A Regular Walking Program - Why Technique Matters & How To Do It Well

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Paradigm Shift

Healthspan

The Period of Life
Without Major Debilitating Diseases
(Cardiovascular, Neurological, Diabetes, Cognitive)

7%-50% Genetic Factors

50%-90+% Lifestyle Factors We CAN Control

Regular Walking Program - a Baseline for Function & Health

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Regular Walking Program - Benefits

Aerobic Endurance
Peripheral Circulation
Breathing Efficiency
Functional Balance
Postural Control

Bone-Loading Signal
Lower-Limb Strength
Joint Mobility
Proprioception
Time in Outside Environment

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ACTIVITY & EXERCISE

Walking Program! —>

Mobility/ Flexibility

Daily

2-10 repetitions
functional movements

Mobility/ stretch for
10-30+ seconds
with relaxation

Exercise & Function

3-5 days a week

150 minutes a week
Moderate intensity

75 minutes a week
Vigorous intensity

High Intensity
Interval Training
4-10X Benefit

Balance - every day!

Resistance

2-3 days a week

POWER/SPEED: 30-70% max

8-12 repetitions for 2-3 sets

STRENGTH: 80% max

4-6 repetitions for 2-3 sets

Eccentric focus for hypertrophy
Include major muscle groups
Full range of motion

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Walking Program = Metabolic Health Benefit

Decrease Blood Glucose Levels
Improves Insulin Sensitivity
Supports Metabolic Flexibility (glucose v keytones)
Progress with Duration or Pace
Include Higher Intensity Intervals
Maintain Core Stability & Muscular Control

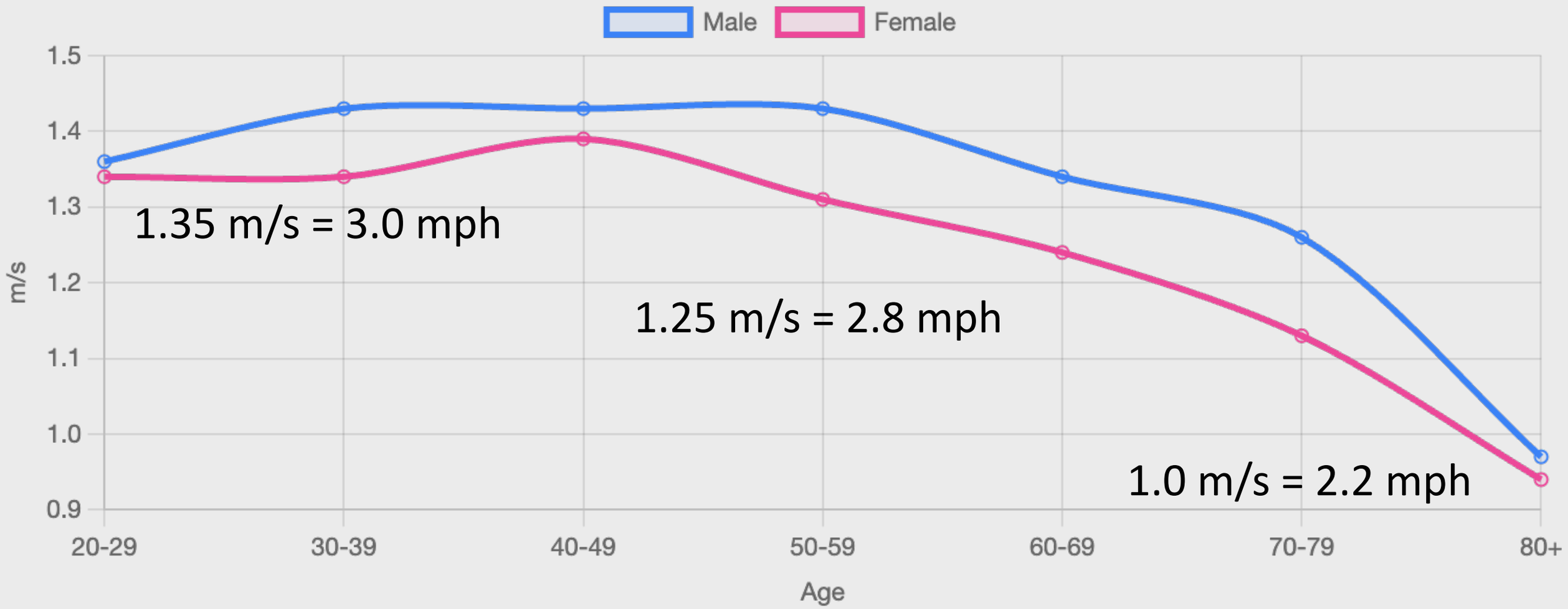
Light/Casual-intensity ~80–99 steps per minute (~2.4 mph)

Moderate-intensity ~100 steps per minute (~2.7 mph), can hold a conversation

Vigorous-intensity walking: ~120–130 steps per minute (~3.4 mph), can speak a few words

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Walking Speed*



Healthy adults aged 20-89 from 41 studies across multiple countries

Descriptive meta-analysis of comfortable-pace walking speed

DOI: 10.1016/j.physio.2010.12.004

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Walking Program-
Essential Joint Mobility

Ankle DF >10°-15°
Hip Extension > 10°
Hip Internal Rotation > 10°
Thoracic Rotation > 25°
Arm Swing
Foot & Ankle Control
Single-Leg Balance

Core Stability Maintained
with
Weight-Bearing & Movement

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Single-Leg Standing Balance*

60–69: ~27 s
70–79: ~17 s
80–99: ~8.5 s

Below ~5 s at any age is linked to higher injurious fall risk

***Average Times from Pooled Studies**
(men & women similar)

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The Five Heart Rate Zones & Benefits*

Zone 1 – 50–60% MHR: Very light effort; you can talk easily. Primarily fat oxidation, used for warm-up, cool-down, or active recovery

Zone 2 – 60–70% MHR: Moderate, sustainable pace. Still conversation possible; fat is the main fuel, with low glycogen use. Builds aerobic endurance and recovery capacity

Zone 3 – 70–80% MHR: Moderate-high intensity; conversation becomes choppy. Mix of fat and carbohydrate burning. Improves endurance and lactate clearance

Zone 4 – 80–90% MHR: Hard; talking is effortful. Approaches lactate threshold; carbohydrates dominate. Enhances speed, power, and lactate tolerance

Zone 5 – 90–100% MHR: Maximum effort; gasping, no conversation. Short bursts or sprints; develops VO_2max, fast-twitch fibers, and neuromuscular power

*Cleveland Clinic

M**aximum Heart Rate = 220 − your age** (±~10 bpm)

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Walking with Postural Control
&
Functional Movement

BRAIN & BODY awareness - regulates, adapts & maintains body alignment & movement

Proprioception

Neuro-Muscular Control

Retraining - Develop Habits for Posture & Movement

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Checklist for Walking-
Posture, Movement & Balance

1. Diaphragmatic Breathing

2. Foot & Ankle Control (“Toe Yoga”)

3. Neutral Pelvis & Spine (stand & walk)

4. Diagonal Stance (“Ready Position” - Core Stability)

5. Rib Cage Over Pelvis (Shoulders over Hips)

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Foot Stability

Diagonal Stance - "Ready Position"
-one foot slightly ahead of the other
-normal step-width
-avoid parallel feet

Shoes - enough support for foot/ankle muscles to work well

Respect muscular fatigue

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Move for Health Physical Therapy
@ The Center at Belvedere

Complimentary Pain & Injury Consults

1st & 3rd Tuesdays each month
9-10 AM (20-min consult)
&
by Scheduled Appointment

Healthspan Talks

2nd Tuesday of each month
9-10 AM, @ The Center & via Zoom

Individual Consults & Plan of Care Packages

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Move For Health Physical Therapy
Group Classes

45-min ZOOM classes, once/week

Core Stability & Functional Training

Strength, Balance, Mobility, Breathing

Thursdays: 9:30-10:15 AM & 7:30-8:15 PM
via email invite

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