

**After the WHY
“Movement is Medicine”
now the
What, When, Where and How**

U3A TIMARU

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JOY
IN
MOVEMENT

Exercise, “A subset of physical activity that is planned, structured and repetitive and has the objective of improvement or maintenance of physical fitness”

- Exercise cures, improves or prevents EVERYTHING from halitosis and hair loss to warts and ingrowing toenails ??????
- Exercising has become a separate entity to movement, as we have evolved more and more sedentary lives.

Movement, “ the change in the position of a body part with respect to the whole body”

MOVEMENT is what we do intuitively, naturally, functionally

Cave men moved to protect, feed and shelter themselves

We don't sleep, eat, breathe, urinate for a single 30 minute session everyday, or for an hour 3 times a week.

So, why do we think that MOVEMENT is a particular function of the body that requires specific scheduling?

Exercise should be a pleasure, a hobby that we timetable into our lives but

MOVEMENT MUST be a HABIT,
performed regularly throughout the day

POSTURE AND MUSCLE SYNCHRONISATION

- Deep stability muscles
- Superficial muscles
- Joint stability

Weakness of deep muscles leads to:

hyper- vigilance of superficial muscles

Strain of ligaments

Micro trauma to joints



HEALTHY LONGEVITY

to maintain whatever level of independence you desire

Not about living longer but living healthier and fitter

To be motivated to move or do exercise the activity needs to make you feel good

Movement releases beta endorphin which reduces pain and increases a sense of happiness

Contributors to healthy longevity

- POSTURE
- MOVEMENT AS A HABIT
- DIET
- FINDING JOY/ HAPPINESS IN SMALL THINGS
- PERSONAL CONNECTIVITY-PETS/ANIMALS/HUMANS/wildlife/the land
- PURPOSE
- EXERCISE AS A HOBBY

UNATTAINABLE GOALS

biggest risk of failure and defeat

ONE repetition of an exercise is better than **NONE**
"A journey of a thousand miles begins with a single step"

THINK BINARY
COMPUTERS ACHIEVE AMAZING THINGS WORKING ON
JUST I AND II

Do 1 or 2 repetitions many times a day

Who in the audience today does these?

- ? 10,000 steps a day
- ? 30 minutes of exercise a day
- ? 30 reps of lifting 40kg
- ? Swimming 50 lengths
- ? Intensity- running fast for 5 minutes/Running up 3 flights of stairs
- ? Stamina- cycle 60km in a morning

INTEGRATE MOVEMENT AND EXERCISE INTO YOUR DAY

MOTIVATION

Physical activity needs to FEEL better than inactivity

- Performance of activity is influenced by environment, social situation, gender, the individual's previous experiences and BMI
- Motivation from CHOICE NOT PRESSURE results in better long term engagement and outcomes

Successful Physical Activity Engagement

- Choice of actions
- To feel successful
- To feel connected and supported by others
- Participation with like minded people with a common goal

The activity does not need to be community, group based. Self directed can be just as successful as long as you feel supported by family/work/friends and that you ENJOY it.

RECAP

- Weak muscles & bones and poor posture -> increase risk of falls, hunched posture and respiratory illness
- Vertebral and hip fractures increase risk of death
- No. 1 cause of death in over 60 yo is falls
- WHO: av lifespan in USA is 79, av living health is 64 = 15 years of poor health before death
- 24 hours of bedrest -> muscle mass loss. Takes 7 days to recover it.
- Bone density and muscle mass decrease with age (especially over 65)

NEVER TOO LATE TO IMPROVE

PHYSIOLOGY

- 30% blood flow reduction with muscle contraction followed by refill with relaxation
- Movement of joints stimulates phagocytic cell action to “clean” the joint - important for arthritic joints
- Bone density, Vit D, sunshine and weight bearing exercise



SIMPLE BIOMARKERS FOR PHYSICAL FITNESS

- Ability to stand on one leg (finger tip support to help balance)
- Grip strength for over 65 yo:
Men > 28kg, Women > 15kg

DIET

- Protein 45-60g per day women, 65-85g men. Eaten throughout the day
- Green veges and fruit
- Vit C (muscles), B12 (nerves) and Vit D (bones) (also from exposure to sunshine)
- Source of Calcium

PREPARATION

- Good POSTURE
- Efficient BREATHING
- Comfortable and supportive FOOTWEAR
- PAIN management
- PACING
- HYDRATION

ESSENTIAL DAILY EXERCISES

- Squats (with ball between knees)
- Sit to stand
- Single leg stand
- Integrate several exs into 1
- Move/exercise whilst performing daily functions
- Little and often



Correct performance of an exercise is important to minimise the risk of injury and maximise effect

Strengthening the deep muscles is essential and is achieved by GENTLE exercises

Standing on 1 leg

Make sure that you feel stable
(finger tip support)

The pelvis of the lifted leg should
be higher than the weight bearing
leg

Increase complexity by standing on
a soft surface (cushion) or by
moving your arms

Squats/ step ups /sit to stand

These do not need to be deep

Always keep feet hip distance
apart

As you move ensure that your
knees do not move towards each
other

Keep your hips and knees over your
toes

DEEP HIP STABILISER EXERCISE

- Sit on a chair or ball with your feet hip-width apart and place your hands on your thighs.
- Try to sit up by firstly rolling your pelvis forward leading from the bottom of your spine so that you are sitting in neutral spine position.
- Imagine gently drawing your thigh bones back into the hip sockets and drawing in the muscles across the front of your pelvis.
- Keep imagining “thighs back and hips together”.
- Repeat x3, several times a day. This exercise also helps with bladder control

WHOLE..ISTIC

Concentric, eccentric, isometric,
isotonic, inner/middle and outer range

Range of movement

Aerobic

Strengthening

Balance

Co-ordination



PROGRESSION

- Reps and sets, increase complexity
- Pacing—10% increase rule, 20% decrease rule, 15 mins max then rest, (ligament creep) repeat
- No 2 consecutive days without exs/movement
- Weight bearing exs
- Non WB exs



FIND JOY

- Enjoyable exs
- Sociable exs
- Music and other parts of the brain



Weight bearing exercise: walking-use a stick/tramping pole, tennis, golf, gardening, T'ai Chi, Pilates, yoga, table tennis, badminton, gym

Sports South Canterbury, Aorangi Stadium,
Morgans Road
for ideas, advice and groups to join



Do
what you enjoy
what you are good at
or learn a new skill



Swimming and Deep Water Walking



Rowing



Exercycles, Cycling and Ebikes

Some condition specific exercises

POTS- recumbent position

Rowing machine/recumbent bike

Restless legs syndrome

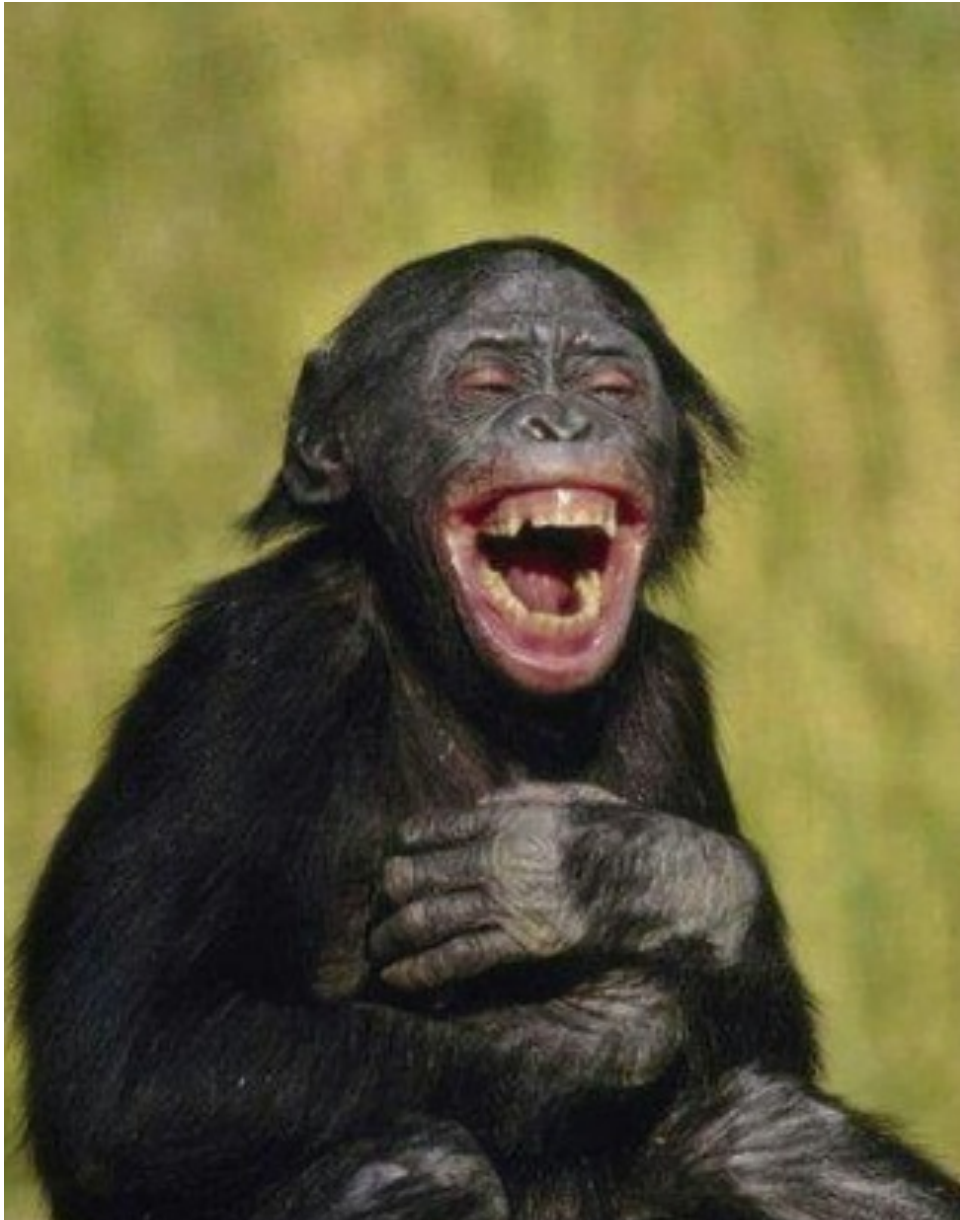
Toe rises, calf stretches, squats

Osteoporosis

Weight bearing and resistance training in sunlight

Prolonged sitting—DVT prevention

Toe curls, heel/toe raises, knee bend and straighten, walking on the spot



POINTS TO REMEMBER

- It takes 14 muscles to open a bottle of wine
- It takes 25 muscles to laugh
- It takes 50 muscles to frown

SO ...LAUGHING YOUR WAY
THROUGH TWO BOTTLES OF
WINE IS MORE OF A WORKOUT
THAN BEING MISERABLE!!

THANK YOU