

## **HONG KONG METROPOLITAN UNIVERSITY**

### **Information Sheet**

#### **TITLE OF THE STUDY**

The effects of different inspiratory pressures on the diaphragmatic thickness fraction and sternocleidomastoid muscle activation in people after stroke

#### **INTRODUCTORY SENTENCE**

You are invited to participate in a research study conducted by Prof. William Tsang Wai Nam from the Department of Physiotherapy, School of Nursing and Health Studies of Hong Kong Metropolitan University (HKMU).

#### **PURPOSE OF THE STUDY**

To determine the optimal training intensity that is associated with the strongest diaphragmic thickening fraction in people after stroke.

#### **PROCEDURES**

We welcome participation in this study from both individuals who have experienced a stroke and healthy adults.

In this study, you will be requested to use a nose clip to hold the nose and breathe with the mouth through a pressure threshold inspiratory loading device. The inspiratory pressure will be set at different percentages of your maximum inspiratory pressure (MIP) test results, in random order. Each inspiratory muscle training (IMT) intensity protocol consists of 10 breaths. A period of at least 30 minutes of rest time will be allowed between different protocols of contraction intensity (% MIP) on the same day. During each IMT intensity protocol, we will use surface electromyography (sEMG) to monitor the activity of your accessory muscles and ultrasonography to measure changes in your diaphragmatic thickness.

All measurements in this study are non-invasive.

#### **POTENTIAL RISKS/STRESS/PAIN/DISCOMFORTS/OTHER FACTORS AND THEIR MINIMIZATION**

There will be no direct risk, stress, pain or discomforts in participating in this study.

#### **POTENTIAL BENEFITS**

There will be no direct benefit in participating in this study.

#### **PARTICIPATION AND WITHDRAWAL**

You have every right to withdrawn from the study before or during the measurement without penalty of any kind.

#### **CONFIDENTIALITY**

Your personal information and data will not be disclosed to any person not being in the research team. Your name or photo will not appear on any published materials.

#### **QUESTIONS AND CONCERNS**

If you have any questions or concerns about the research study, please feel free to contact Prof

William Tsang Wai Nam of HKMU at 3970 8703. If you have questions about your rights as a participant of this research study, please contact the Research Ethics Committee of HKMU at 2768 6251.

## Consent Form

Hong Kong Metropolitan University  
School of Nursing and Health Studies, Department of Physiotherapy

Consent form for

The effects of different inspiratory pressures on the diaphragmatic thickness fraction and  
sternocleidomastoid muscle activation in people after stroke

I have read and understand the information provided about the above study. I agree to participate  
in this study.

_____ Name of participant	_____ Signature of participant	_____ Date
------------------------------	-----------------------------------	---------------

_____ Name of investigator	_____ Signature of investigator	_____ Date
-------------------------------	------------------------------------	---------------