvements in physical function, strength, fatigue, quality of life (QOL), possibly recurrence and survival
  - 好處包括: 提升 體能運作, 肌肉力量, 生活質素, 及減低疲倦感, 更可能 減低 復發機會
- Basically follows the same recommendation for the general public, with an emphasis on returning to normal daily activities as far as possible, with modification on disease type / individual basis

方法:基本上與一般大眾運動指引相似,只是跟據個別身體程況,加入"盡量返回 正常活動能力" (Wolin et al 2012)

# Rating the evidence-base supporting the ACSM Exercise Guidelines for Cancer Survivors.

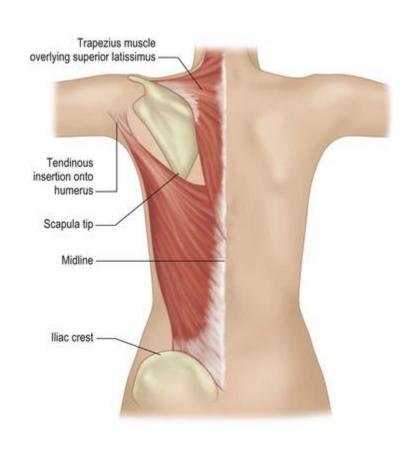
實證醫療評估研究: 有關運動對康復者的好處

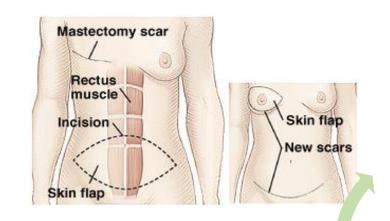
	Breast (during) 乳癌治療期間	Breast (After) 乳癌治療後	Prostate 前列腺癌
Safety 安全	Α	A	A
Fitness 體能	Α	A	С
Strength 肌力	Α	A	С
Body composition 身體成份	В	В	
QOL 生活質素	В	В	С
Fatigue 疲倦	В	В	С
Anxiety 憂慮	В	В	
Flexibility 柔軟度		Α	
Physical function 體能運作		Α	
Lymphedema 淋巴水腫		Α	
Body image 身體型像		В	

# ACSM Exercise Guidelines for Cancer Survivors美國運動醫學會運動指引

	Aerobic 心肺功能運動	Resistance 負重運動	Flexibility 伸展運動
US Physical Activity Guidelines for Americans (PAGA) 一般建議	150 min/week of moderate intensity or 75 min/week of vigorous-intensity activity, or an equivalent combination. 每星期150分鐘,中等難度;或,每星期70分鐘,高等難度運動.	Muscle-strengthening activities of at least moderate intensity at least 2 days/week for each major muscle group. 中至高等難度,每星期 兩次,包括主要肌肉組群.	Stretch major muscle groups and tendons on days other activities are performed. 伸展運動,包括 主要肌肉組群
Breast 乳癌康復者	Follow US PAGA.	Start with supervised program and progress slowly. 輕量運動開始,循序漸進	Follow US PAGA.
Prostate 前列腺癌者	Follow US PAGA.	Follow US PAGA.	Follow US PAGA.
Colon 大腸癌康復者	Follow US PAGA.	Follow US PAGA except with stoma, where lower resistance and slower progression are recommended to avoid herniation.	Follow US PAGA, taking care to avoid excess abdominal pressure if patient has ostomy.

# Individualized Exercise Prescription





- Surgery
- Chemotherapy
- Radiotherapy
- Wound
- Reconstruction
- Lymph nodes

•••



Assessment e.g. pain, ROM, strength, wound, swelling, sensation ...

# Exercise Options 運動選擇

# Exercise & Options 運動及選項

- ▶ Cardio exercise 心肺功能運動
- ▶ Stretching exercise 伸展運動
- ▶ Resistance exercise 肌力鍛鍊
- ▶ Postural exercise 姿態改善
- ▶ Balance exercise 平衡運動
- ▶ ..... Others 其他



# Common concerns of people with breast cancer during exercise 常見關注事項

Exercise & lymphedema

運動與淋巴水腫

# Position Statement of the National Lymphedema Network

相關組織建議

Exercise is a part of healthy lifestyle and is essential for effective lymphedema management

運動 是健康生活模式其中一部份,它對有效管理淋巴水腫有幫助

Individuals with or at risk for lymphedema can and should perform aerobic and resistance exercise in a safe manner

患有淋巴水腫及有風險患有淋巴水腫的人仕,在安全情況下,是可以,也應該進行帶氧運動及 肌力訓練.

#### Healthy Habits for Patients at Risk for Lymphedema



#### Healthy Lifestyle:

A healthy diet and exercise are important for overall good health.

- Maintain optimal weight through a healthy diet and exercise to significantly lower risk of lymphedema.
- Gradually build up the duration and intensity of any activity or exercise. Review the Exercise Position Paper.\*
- Take frequent rest periods during activity to allow for recovery.
- Monitor the at-risk area during and after activity for change in size, shape, tissue, texture, soreness, heaviness, or firmness.



#### Skin Care:

Make sure that your skin is in good condition.

皮膚護理

- · Keep your at-risk body part clean and dry.
- Apply moisturizer daily to prevent chapping/chafing of skin.
- Pay attention to nail care and do not cut cuticles.
- Protect exposed skin with sunscreen and insect repellent.
- Use care with razors to avoid nicks and skin irritation.

身體檢查



#### Medical Check-ups:

Find a certified lymphedema therapist (CLT).\*

- Review your individual situation, get screened for lymphedema, and discuss risk factors with your CLT.
- Ask your CLT or healthcare professional if compression garments for air travel and strenuous activity are appropriate for you.
- If a compression garment is recommended, make sure it is properly fitted and you understand the wear, care, and replacement guidelines.
- Set a follow-up schedule based on your needs with your CLT.
- Report any changes in your at-risk body part to your CLT.



#### Infection Education:

Know the signs of infection and what to do if you suspect you have one. 認識感染

- Signs of infection: rash, itching, redness, pain, increased skin temperature, increased swelling, fever, or flu-like symptoms.
- If any of these symptoms occur, contact your healtcare professional immediately for early treatment of possible infection.
- If a scratch or puncture to your skin occurs, wash it with soap and water, apply topical antibiotics, and observe for signs of infection.
- Keep a small first aid kit with you when traveling.

#### 避免引起淋巴水腫風險誘因

#### TRY TO AVOID POSSIBLE TRIGGERS



受傷 或意外



肢體約束





過長 靜止時間

#### Injury or Trauma

- Wear gloves while doing activities that may cause skin injury (eg, washing dishes, gardening, using chemicals like detergent).
- Try to avoid punctures (eg, injections and blood draws).

#### Limb Constriction

- Wear loose jewelry and clothing.
- Avoid carrying a heavy bag or purse over the at-risk limb.
- Try to avoid blood pressure cuffs on the at-risk limb.

#### **Extreme Temperatures**

- Avoid exposure to extreme cold, which can cause rebound swelling or chapping of skin.
- Avoid prolonged (> 15 min.) exposure to heat, particularly hot tubs and saunas.

#### **Prolonged Inactivity**

At-risk for leg lymphedema?

- Avoid prolonged standing or sitting by moving and changing position throughout the day.
- Wear properly, fitted footwear and hosiery.

Please Note: These guidelines are meant to help reduce your risk of developing lymphedema and are NOT prevention guidelines. Because there is little research about risk reduction, many of these use a common-sense approach based on the body's anatomy and knowledge gained from decades of clinical experience by experts in the field. Risk reduction should always be individualized by a certified lymphedema therapist and healthcare professional.



\*To review the NLN's other position papers visit www.lymphnet.org

# Safe Manner 安全禮儀

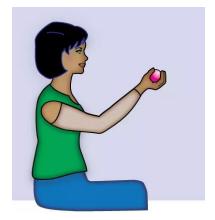
- ▶ Starts with low exercise intensity & duration 開始時,選擇低運動量:短時間,低辛苦程度
- ► Allow gradual progress 循序漸進
- ► Seek medical advice whenever indicated 需要時, 尋找 醫護 建議



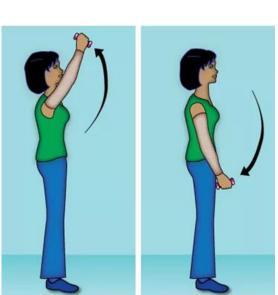
# Practice 練習

# Practice 1 練習一

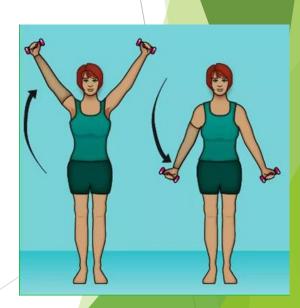
- Hand Exercise
- Elbow Exercise
- Shoulder Exercise
- Scapular Exercise
- Combined Exercise
- 握手
- ▶ 手踭屈曲 及 伸展
- ▶ 肩膊 外展 及 內收
- ▶ 肩膊屈曲 及 伸展
- ▶ 手部 手踭 肩膊肩胛骨
- ▶ 合成 運動











#### Practice 2

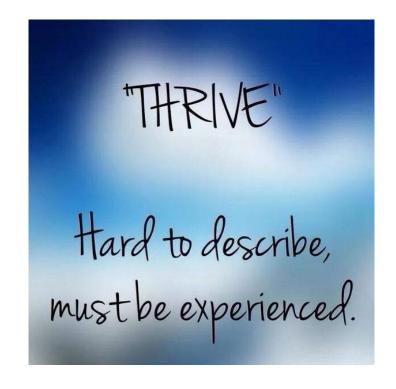
#### 練習二

- ▶ Cardio Exercise 心肺功能運動
- ▶ Heart Rate 心率
- ▶ Rate of Perceived Exertion 辛苦程度
- ► Talk Test 說話測試

- ▶ Multi- and large muscle group involvement 多組 及大肌肉
- ▶ Isotonic 肌肉 收縮 及 放鬆
- ▶ Rhythmic 有節奏

# Practice 3 練習三

- ▶ Stretching 伸展運動
- ▶ Postural 姿態改良練習



As a thriver, having an opportunity to rebuild 茁壯成長

#### References

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