# AM I TOO HEAVY FOR MY KNEES?



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Based on a 2019/2020 local survey, among Singapore residents aged 18 to 74 years:

1 in 10

Singaporeans are **obese** 

20.7% has high health risk based on BMI

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**Obesity more common among males** 

T BMI

risk of total knee replacement (TKR)

According to local data gathered in 2015. Body Mass Index or BMI is calculated as: weight (kg) divided by (height (m) x height (m)

Up to **50%** 

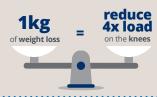
TKR patients are obese in western countries

These patients are also at

### high risks of complications

such as higher rates of wound infection

Losing weight can help to reduce pressure on the knee joints



10kg
of weight loss

Less
40kg load
load that the knees
need to support

Aerobic and resistance exercises recommended

3 days/week 1 hour/day

## **Aquatic aerobic exercises**

(non-weight bearing or impact activities) are highly recommended.

#### **Walking**

Walk across the pool, swinging your arms as you do.



#### Jogging on the spot

Jog on the spot by lifting your right knee up and alternate with your left knee, swinging your arms as you do.



#### **Half squats**

Hold onto the side of the pool for balance. Bend both knees to lower your hips back into a half squat position with your back straight. Hold the position for a few seconds. Return to starting position. Repeat 10 times.



# **Standing side leg lifts**

Keep both knees straight and lift your right leg out to the side. Lower the right leg slowly, keeping your knee straight. Repeat 10 times. Repeat with your left leg.



#### **Knee lifts into extension**

Bend your right knee and bring your thigh parallel to the water surface. Straighten your right knee forward and hold the position for a few seconds. Then lower your right leg down slowly, keeping your right knee straight. Repeat 10 times. Repeat with your left leg.



#### Single leg balance

Lift your right foot off and maintain your balance against the resistance of the water. Hold the position for 15 to 20 seconds or as long as possible. Repeat with your left leg.



Stop and get out of the pool immediately if you experience any giddiness, breathlessness, pain, or other discomfort. Seek medical attention if required.