



TOPIC: AGELESS TRAILS – INJURY PREVENTION

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60-MIN EXPERT LECTURE



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WHY THIS TOPIC?

- Athletics brings joy, but also the risk of injury
- Injuries are not inevitable – they can be prevented
- Goal: understand your body after 50 and train wisely
- Today we learn how to keep the trails ageless



WHAT HAPPENS TO THE BODY AFTER 50? (1)



MUSCLE

S

- Sarcopenia: loss of muscle mass 3-8% per decade
- Fast-twitch fibres (sprint, jump) decline faster than slow-twitch fibres



STRENGTH

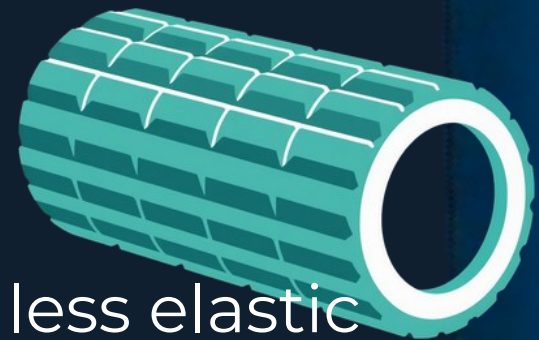
- Dynapenia: loss of strength greater than loss of mass
- We must nurture strength, not just endurance



WHAT HAPPENS TO THE BODY AFTER 50? (2)



Connective tissues



- Tendons and ligaments stiffer, less elastic
- Articular cartilage wears down (slowed by movement)
- Bones lose mineral density (stress fractures!)



Nervous system

- Proprioception declines – balance becomes weaker
- Coordination requires refreshing through training

CARDIOVASCULAR SYSTEM AND KEY MESSAGE



VO₂max declines

✱ ~10% per decade
(inactive)

In active

✱ individuals only
~5% per decade

**Training dictates
the pace of
ageing, not the
other way
around**

But: a wiser
approach is needed
– longer warm-up,
better technique,
listening to the
body

INJURIES IN 50+ ATHLETICS:- BASIC CLASSIFICATION

ACUTE

- Hamstring strain (sprint)
- Ankle sprain (jump)

CHRONIC (OVERUSE)

- Achilles tendonitis
- Runner's knee
- Lower back pain (throwers)

***In our case, chronic injuries are more
common and more insidious***

WHY ARE WE MORE VULNERABLE?



- Tissues react more slowly to sudden loads
- The same increase in mileage at 60 carries 2× greater risk
- Prolonged recovery time
- Micro-damage accumulates → real injury

Therefore: gradual progression, body signals as a priority

PAIN IS NOT NORMAL



- “Oh, it just niggles a bit; it will pass” –

DANGEROUS

- Sharp, localised pain > 48h =

STOP

- It can be the first sign of a stress fracture or rupture

- Early recognition = self-

diagnosis

RISKS BY DISCIPLINE

DISCIPLINE	LOAD	RISK AREAS
Running	Achilles tendon, plantar fascia, knees	Hard surface → injuries
Jumps	Ankle, knee, back	Explosiveness + shock absorption
Throws	Shoulder, thoracic spine, lumbar spine	Rotator cuff, mobility

Common: asymmetries and imbalances → injuries



SELF-DIAGNOSIS:- INTRODUCTION



- 3 simple tests, no

- Reveal: asymmetries, limited mobility, balance deficits

- At home or during

- This is not a competition – this is

training

diagnostics

TEST 1: OVERHEAD SQUAT



What we do

- Squat, arms overhead, heels on the ground, chest upright

What we observe

- Heels lifting? → ankle joint
- Knees caving inward? → gluteus medius
- Torso leaning forward / arms dropping? → shoulders, thoracic spine

Ideal: heels down, arms up, torso upright, squat to parallel



TEST 2: IN-LINE LUNGE



What we do

- *On a line, hands on hips, step forward, lower back knee, return*

What we observe

- *Torso swaying?*
- *Front knee collapsing inward?*
- *Left/right asymmetry?*

Ideal: smooth movement, stable torso, controlled knees



TEST 3: SINGLE-LEG STANCE - EYES CLOSED



What we do

- On one leg, arms crossed on chest, eyes closed, time measured

Goal: ≥ 30 seconds

Alarm:

- < 20 seconds $\rightarrow$ proprioception deficit
- L/R difference > 5 seconds $\rightarrow$ asymmetry

Result: introduce balance exercises and foot strengthening



INTERPRETING THE RESULTS

- Asymmetry or limitation $\neq$ training prohibition

- = I know where I am vulnerable $\rightarrow$ I do extra work there

- Write down your results, repeat

monthly

- Progress

motivates!



RECOMMENDATIONS:- HOW TO APPROACH ACTIVITY (1)

PRINCIPLE 1: PROGRESSIVE OVERLOAD



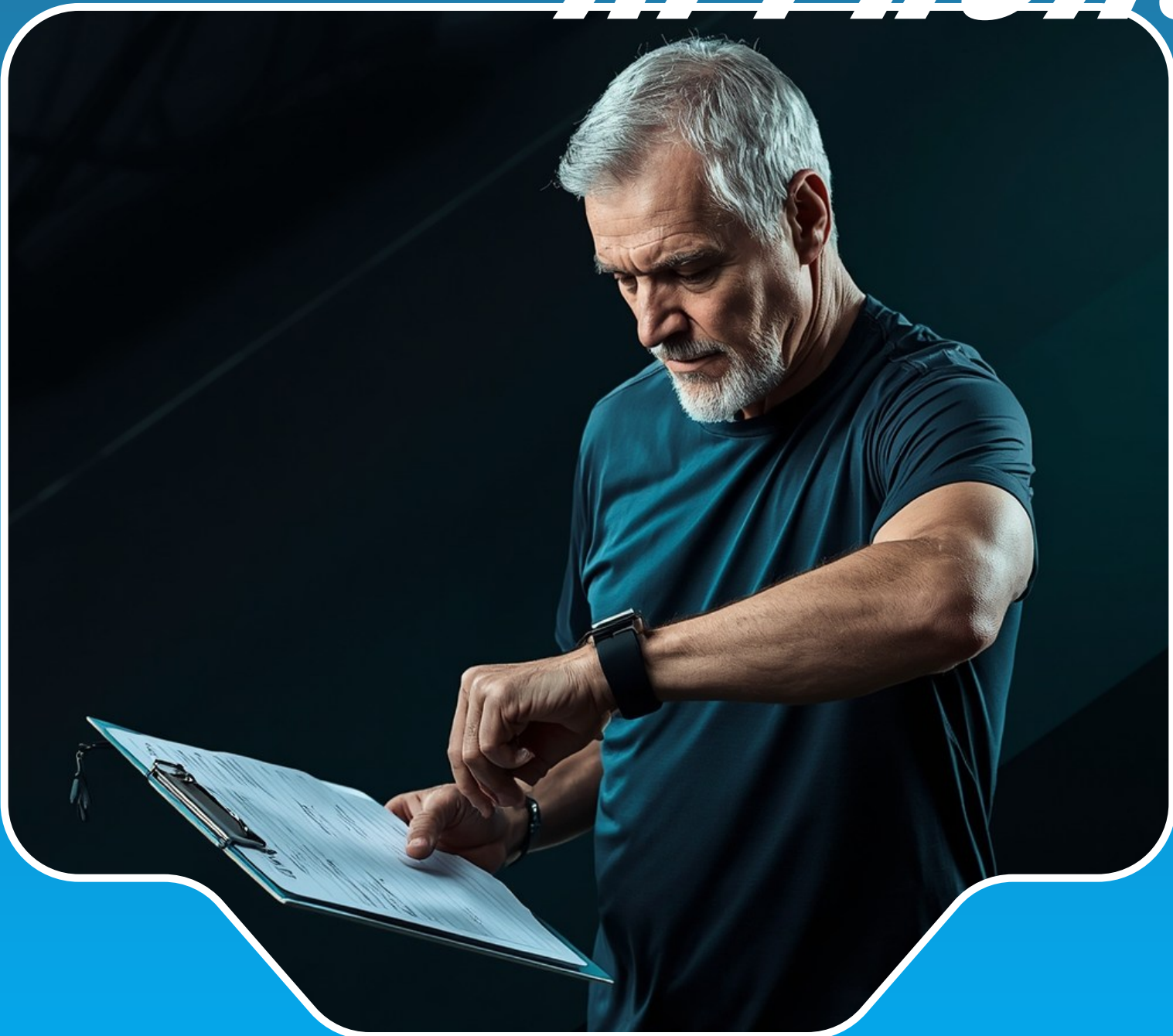
- Increase one parameter at a time
- More mileage? No hill sprints
- Introducing jumps? Reduce running that week

- 15–20 minutes minimum
- General mobility, dynamic stretching,
core activation, specific movements



PRINCIPLE 2: WARM-UP = HALF THE TRAINING

RECOMMENDATIONS:- HOW TO APPROACH ACTIVITY (2)



PRINCIPLE 3: LISTEN TO YOUR BODY IN A NEW WAY

- Sharp, localised pain > 48h = STOP
- Slower recovery – pain is a valid signal

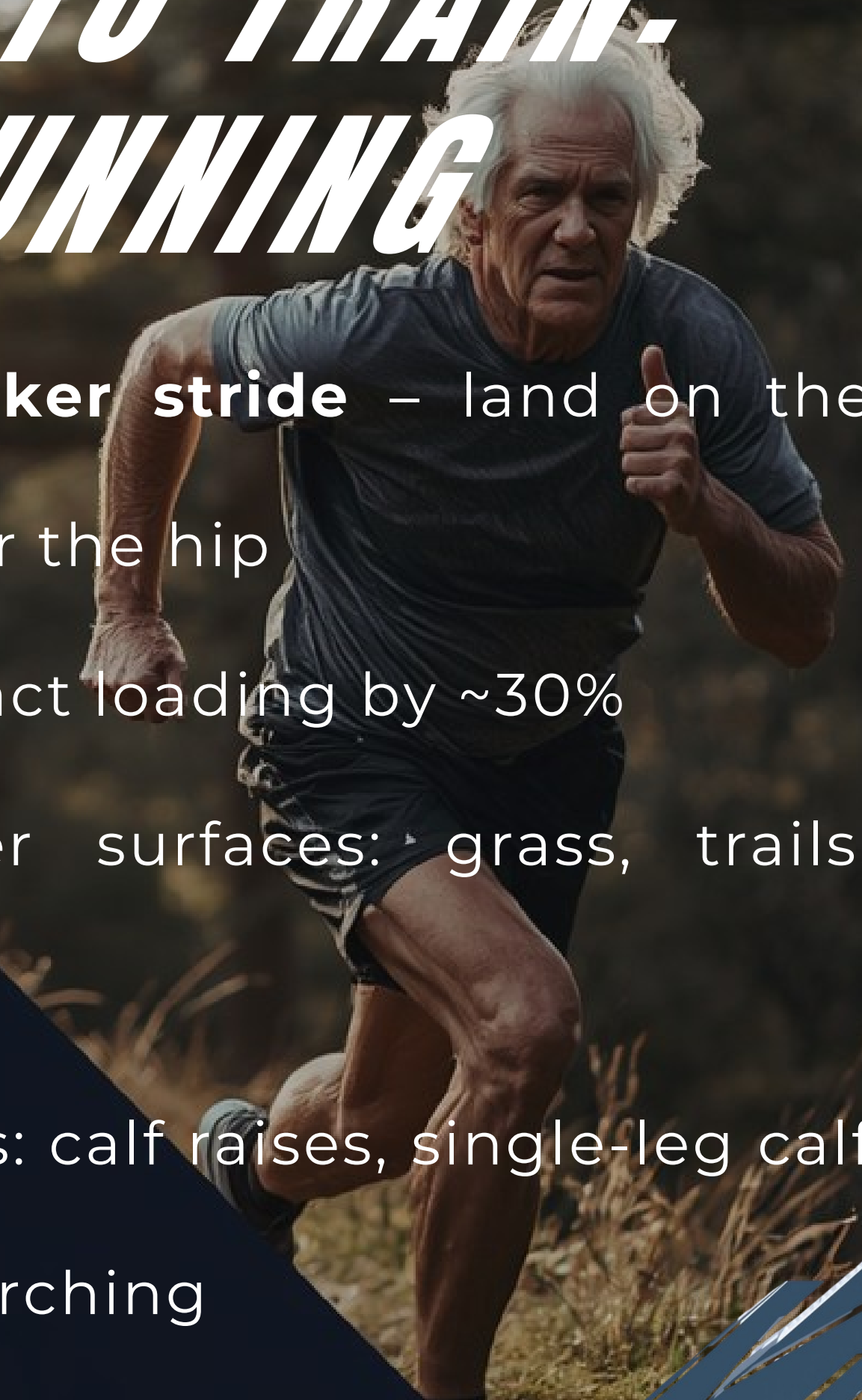
PRINCIPLE 4: PLAN YOUR SEASON

- 4 weeks progression → 1 week deload (50% less)
- Variety: running + technique + throws + strength



HOW TO TRAIN: RUNNING

- **Shorter, quicker stride** – land on the midfoot under the hip
- Reduces impact loading by ~30%
- Choose softer surfaces: grass, trails, tartan
- Foot exercises: calf raises, single-leg calf raises, toe marching



HOW TO TRAIN:- JUMPING

- **Landing is crucial** – never a fully extended leg
- Shock absorption: bending the knee and hip (“like a cat”)
- Practise landings: on the spot → from low height → with run-up
- Low-intensity plyometrics: hops, skips, jump rope
- Maximal jumps only after 2–3 pain-free training sessions



HOW TO TRAIN- THROWING



- **Shoulder and thoracic spine mobility above all**
- Warm-up: arm circles, opening the chest with a stick, trunk rotations
- Power from legs and hip rotation – not just from the shoulder
- If you feel it only in the shoulder → poor technique, injury risk
- Start with lighter implements, gradually progress to competition weights

COMMON TO ALL DISCIPLINES

Strength training 2× per week

(bodyweight)

- Squats, lunges, bridges, push-ups, pull-

ups/bands

Mobility daily (5–10

min)

- Stretching after training and on rest

days

Strength is the best shield against injuries

RECOVERY AS PREVENTION (1)

The golden hour after

training

- Protein + carbohydrates (yoghurt + fruit, chicken sandwich)
- Hydration – water or electrolyte drink

Cool-

- 5–10 min light jogging / brisk walking
- Static stretching: hamstrings, quadriceps, calves, shoulders
- Each position 30 seconds, without pain



RECOVERY AS PREVENTION (2)



The next day – active

rest

Walking, swimming,
cycling, yoga

Sleep

7–9 hours → growth hormone →
tissue repair
Poor sleep? Reduce intensity
or do only mobility work

Massage / foam

roller

Allowed and recommended,
but gently over tendons

MENTAL ATTITUDE

MINDSE

**MENTAL RESILIENCE IS
KEY.**

- Injuries happen when we are tired, distracted, under stress
- Bad day? Don't force personal records
- Training in nature, with a smile, in company = prevention
- **Goal: not to defeat the years, but to enjoy them – healthy and whole**





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ThANK YOU FOR YOUR ATTENTION!

QUESTIONS AND ANSWERS

**REPEAT The TESTS TONIGHT – WE WILL HELP YOU
INTERPRET THE RESULTS.**

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