



PROGRESSIVE RESISTANCE TRAINING

- Improved fitness
- Increased IGF-1 uptake in brain
- Increased cerebral blood flow
- Improved body composition (decreased fat, increased muscle)
- Increased insulin sensitivity
- Decreased stress, depressive symptoms
- Reduced hypertension

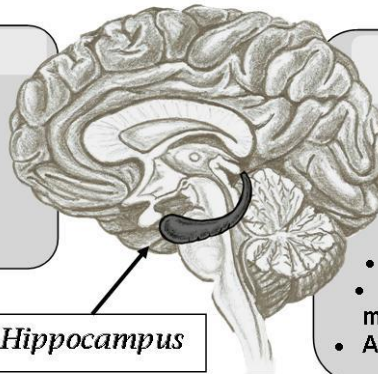


COGNITIVE TRAINING

- Increased proficiency in trained tasks
- Transfer to general cognitive processes
- Improved mood and decreased stress
- Decreased neuropsychiatric symptoms

SYSTEMIC

- Decreased inflammation, cortisol response to stress
- Increased social integration, complexity
- Improved self-efficacy



Hippocampus

BRAIN MORPHOLOGY/ BIOCHEMISTRY

- Increased BDNF
- Increased neurogenesis
- Increased synaptic complexity
 - Angiogenesis
- Increased cortical thickness
- Increased phosphocreatine metabolism
- Altered functional connectivity

IMPROVED COGNITIVE FUNCTION

REDUCED DEMENTIA INCIDENCE
IMPROVED FUNCTIONAL INDEPENDENCE
IMPROVED QUALITY OF LIFE