Lifestyle Management of Menopause
What is really Effective?

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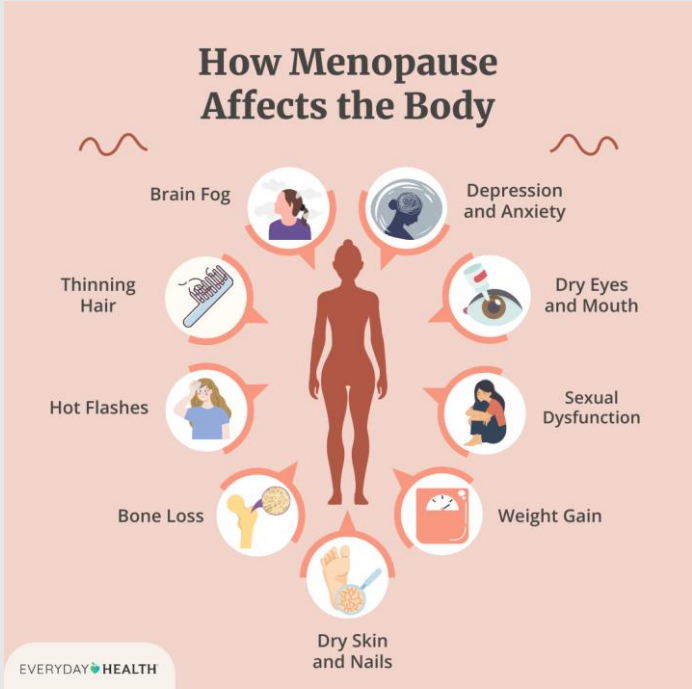
HEALTH RISKS of the MENOPAUSE TRANSITION *(Lifestyle Genomics 17:pp93 2024)*

Body Composition
The Gut microbiome
Lipids and lipoproteins
Cardiovascular
Energy Expenditure
Diabetes
Diet
Physical Inactivity
Insulin Insensitivity
Osteoporosis



In Carter et al , Women's Health 2024- 88% of women fail to receive advice on exercise during menopaus.

WEIGHT GAIN and MENOPAUSE

Fact 1: Weight gain around menopause is mainly associated with **lifestyle** and **ageing** along with a decrease in **resting metabolic rate.**

Fact 2: Hormonal changes during menopause results in changes in body composition with **central fat (truncal added 5.5%) and visceral fat (+26.9cm) gains.** *Barber et al, Climacteric – meta – analysis of of over a million women*

Fact 3: Loss of muscle mass is underappreciated (- 3.7% arms and legs). **Muscle matters !** Skeletal muscle has a role in regulation of homeostatsis, ageing and disease progression across most organ systems of the body. Looking after muscles will lower your risk of chronic disease.

WEIGHT GAIN and MENOPAUSE

Fact 4: Muscle strength and power is even more important than muscle mass. Muscle weakness (eg measured by grip strength or the ability from sit- to – stand – can affect mid life function and lower power leads to later- life disability ‘old age’.

Fact 5: Midlife fitness matters!! Higher levels of fitness at midlife (40-59 years) is associated with longevity (+ 5 years) in a dose-response manner *Clauson J Am Cardiol* Higher cardiorespiratory fitness in mid life leads to and **%88** reduction in dementia.

Fact 6: Risk of Dementia is statistically associated with **slow** walking speed, (2.1 x risk) **weak** muscle strength (2.3 x risk), **unfit and obese** (cognitive and demential risk) *Tessier et al JAMA 2022*

2020 WHO Guidelines : Physical Activity

https://www.who.int/publications/i/item/9789240015128

1) Aerobic Activity

At least 150 – 300 minutes of moderate intensity physical activity weekly OR
At least 75 – 150 minutes of vigorous intensity aerobic physical activity.
For additional health benefits change to over 300 mins moderate or 150 mins intense

2) Muscle Strengthening

On at least 2 days a week add muscle strengthening activities at moderate or greated intensity that involve all muscle groups. For additional benefits - 3 days

3) Sedentary behavior

Limit sedentary time and replace with more physical activiy. Eg walk up the stairs – every move counts!

Dose of Exercise

Low (min 150 mins weekly) has a lower effect on fitness and body composition than **Mid** (min 225 mins weekly) or **High** (min 300 mins weekly)

Training Intensity

Moderate (40-50% HRR max heart rate) Vs **Vigorous** (70-75%HRR), c ombined with caloric restriction lead to similar weight loss. It was the dose of exercise (ie total time exercising) that mattered.

Short Exercise Bouts

Accumulated short bouts of exercise (6-25 mins, 3-6 days a week) were **effective** in reducting obesity indices. *Kim et al Am J Health Prom 34(1) 2020*

High Intensity Training

For time poor … reducting the amount of time exercising but increasing the intensity only improves weight loss in premenopausal women *Duput et al 2020.*

Aerobic or Resistance (weights)?

Both are great for fat loss, but a combination of both types of exercise is superior *Walters et al 2022*

Diet v Exercise v Both?

A systematic review of 11 studies in peri and post menopausal overweight or obese women *Chen et al Menopause 25(7) 2018* demonstrated decreased lean mass in women who underwent a diet, and diet and exercise program. Women who exercised alone did not achieve the same benefit.
Exercise **alone** is thus not effective in weight reduction; **caloric restriction** is also necessary.

Calorie restriction + exercise emerged as the most effective strategy for reducing weight and fat percentage while maintaining lean body mass.

Note that 'special diets' eg ketogenic diets are suboptimal.
Note that GLP 1-RA treatments risk large loss (30-50%) of lean muscle mass.

Bring on the Weights – It is no longer optional!

In October 2024 a meta-analysis of 151 trials (total 6306 women) *Radaelli et al Sports Med* substantially improved physical function, body mass and muscle size and strength in healthy older adults.

Low volume resistance training includes 12 weekly sets (8-10 reps) for lower leg muscles. This is achievable in just 2 sessions a week.

Dietary Protein NHMRC Dietary Guidelines

After menopause your protein requirements increase and thus dietary protein is important

Protein recommended 0.7 to 1.07 g/kg/day

For older adults 1.0 to 1.2g/kg/day (+25-50%)

For malnourished/older/acute chronic illness 1.2 to 1.5g/kg/day (+50-90%)

For critical /severe illness/malnutrition 2.0 g/kg/day (+ 150%)

An average 70 kg women needs about 85g of high quality protein.

Exercise is king – protein is the added benefit.

Refer to the Let's Move Study (Ladies' exercise training and supplement study) . *Daly R et al Am J Clin Nutr 112:427-446, 2020,*

Cognitive function – Your Brain and Exercise

The news is excellent for exercise and brain health! *Northey et al Br J Sports Med* published in 2017 a meta-analysis of adults over 50.
They found that

- Resistance training +
- Aerobic exercise +
- Dietary protein

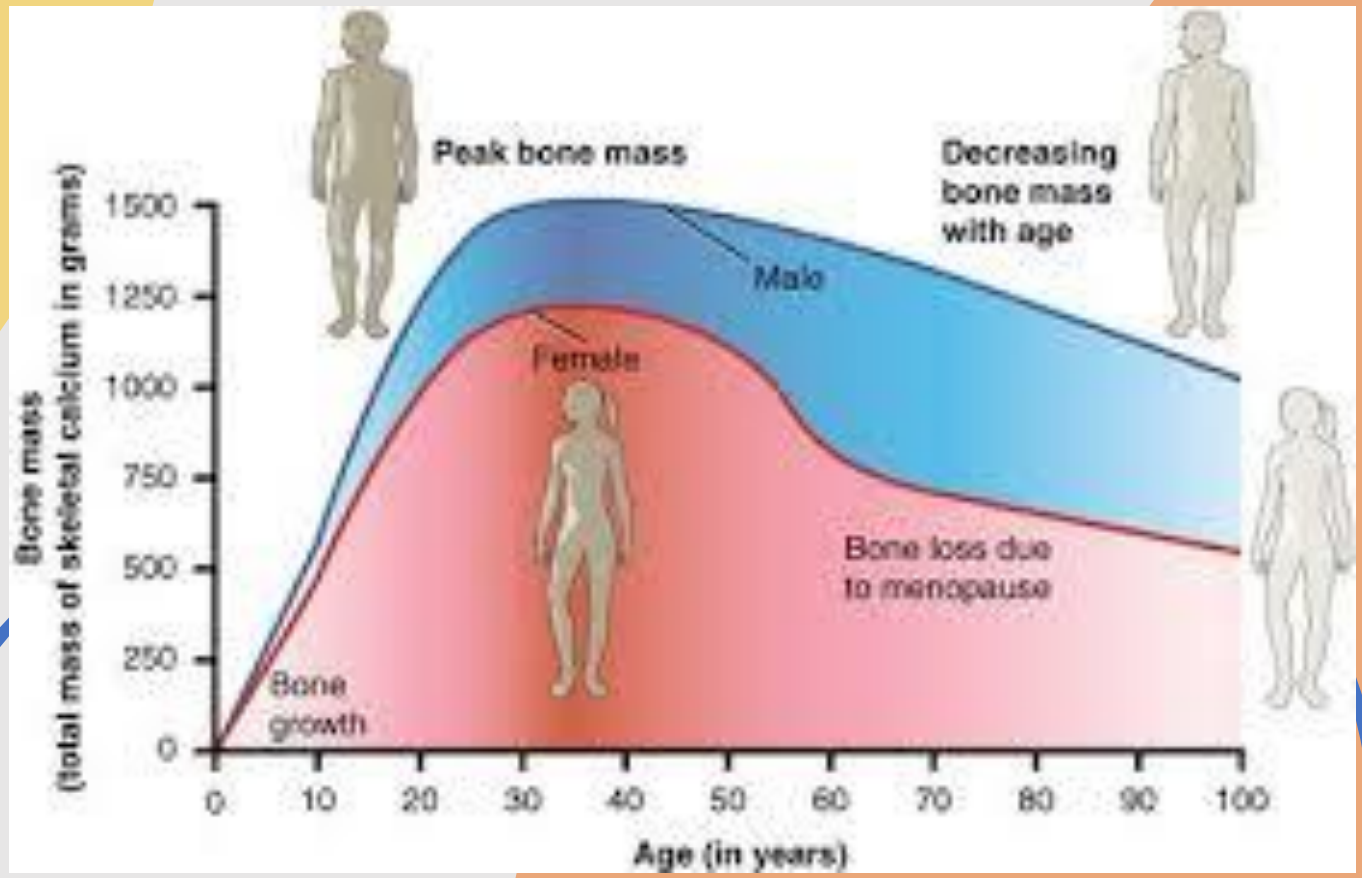
Resulted in improved in all cognitive tasks, namely-

- Executive function eg ‘find the hidden pathway’
- Visual learning eg ‘have you seen this card before’
- Psychomotor functions eg ‘has the card turned over’
- Working memory eg ‘is the previous card the same’

Bones and BMD (Bone Mineral Density)

In postmenopausal women, a meta-analysis of 80 Randomised Controlled Trials, including 5582 participants demonstrated exercise improved bone density in the
-lumbar spine
-femoral neck
-hip

This correlates to fracture reduction.



Suggestions

www.healthyboneaustralia.org.au

personal training

apps

youtube, social media content