

How it works: Optimal body use



MECHANISMS

EFFECTS

1

Relaxed Weight Bearing

Muscles relax & increase elastic potential in the tissues so that more force is transmitted to bones

- a. **Transforms cardio-respiratory function**
Liberates diaphragm, which massages pericardium
- b. **Stronger bones & more powerful muscles**
More bone compression/elastic storage/power potential
- c. **More capability to process stress & anxiety**
triggered by dissipation of neuromuscular tension

2

Active Joint Motions

Fluid & mobile joints that drive limbs & control posture via reciprocal resistance-free motions.

- a. **Regeneration of joints & tissues**
Fluid motions have a massaging, therapeutic effect
- b. **Greater balance, control & coordination**
Well articulated joint motions improve sensory feedback
- c. **Effortless movements & increased fitness**
More enjoyment of exercise & capacity for work

3

Controlled Weight Transfer

Rapid, relaxed & clean transfer of body weight with minimal impact & vertical or lateral displacement

- a. **Reduces risk of falls, collisions & injury**
via more control of body & minimal impact shock
- b. **Reduces stress & improves autonomic function**
Less shock & tension, more relaxation & regeneration
- c. **Greatly enhances fitness & performance**
Optimal energy recycling via conserved momentum

How it works: **Poor body use**



MECHANISMS

EFFECTS

1

Tense Weight Bearing

Muscles contract against gravity and bear body weight instead of it being taken by the bones.

a.

Impaired cardio-respiratory function

Overuse of superficial muscles stifles diaphragm/heart

b.

Weaker bones & muscles

Less bone compression & muscular power potential

c.

Less capability to process stress & anxiety

Due to suppressed parasympathetic function

2

Passive Joint Motions

Limbs pull on joints and drag body along, squandering energy by creating resistance and friction.

a.

Excessive degradation of joints & tissues

Lack of free motion increases shear stress & friction

b.

Impaired balance, control & coordination

Underuse of joints limits sensory-motor integration

c.

Laboured movements & reduced fitness

Inefficiency reduces capacity for physical work

3

Uncontrolled Weight Transfer

Weight thrown around with each step; body rises/falls with pronounced vertical or lateral displacement.

a.

Amplifies risk of falls, collisions & injury

via loss of control of body & effect of impact shock

b.

Builds stress, impairs parasympathetic function

Impact shock agitates nerves & inhibits regeneration

c.

Impairs performance by destroying momentum

High energy (ATP) input required to maintain speed