

A photograph of two people, a man and a woman, performing a physical activity outdoors. The man, wearing glasses and a dark blue shirt, is kneeling on the ground. The woman, wearing a blue patterned shirt and dark blue pants, is in a low squat position with her right arm raised. They are in a garden-like setting with trees and a building in the background.

Aging Well Past 40 with **Activate, Elongate & Recuperate**

AUTHORS

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A mini-guide book for community produced from roundtable discussions during the TSU-UPSI-UiTM Social Innovation Camp 2025 at Thaksin University Phattalung Campus, Thailand on 12-18 May 2025.

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Introduction

Roundtable Discussions

On 12 to 18 May 2025 we have gathered at Thaksin University Phattalung campus for the Social Innovation Camp 2025, as part of international outbound mobility program for UPSI and UiTM undergraduate students and staffs. Together with TSU staffs that attended this camp, the staff's group had participated in roundtable discussion's sessions, that focus on one if it, physical conditioning for aging adults. Aging adults here has been defined as healthy adults after the age of 40 years old and above, up till 50 to 59 years old.

Aging well

Basically aging well for the authors means being able to function well physically, cognitively and emotionally in performing daily physical tasks. This derives mainly from practicing active lifestyles that includes daily movement and activities that stimulate the musculoskeletal systems for responses that lead to longitudinal adaptation.

Some may suggest a full fitness session of 40 minutes to one hour, perform one or up to three sessions per week. But our approaches focus on supporting that approach by performing a very minimal dose of physical movement daily for up to 5 days a week.

Definition

It is important to differentiate between activation and a full exercise or training session. In this book, activation refers to stimulating joint muscles, ligaments, and tendons for movement and repetitive physical motion. Elongation can be simply defined as the stretching of muscles and decompression of the spine. Others may define it slightly differently, but for the purposes of this book, these are the definitions we will use for activation and elongation.

Our body responds to any new stress as a stimulus. Here, "stress" refers to any movement that our body performs, which triggered a response to overcome its current steady state and align with the required movement. Every response triggered repeatedly over time causes adaptation. The body grows stronger to ensure it can effectively react to that stimulus in the future.

Activating muscles means muscles are contracted to produce force in response to any stimulus or in this case, active movement.

Problem and Suggested Solution

As many of us in the group are in our 40s and 50s, our own experiences, supported by numerous studies, indicate that aging adults primarily face a reduction in function, affecting both the quality and quantity of strength, endurance, and mobility. Lower back stiffness and poor posture are also common issues regularly encountered.

Initially, we focused on loading the body for stimulus. This aimed at strengthening the muscles, joint, ligament and tendon. Then, when we discussed on addressing the lower back stiffness experienced by some of us, we shifted our focus to decompression and stretching movements, as back pain often stems from muscle stiffness and tightness. After further discussions, we decided to organize the movements into two domains or sections. This decision considered the risk that promoting only compression-based movements might neglect the opposite motions that produce a stretching effect, and vice versa. Like yin and yang, overemphasizing one aspect can disrupt the balance. We named the two interrelated domains "Activate," representing activation movements, and "Elongate," representing stretching and decompression movements. From there, we tested several movements commonly used by our team and typically recommended by research, selecting those suitable for this book's purpose.

Based on this, we concluded that recommending three to five daily movements to address these issues is the best approach, as this mirrors our own practice. These movements can be incorporated into a comprehensive physical conditioning program by increasing their duration, sets, and difficulty level. Simply put, practicing basic movements daily lays the foundation for a more complete program later.

Objectives of Activation and Elongation

The main objectives for daily activation and elongation will be for preservation of functional independence, improve muscle strength, increase muscle mass, enhance balance and thus prevent fall.

Conclusion

In conclusion, to reduce or resolve muscle stiffness and muscle loss issues commonly faced by aging adults like us, we recommend performing activation and elongation movements as frequently as possible (such as daily for five days per week or every other day), with only two to three repetitions per movement each time.

ACTIVATE

- BREATH NORMALLY.
- DO NOT HOLD BREATH.
- KEEP SAFE. ALWAYS HAVE SUPPORT NEARBY.

**6 SECONDS DOWN
1 SECOND PAUSE
1 SECOND UP**

6:1:1

Disclaimer:

Participating in any exercise program carries the risk of injury. Before starting this or any other exercise program, please consult with your doctor or a qualified healthcare professional. The information provided in this guide is for educational and informational purposes only and is not intended to be a substitute for professional medical advice. We are not responsible for any injury or damage resulting from following the advice in this guide

AGING WELL PAST 40
with activation & elongation

1

OVERHEAD SQUATS

- Knee not exceed the toe at all times.
- Back straight.
- Hand straight -up next to ears.
- Bottom down as low as possible.
- Do 6 seconds going down, 1 second stop, and 1 second go back up standing.

2

WALL PUSH-UP

- Maintain straight line head to heels.
- Engaged/activate core at all times.
- Slowly go down towards wall as low as possible.
- Do 6 seconds going down, 1 second stop, and 1 second go back up extend elbow.

ELONGATE

- BREATH NORMALLY.
- DO NOT HOLD BREATH.
- KEEP SAFE.ALWAYS HAVE SUPPORT NEARBY.

10 SECONDS ELONGATE
30 SECOND REST

10:30

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AGING WELL PAST 40
with activation & elongation

3

ASSISTED DEADHANG

- Pulling motion.
- Feel stretch/elongation of muscles.
- Do 10 seconds light hanging followed by 30 seconds rest (if more than one set performed).

AGING WELL PAST 40
with activation & elongation

4

FULL DEADHANG

- Hanging motion.
- Straight body line.
- Feel stretch/elongation of muscles.
- Do 10 seconds light hanging followed by 30 seconds rest (if more than one set performed).

5

OTHER VARIATIONS



- All pulling motion.
- Feel stretch/elongation of muscles.
- Do 10 seconds light hanging followed by 30 seconds rest (if more than one set performed).



RECUPERATE

- DRINK WATER. GET HYDRATED.
- SELF MASSAGE.
- HOT AND COLD BATH.
- QUALITY SLEEP.

REST AND RECOVERY

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Self massage.

- Use soft foam roller.
- Do at least once daily.
- 60 second to 2 minutes per muscle group.



A photograph of three people standing in a modern indoor space, possibly a hallway or exhibition area. On the left is a woman wearing a white face mask, a pink polo shirt, and a dark grey blazer. In the center is a man wearing glasses, a white shirt, and a dark grey bomber jacket. On the right is a man wearing glasses, a blue and yellow patterned polo shirt, and dark trousers. They are all smiling and looking towards the camera. In the background, there is a digital display screen showing a 'WELCOME TO SOCIAL INNOVATION CAMP 2020' banner. The floor is made of large, light-colored tiles.

FUNCTIONAL ATTIRE

Functional attire means wearing attire that can respond well to any kind of movement the body needs to perform in day-to-day activities. Wearing tight and non-stretchable jeans for example, may prohibit certain movements.

Functional attire may not be just sports attire. Current fabrics development has evolved well, making any kind of attire is actually functional and does not restrict movement. For example stretchable slack pants that make even official office attire become elastic and functional similar to wearing sports track pants.

This is what we want to suggest to the aging community. Choose appropriate fabrics that support the function of the body, regardless of fashion. Meaning, you can wear office attire, but functional in nature.

A modern, minimalist living space with a desk, chair, plants, and storage units. The room is bright and airy, with light-colored walls and wooden floors. A large exercise ball is in the foreground, and a stack of purple yoga blocks is nearby. A sign on the wall reads "HOME IS WHERE YOU ARE".

Space that support aging well

Space or area of living is another major factor that we thought important to be highlighted when discussing factors that support the aging process in adults.

Three areas that we typically spend time off a lot are our office work space, our home living room and our bedroom space.

Similarly to the attire, the space that we live and spend time in should be functional in nature. A functional living room for example, may have a coffee table in the middle, but moveable and portable enough to be moved aside whenever we want to perform activation and elongation activities.

Effect on cognitive function.

Research has shown that short-term body-weight eccentric exercise intervention was effective in enhancing components of cognitive and physical function, with minimal dose as short as five minutes daily (Kirk, Mavropalias, Blazeovich, Cochrane-Wilkie & Nosaka, 2025; Huang, Singh, Taaffe, Chen & Nosaka, 2025).

Activating muscles via elongation movement as depicted in this book may also improved mood states and cognitive performance in physically inactive people, apart from obvious physical benefits such as improve joint range of motion (ROM) and reducing muscle stiffness (Patar & Mondal, 2017; Sudo & Ando, 2020; Park, Song, Lee, Lee, Han, & Oh 2024).

More research is needed on this area, but as stated above, at least a minimal effect is there in term of cognitive function.

Add-on: Walking & house chores.

- Walk as minimal as 10 minutes per day at relax fast pace. Combine with activate and elongate activities.
- Keep doing at least one physical based house chores daily.



Lifelong

FIT TIPS

**Activate
Elongate
Recuperate**

Postscript

The “Activate”, “Elongate” and “Rejuvenate” are created based on my own personal experience, in combination with sports and exercise science knowledge that I gained through my formal education and career. As I am aging and now at 45 years old, daily physical activity and training becomes more important to me. Particularly to maintain and keep functioning well in my work and other daily life chores for the family. During my visit to Thaksin University as a lecturer accompanying undergraduates students for a social innovation camp (international mobility program), we had a session among the participating lecturers on research and innovation. As I realized that time all of us are mostly past 40s and 50s, and still active in various ways, I think it will be good to produce a short and simple guide that introduces the activate, elongate and rejuvenate concept that I use for so long to others. Thus, once introduced to the group, we had an excellent discussion to look into exercise for the aging population. From that session, we move on immediately into action, producing this guide.

So, how to use this mini book? Well, the book is just a concept introduction. Exercises introduced are not limited to what has been presented only. Any qualified trainers or exercise enthusiast with basic knowledge will be able to expand it further and create a more comprehensive physical activity or training plan. And this is exactly the aim at this stage. To encourage people to exercise and keep active with those three core domains in any session they do. Once they understand and are comfortable with this concept, further info will be added later by us. More to come in future with details, in which hopefully can be follow-up by us all as soon as possible. And as a reminder, this is not a new concept, it's just a view from a different angle of how physical activity and exercise should be done by an aging population.

Finally, I do hope that this concept book will be beneficial to everyone in any way, and consult a qualified physician when performing any of the suggested exercises or movements.

Sincerely,

Nur Ikhwan Mohamad



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