

NutraMind™ - For Brain Health



NUTRAMIND™
BY PROSTASIS

Research Summary:

Website:

www.Prostasis.com

Research Conducted With:

Duke University
2018-2021

NutraMind™ - A NutraSimilar™ to prevent neurodegeneration

Introduction:

NutraMind™ is a patented NutraSimilar™ supplement developed for brain health and prevention of age-related brain diseases. The patented blend of five ingredients was developed through an AI-driven process that identified natural ingredients that when combined could support a meaningful improvement in prevention of neurodegenerative diseases without the side effects of synthetic medications. The proprietary blend and doses of these ingredients was theorized to pass the blood brain barrier and improve brain health by preventing accumulation of amyloid plaque and reducing hippocampal shrinkage while increasing Brain Derived Neurotrophic Factor (BDNF).

Study Designs:

The studies were designed by Prostasis with collaboration from Duke University and conducted at Duke facilities. Each of the studies evaluated NutraMind's effect on mice fed with NutraMind™ and without (control) using a standard and High Fat Diet (aka – western diet).

Study Results:

In summary, the data suggests that NutraMind™ had a beneficial effect compared to the control group in all the neurological studies conducted in both the high fat and low-fat diets.

In the amyloid beta plaque study, mice on NutraMind™ had 92% less Ab plaque particles than the mice in the control group.

In the hippocampal size study, mice on NutraMind™ experienced a 35% reduction in hippocampal shrinkage than mice in the control group.

In the Brain Derived Neurotrophic Factor study, mice on NutraMind™ experienced a 46% improvement in Brain Derived Neurotrophic Factor than mice in the control group.

Post Study Hypothesis:

It is believed that the proprietary blend of ingredients works through multiple pathways to restore the body to its natural physiologic state, increasing neurogenesis and reducing neuroinflammation thus preventing hippocampal shrinkage.

NutraMind™ - For Brain Health

NutraMind™ - Inhibiting Amyloid Beta Plaque Accumulation

Introduction:

NutraMind™ is a patented NutraSimilar™ supplement developed to improve brain health and prevent neurodegeneration. NutraMind™ is theorized to activate Brain Derived Neurotrophic Factor, prevent hippocampal shrinkage, and inhibit the accumulation of amyloid plaque (A β plaque).

Study Design:

In this controlled study, we evaluated the effects of NutraMind™ on the change in A β plaque accumulation seen when mice received a western high-fat diet (HFD) with NutraMind™ (Treated) and without NutraMind™ (Control).

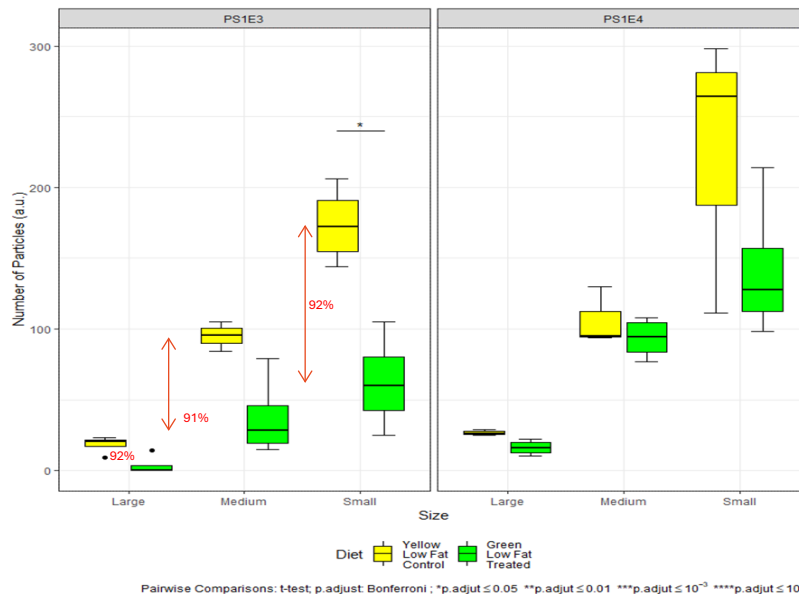
Study Results:

The study showed that NutraMind™ prevented accumulation of A β plaque particles for mice on the HFD with NutraMind™ compared to mice on a HFD alone. The study also evaluated the reduction in number of particles by mass (large, medium, and small) with an average reduction of 92% of particles in the treated vs untreated groups.

Post Study Hypothesis:

It is believed that the proprietary blend of ingredients works through multiple pathways to restore the body to its natural physiologic state, increasing neurogenesis and reducing neuroinflammation thus preventing accumulation A β plaque.

NutraMind™ effect on accumulation of A β plaque



NutraMind™ - For Brain Health

NutraMind™ - Effect On Hippocampal Size

Introduction:

NutraMind™ is a patented NutraSimilar™ supplement developed to improve brain health and prevent neurodegeneration. NutraMind™ is theorized to activate Brain Derived Neurotrophic Factor, prevent hippocampal shrinkage, and inhibit the accumulation of amyloid plaque (A β plaque).

Study Design:

In this controlled study, we evaluated the effects of NutraMind™ on the change in hippocampal volume and Brain Derived Growth Factor (BDNF) seen when mice received both a high-fat western diet (HFD) and Low-Fat Diet (LFD) with NutraMind™ (Treated) and without NutraMind™ (control) for 20 weeks.

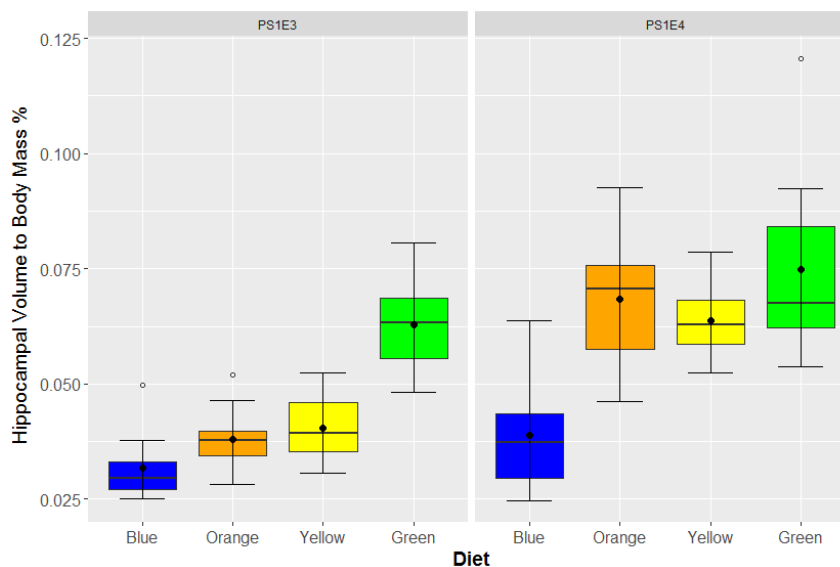
Study Results:

The study showed that NutraMind™ prevented hippocampal shrinkage by 35% in the LFD and 16% in the HFD for mice with the APOE ϵ 3 genetic variant (Left Graph), NutraMind™ also reduced hippocampal volume by 15% for mice on the LFD and 43% for mice on the HFD with the APOE ϵ 4 variant (Right Graph). In addition, APOE ϵ 3 mice on HFD saw a 46% increase in BDNF than the control group and a 32% increase of BDNF for mice on the LFD compared to control.

Post Study Hypothesis:

It is believed that the proprietary blend of ingredients works through multiple pathways to restore the body to its natural physiologic state, increasing neurogenesis and reducing neuroinflammation thus preventing hippocampal shrinkage.

NutraMind™ effect on hippocampal size in APOE ϵ 3 and ϵ 4 Mice



NutraMind™ - Activating Growth of Brain Derived Neurotrophic Factor

NutraMind™ - Activating BDNF Synthesis

Introduction:

NutraMind™ is a patented NutraSimilar™ supplement developed to improve brain health and prevent neurodegeneration. NutraMind™ is theorized to activate Brain Derived Neurotrophic Factor, prevent hippocampal shrinkage, and inhibit the accumulation of amyloid plaque (A β plaque).

Study Design:

In this study, we evaluated the effects of NutraMind™ on the change in Brain Derived Neurotrophic Factor between mice who were fed a western high fat diet (HFD) with NutraMind™ and mice fed a low-fat diet (LFD) alone.

Study Results:

In comparison to placebo controls, mice on a NutraMind™ HFD diet (orange) showed a 46% improvement in BDNF than mice on a HFD (blue) alone. Mice on NutraMind™ LFD diet (green) realized a 32% increase in BDNF than mice on a LFD alone.

Post Study Hypothesis:

NutraMind™ is thought to activate several mechanisms within the brain leading to increases in BDNF, reductions in amyloid beta plaques and significantly preventing hippocampal shrinkage. The combination of these compelling physiological changes and neuroprotective characteristics can play an important role in reducing cognitive decline, improving memory and inhibiting neurodegenerative diseases.

NutraMind™ - Activating BDNF In Different Mice Cohorts

