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**封面故事**

要數牠最大的特色，非那長長的四肢莫屬了。如此發達的肌肉使牠成為運動專家，無所不能。運動習慣不但令身體健壯，也令心靈自信快樂。今次，牠化身你的個人教練，一起進行訓練，保持身心健康... ...

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VOL. 05

# Move to Improve:
## Exercise for a Healthy Mind

**So it turns out that exercising really helps improve one's health! And now, research shows that exercising can prolong your life!**

**As mentioned in our previous booklets, there are some secret tips of longevity from the residents of the Blue Zones:**

- Having good stress reduction habits
- Maintaining a balanced diet
- **Avoiding prolonged sitting**
- Maintaining close social interactions with family and friends



# Are you exercising enough?

**Review your physical activity in the last week.**

**Times:** How many times? _____ times

**Duration:** How long each time? _____ minutes

## Type(s) of exercise:

**Aerobic Exercise**

**YES / NO**

Engaging in aerobic exercise for at least 10 minutes continuously helps to expend energy in large muscle groups, increasing heart rate and breathing rate. This provides muscles with more oxygen and nutrients, thereby enhancing cardiovascular function. Activities such as walking, running, cycling, hiking, and swimming are considered aerobic exercises.

**Strength Training**

**YES / NO**

Resistance and weight training exercises, such as weightlifting, can increase muscle strength and endurance.

**Bone-Strengthening Exercises**

**YES / NO**

For adults and the elderly, weight-bearing activities help maintain strong bones. Therefore, light weight-bearing exercises are already sufficient. For children and adolescents, weight-bearing activities stimulate growth. Jumping rope and playing basketball, for example, are ideal activities

**Flexibility Exercises**

**YES / NO**

Stretching exercises, yoga, and other activities can help improve flexibility, as well as reduce the risk of injury during aerobic exercise and strength training. What's more intriguing, stretching can even alleviate stress. Neglecting the importance of stretching exercises may lead to cramps, muscle strains, and joint problems.

**Balance Exercises**

**YES / NO**

Activities that train the muscles throughout the whole body, such as standing on one leg, yoga, and Tai Chi, can enhance balance, increase spinal stability, strengthen core muscles, and improve strength, endurance, and flexibility. They can also improve posture and reduce lower back pain.

**Intensity levels:**

**☐ Low (e.g., walking), ☐ Medium (e.g., brisk walking, slow cycling), ☐ High (e.g., ball sports, running).**

# Does exercising make you happier?

## 1

### Green Exercise (Vitamin D)[1][2]

Engaging in outdoor activities under sunlight for 10 minutes allows for the absorption of sunlight, which provides the recommended daily intake of vitamin D, which helps increase serotonin in the brain and combat depression. 1 hour of sunlight absorption can improve our sleep quality.

If we compare the same exercise taken place in urban environments and natural environments, we will find that exercise taken place in natural environments yields more significant effects in terms of enhancing self-image and relieving anger, tension and depression.

## 2

### Stress Relief[3]

Have you ever tried exercising when feeling stressed? When exercising, we can focus more on the present moment. We can then be aware of the physical and mental changes happening within us, avoiding rumination on unpleasant past experiences, or worrying about the future.

## 3

### Effects on the Nervous System[4][5]

Exercise increases the secretion of dopamine, a neurotransmitter that plays a role in reward and motivation. The neurotransmitter gives us a sense of reward and increases motivation. Studies have found that running on a treadmill dramatically elevates dopamine levels and activity level, which is also known as the "Runner's high".

Exercise helps repair the hippocampus, which shrinks due to emotional disorders such as depression, and therefore improves memory.

## 4

### Self-image[6]

Maintaining an exercise routine helps establish self-image, allowing individuals to feel a sense of accomplishment and social acceptance. It helps us appreciate and accept ourselves, boosting self-confidence.

## 5

### Anti-Inflammatory Benefits[7]

High levels of stress, negative emotions, poor dietary habits, aging, and a sedentary lifestyle can increase muscle and joint soreness. It may also trigger inflammatory responses that affect neurotransmitters regulating emotions, which may then lead to depression. Exercise, on the other hand, helps produce anti-inflammatory compounds, which, in the long run, can improve mental well-being.

## World Health Organization Guidelines

**Adults aged 18-64 should:**
Accumulate **at least 150 minutes of moderate-intensity** aerobic physical activity per week, or **at least 75 minutes of vigorous-intensity** aerobic physical activity per week, or an equivalent combination of both. The activity can be performed in hybrid, but it is recommended to have each session lasting no less than 10 minutes.

Many individuals, due to their busy lifestyles, have gradually developed a sedentary habit of prolonged sitting. Even if it is not possible to meet the recommended **daily standard of approximately 30 minutes of moderate-intensity activity**, it is still important to avoid a sedentary lifestyle. Remember, any level of physical activity is better than none! In fact, there are many opportunities for moderate activity throughout the day, which vary in duration. For example:

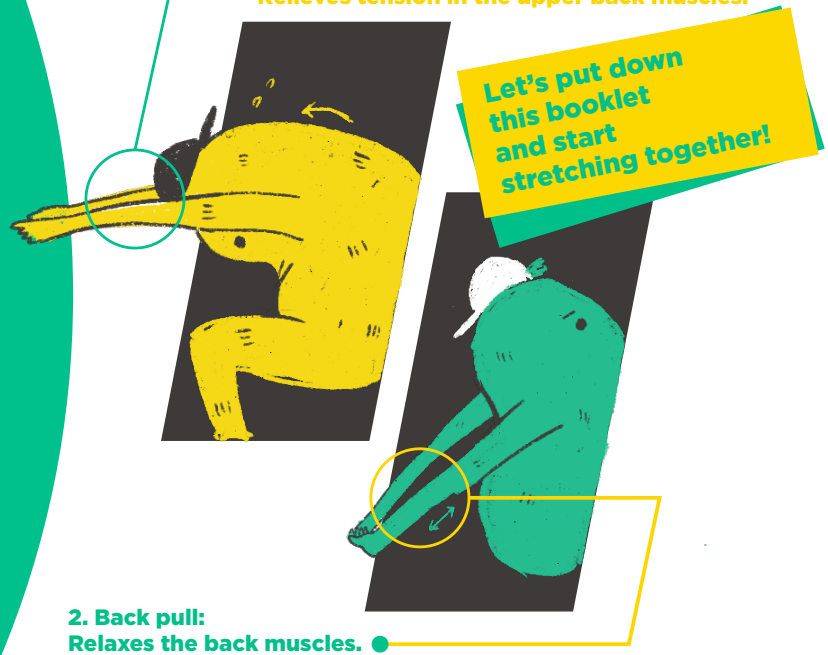
- **Washing windows or floors for 45 to 60 minutes**
- **Playing volleyball for 45 minutes**
- **Wheelchair propulsion for 30 to 40 minutes**
- **Cycling 5 kilometers in 30 minutes**
- **Social dancing for 30 minutes**
- **Pushing a stroller for 1.5 kilometers in 30 minutes**
- **Walking 2 kilometers in 30 minutes (1 kilometer every 15 minutes)**
- **Swimming laps for 20 minutes**
- **Playing basketball or wheelchair basketball for 20 minutes**
- **Jumping rope for 15 minutes**
- **Running 1.5 kilometers in 15 minutes**
- **Climbing up and down stairs for 15 minutes**



## Stretching exercises

Sit up straight, extend both arms forward parallel to the ground, lower your head between your arms to align your arms, head, and shoulders in a straight line, then bend forward to bring your upper body as close as possible to your thighs.

**1. Forward stretch:**
**Relieves tension in the upper back muscles.**



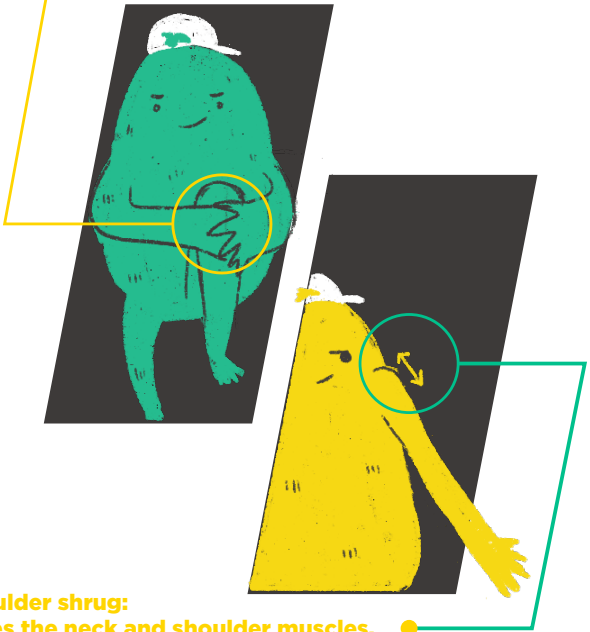

**2. Back pull:**
**Relaxes the back muscles.**

Place your hands behind your lower back. Interlace your fingers or clasp your hands together, palms facing down. Fix your chest posture while bending your back backward, tilting your head upwards at the same time. If you feel tension in your muscles, try holding the position for a few more seconds before relaxing and repeating.

**Safety note: Use a stable chair.**

Sit on a chair, lift one leg to your chest, hug your knee with both hands, and pull your thigh as close to your body as possible. Switch legs and repeat the movement.

**3. Knee hug stretch:**
**Relieves tension in the lower back muscles and knee pain.**



**4.Shoulder shrug:**
**Relaxes the neck and shoulder muscles.**

Sit on an office chair, elevate both shoulders towards your ear lobes as much as possible, hold the position for a moment, then relax your body and repeat the movement.



# Establishing a SMART Plan

Since exercise has numerous benefits, why do we struggle to stay motivated? Starting a new exercise routine can be challenging, so let's create a **SMART exercise plan** together!

## Long term goals

I _____ (name) aim to achieve exercising for _____ minutes _____ times per week within _____ months.

**The exercises you choose to do (choose 1-3 items)**

*It is recommended that the ultimate goal is exercising 150 minutes a week (In at least 3 sessions).

## Short term goals

**Let's plan a 1month exercise plan, including time, location, content, and companionship.**

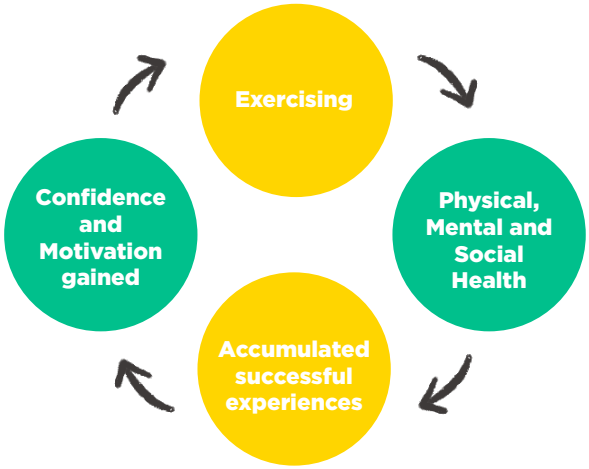
- Running for 15 minutes
- Brisk walking for 30 minutes
- Climbing stairs for 15 minutes
- Achieve 10, 000 steps a day
- Hiking
- Fitness dancing for 30 minutes
- Doing house chores for 45 minutes
- Swimming for 20 minutes
- 45 minutes of yoga
- 30 minutes of playing badminton
- 15 minutes of playing basketball
- 30 minutes of practicing Tai Chi
- 30 minutes of cycling
- 15 minutes of weightlifting
- 30 minutes of exercising at the park fitness facilities
- Others: _____

# Finding the Motivation for Sustained Exercise

If you are someone who doesn't have a regular exercise habit, it's best to start gradually and progress at your own pace. Set short-term and achievable goals, allowing your body time to adjust and avoiding muscle soreness and injuries that can lead to negative experiences.

We can utilize the "Habitual Loop" composed of 3 elements: cue, routine, and reward. The more frequently you exercise, the easier it becomes to adopt a new pattern. Eventually, your brain will let go of old habits and form new exercise habits. For example, you can set your phone lock screen to display your exercise goal, which serves as a reminder every time you see it. Then, follow the SMART goal method to implement the routine. Once you have successfully exercised for a week, reward yourself with a nice meal.

Persist in completing your goals at your own pace, gradually accumulating successful physical, mental, and social experiences during exercise., which This will provide you with confidence and motivation to continue.




*Individuals with chronic conditions such as heart disease, diabetes, obesity, along withor males over 40 and females over 50, should consult a doctor before starting a new exercise plan.



**Exercises DO improve our mental health!**

**1. A journey of a thousand miles begins with a single step.**
**2. Start now. Stay consistent.**

**Remember to progress gradually and within your limits. Try to maintain consistency. When needed, seek advice from professionals such as doctors or physical therapist**