What is BDNF?

- A protein that is essential for the growth, maturation, and maintenance of neurons
- Expressed in the Hippocampus
- Closely related to learning and memory
- Essential in the prevention of Neurological diseases
- Decreases by 70% in Alzheimer’s patients

How Exercise Can Improve Your BDNF

- The molecule β-hydroxybutyrate increases after prolonged exercise
- β-hydroxybutyrate increases BDNF promoters
- Promoters are essential for gene transcription and then protein translation

Putting it to the test

- In a study, 24 individuals between the ages of 65-79 with no regular exercise experience within the last 6 months were studied.
- Their aerobic exercise prescription consisted of 50 minutes, 4 days a week of moderate to high intensity.
- Results consisted of no increase of BDNF in the control group however there was a significant increase in the exercise group.

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Works Cited

