

Exercise, diet, and sleep

improve brain skills (and health)

Note: I am not an expert in this area, and the references are given mostly for concreteness and to have a starting point.

Exercise



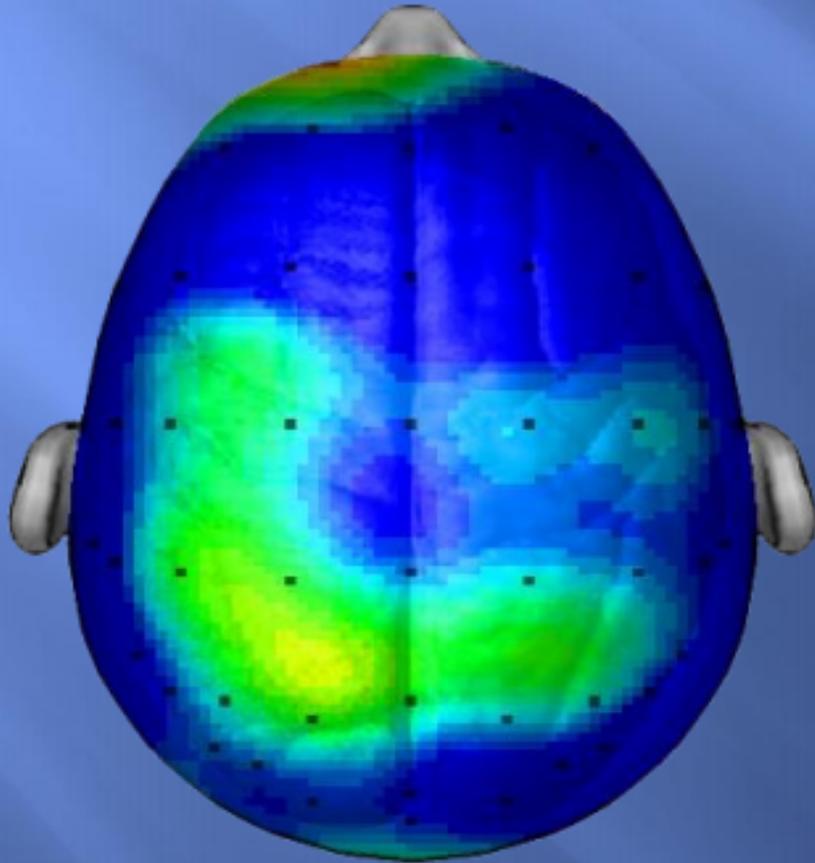
“Regular exercise changes the brain to improve memory, thinking skills”

“Aerobic Exercise Is 'Miracle-Gro' for Your Brain”

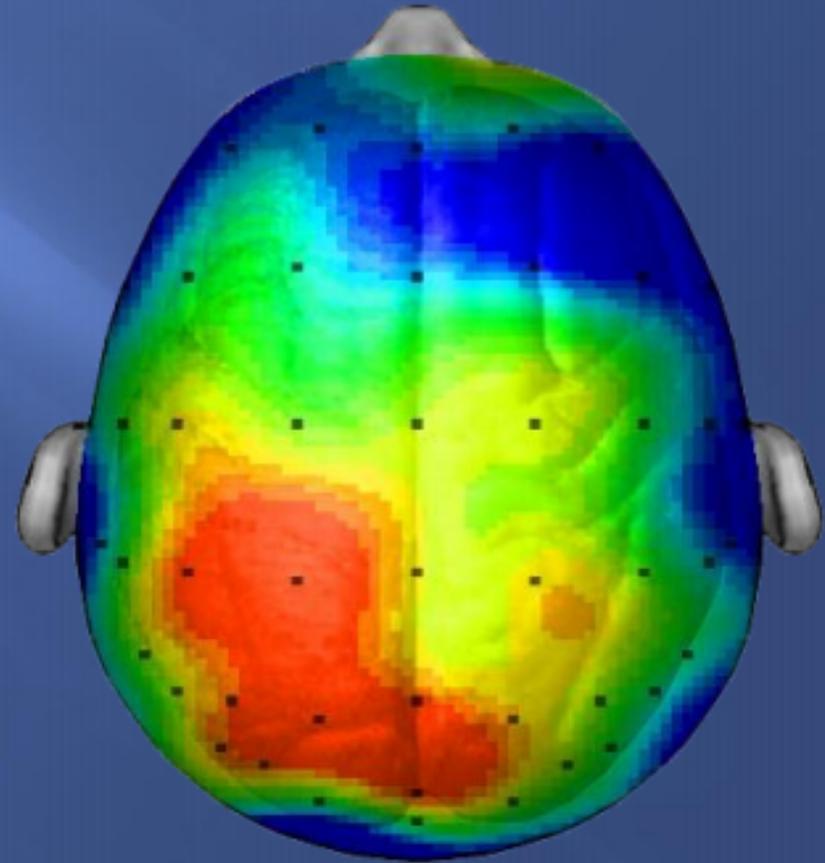
The Influence of Exercise on Cognitive Abilities
Compr Physiol. 2013 Jan; 3(1): 403–428

Average composite of 20 student brains taking the same test

BRAIN AFTER SITTING QUIETLY



BRAIN AFTER 20 MINUTE WALK



Research/scan compliments of Dr. Chuck Hillman University of Illinois

Exercise, more

Spark: The Revolutionary New Science of Exercise and the Brain

by John J. Ratey.

Deskcycles

“A new tool in a Paramus Elementary school is promoting physical activity while learning.”



Learning is optimal immediately after aerobic exercise

**Phisycal activity: Culture, woven into routine, not special
Many tasks can be done while moving**

Diet

Brain foods: the effects of nutrients on brain function

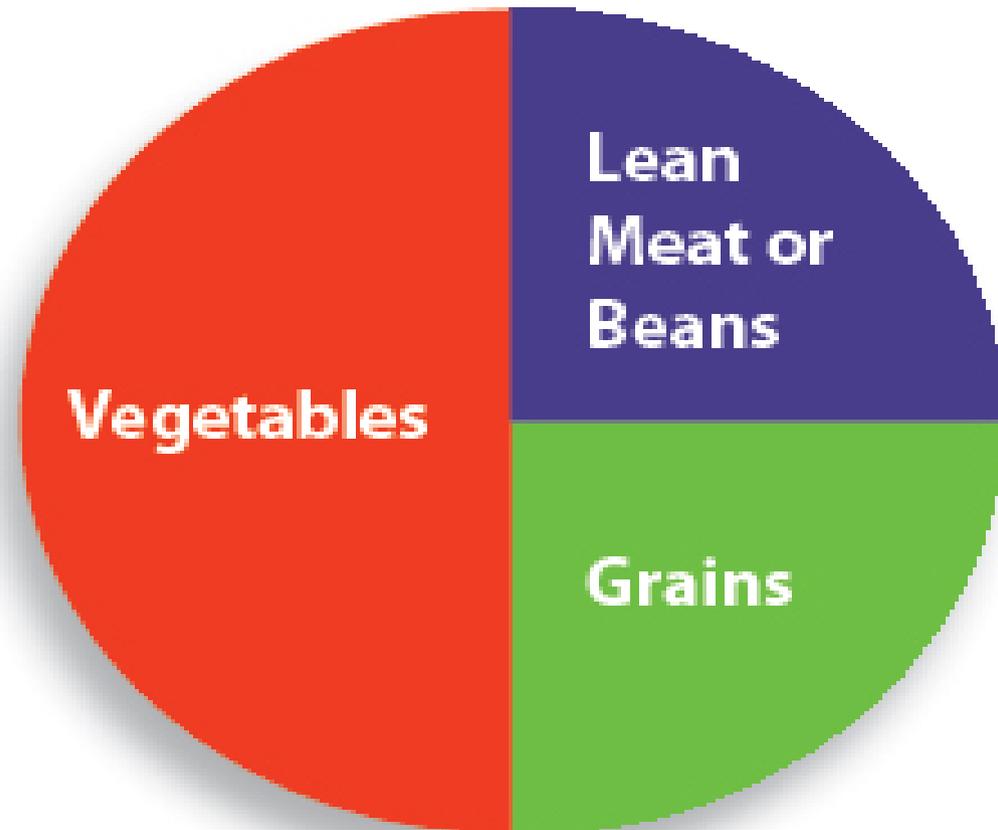
Nat Rev Neurosci. 2008 July ; 9(7): 568–578. doi:10.1038/nrn2421

School Lunch Quality and Academic Performance

NBER Working Paper No. 23218, March 2017

“Students at schools that contract with a healthy school lunch vendor score higher on CA state achievement tests,”

You plate should look like:



Sleep

Sleep Drives Metabolite Clearance from the Adult Brain
Science 18 Oct 2013

“Sleep allows brain to wash out junk”

[...] in addition to its well-described effects on memory consolidation.