

# *Agmaset® and AgmaVet® Science Leading to Product*

Nutraceuticals containing the  
neuroprotective ingredient  
*G-Agmatine®*.

*G-Agmatine®* -

The best brand of agmatine.

<https://ForNerveHealth.com>

Neuroscientists - 1977  
Donated to – Dr. Donald J. Reis's  
Laboratory of Neurobiology, Cornell  
University Medical College.  
(oil pastel on paper)



# Agmatine\*

## *A Novel Neuroprotective Dietary Ingredient\*\**

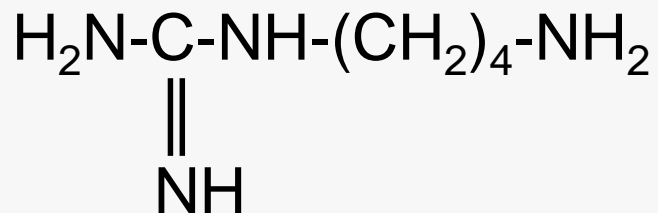
\*Discovered in 1910 (Albrecht Kossel)

\*\*Neuroprotection Discovery 1994 (Gilad et al.)

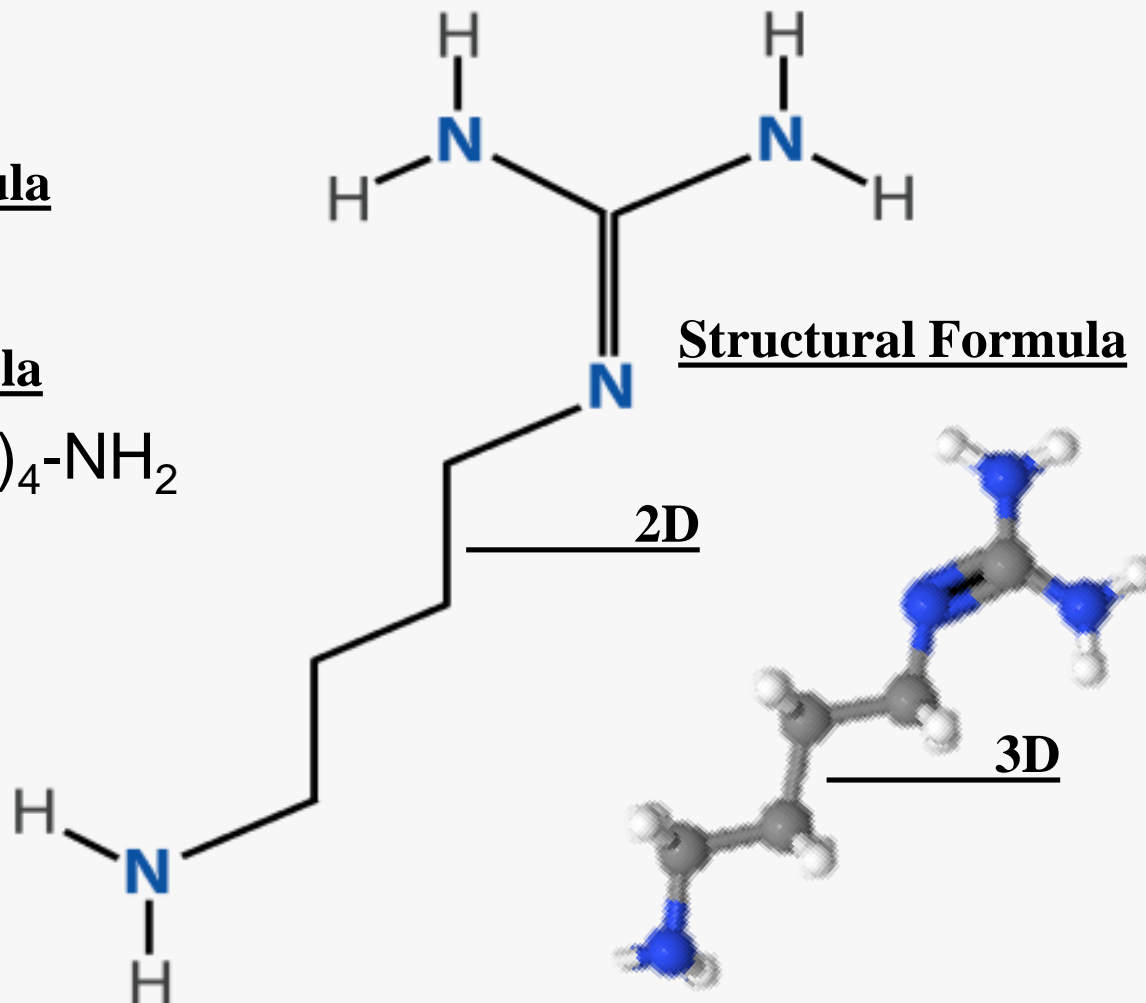
### Molecular Formula



### Chemical Formula

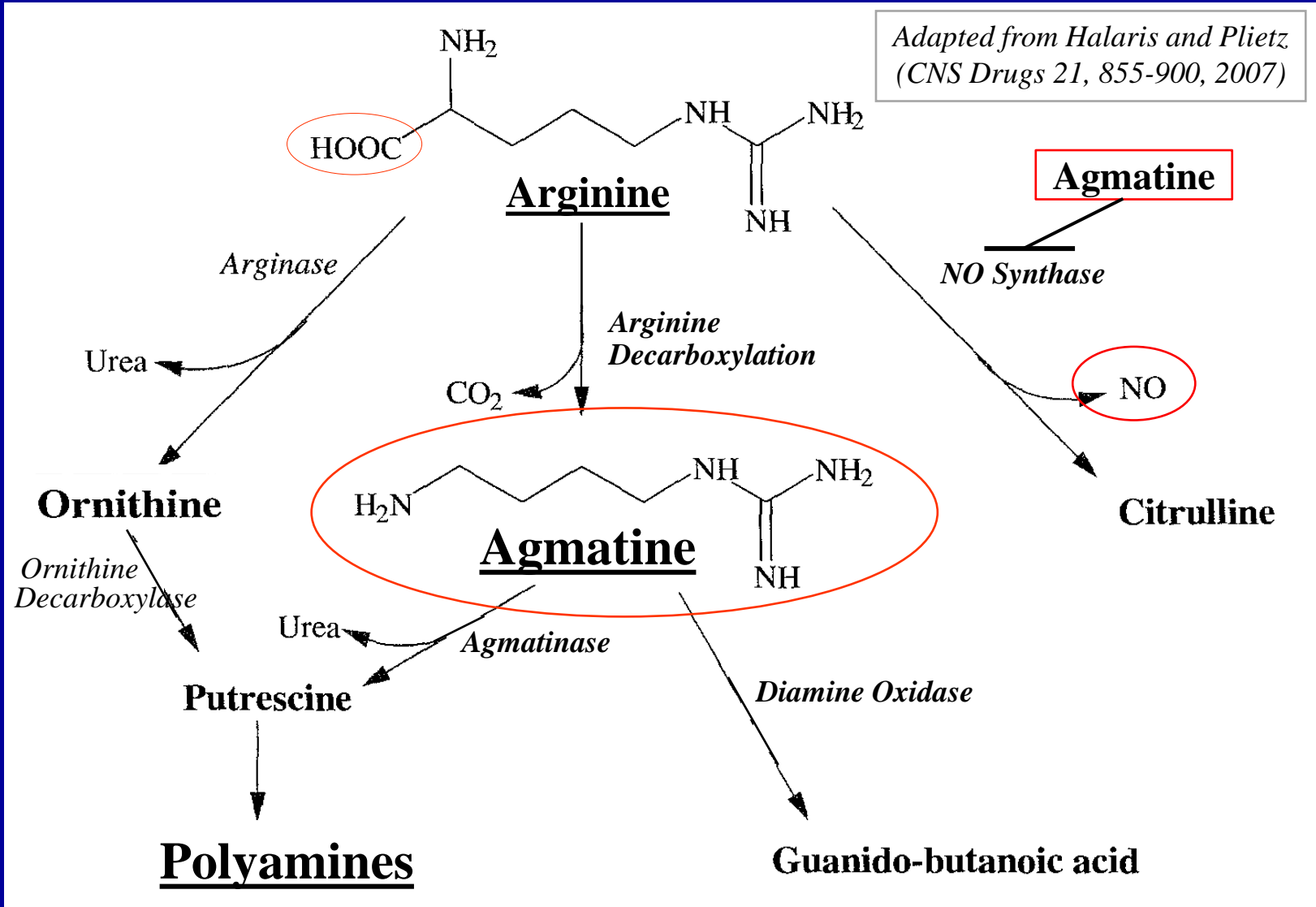


### Structural Formula



# Metabolic Pathways

- **Agmatine** is a metabolite of the amino acid **arginine**-
- But **agmatine** exerts different effects than **arginine**-



# Agmatine is a Naturally Occurring Compound with Broad Distribution in the Body

- Brain: 300 ng/mg
- Blood: 47 ng/ml
- Intestine: 55 ng/mg
- Fecal: 3,290 ng/g

# **Agmatine is a Ubiquitous Compound Present in Many Plant- and Animal-Derived Foodstuff**

- **Commonly found in foodstuff derived from plants, fish and animals (usual range: 0.1 – 10 mg/kg).**
- **High levels are found in certain fish products (200 and up to 650 mg/kg).**
- **Intestinal microbial production is considered a major source of agmatine.**

# **Agmatine Exerts Multiple Effects**

## **-Animal Model Experiments-**

- **Neuroprotection.**
- **Healthy pain-free nerve functions.**
- **Healthy mood functions.**
- **Healthy coping with Stress .**
- **Learning and memory enhancement.**
- **Healthy blood glucose regulation.**
- **Healthy blood flow.**
- **Protection of healthy kidney functions.**
- **Healthy control of cell growth.**



# UNIQUE MECHANISM OF ACTION

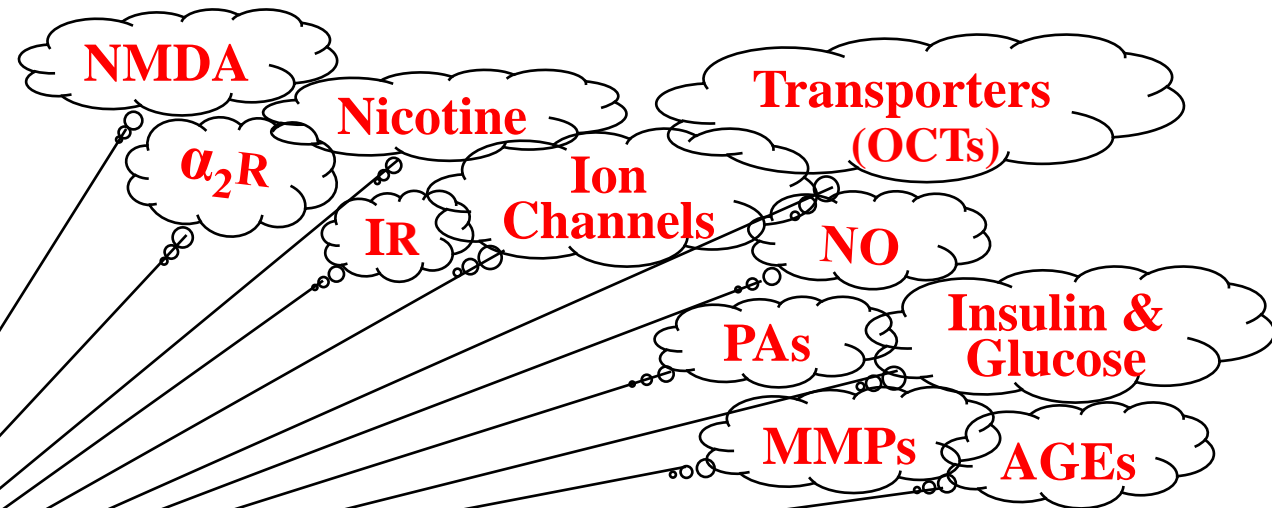
## 'The Molecular Shotgun Concept'

**Magic Bullet**

(Paul Ehrlich)

**Firing Squad**

(Polypharmacy)



**Agmatine Modulates  
Multiple Molecular Targets**

# Translating Research Into Practice

‘The Valley of Death’

Where some 99% of treatments fail

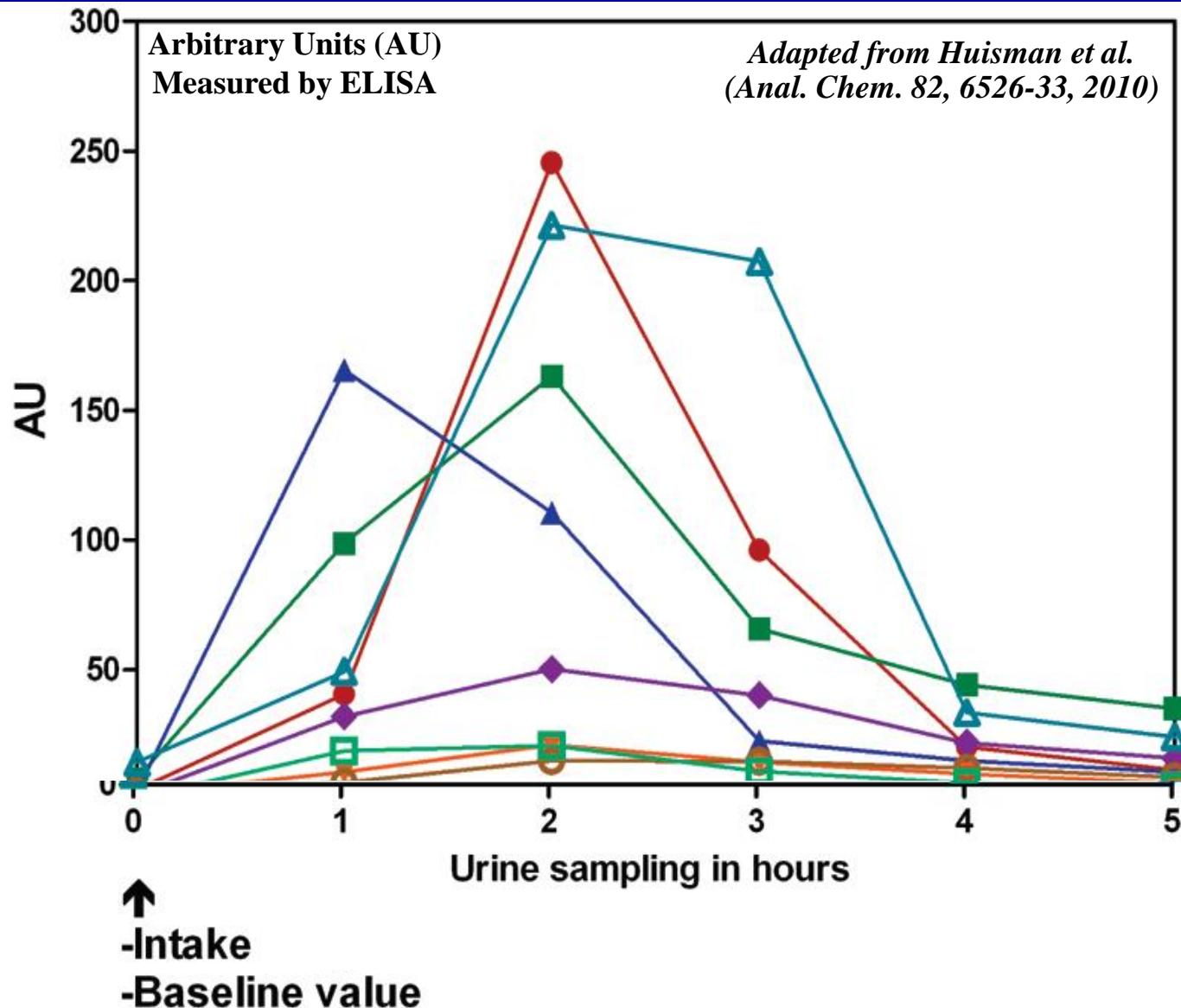




# **Absorption, Distribution, Metabolism and Elimination**

- **Oral agmatine is absorbed by the gastrointestinal tract.**
- **Agmatine is distributed throughout the body. It crosses the blood-brain-barrier.**
- **Agmatine is mostly converted to putrescine, precursor for polyamine synthesis, and urea. Some may be oxidized.**
- **Agmatine is excreted by the kidneys.**

# Agmatine in Urine Following Oral Intake (2 hr apparent blood half-life)



## Addressed Conditions

*More than 20 million people in the United States alone cope everyday with circumstances that challenge healthy nerve functions...*



# Safety Clinical Trial

## ***-Open Label, Dose-Escalating Clinical Study Design-***

Keynan et al., *Pain Med.*, 2010;11(3):356–368

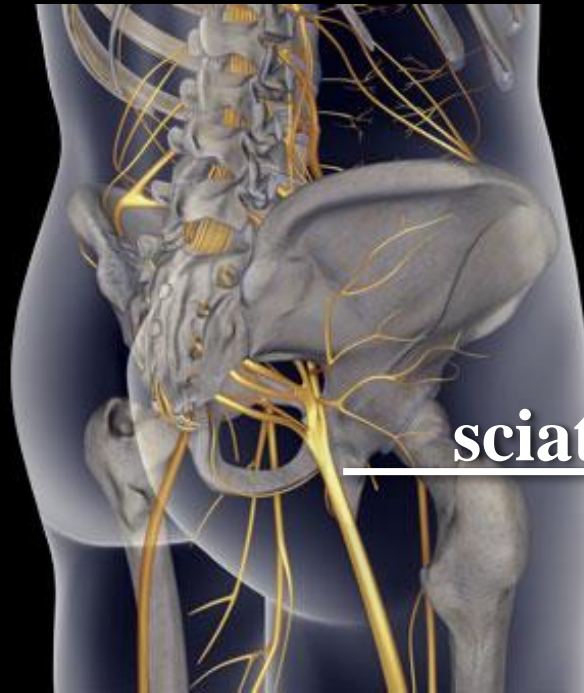
Cohort	Participants [Male] [Female]	Treatment Regimen
1 <sup>st</sup> Cohort	5 [3] [2]	1 capsule 3 times daily (1.335 g agmatine sulfate/day) - 10 day treatment
2 <sup>nd</sup> Cohort	5 [1] [4]	2 capsules 3 times daily (2.670 g/day) - 10 day treatment
3 <sup>rd</sup> Cohort	12 [7] [5]	8 daily capsules (2 in the morning, 3 at noontime and 3 in the evening) (3.560 g/day) - 10 day treatment
4 <sup>th</sup> Cohort	12 [8] [4]	8 daily capsules (2 in the morning, 3 at noontime and 3 in the evening) (3.560 g/day) - 21 day treatment



<b>Adverse Effects</b> During 7-month Follow-up	1 <sup>st</sup> Cohort	2 <sup>nd</sup> Cohort	3 <sup>rd</sup> Cohort	4 <sup>th</sup> Cohort
<b>Mild Diarrhea</b>			1	2
<b>Discontinuations – Due to the above Adverse Effects</b>				1
<b>Free Will Discontinuations</b>				1

# Translation of Research into Treatment

## -Clinical Study Focused on Sciatic Nerve-



sciatic nerve

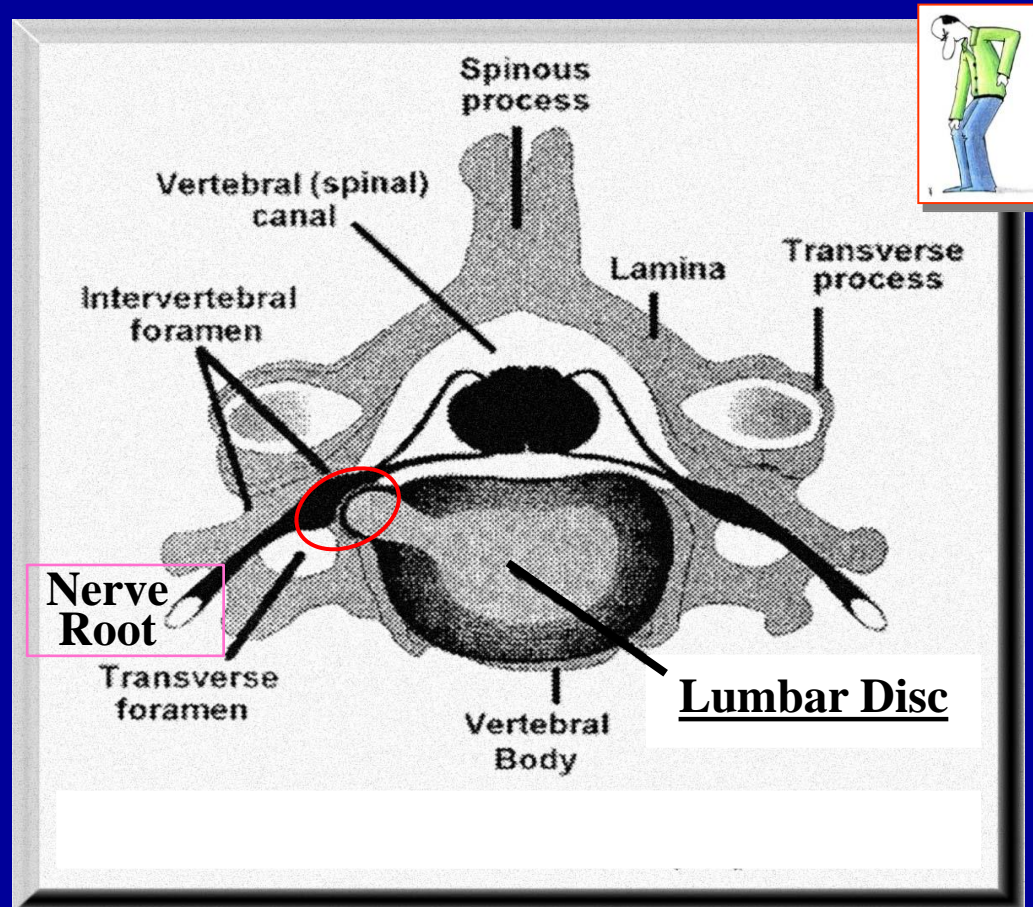


*Adapted from WebMD Slideshow:  
'A Visual Guide to Sciatica'*



# Clinical Study

- About 1.5% of the population cope everyday with circumstances that challenge healthy sciatic nerve functions.
- Sciatic nerve functions can be clearly defined and measured.





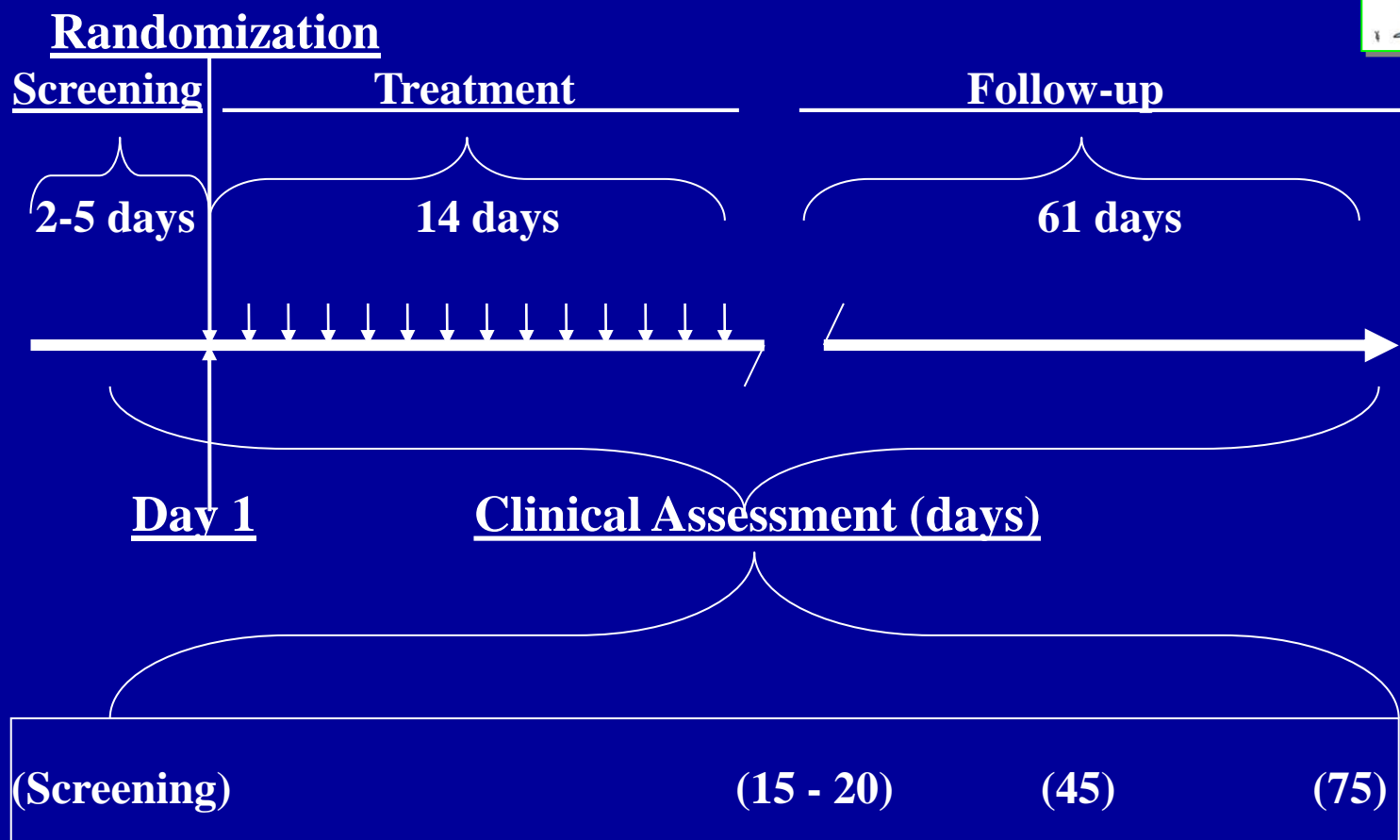
# Efficacy Study – Sciatic Nerve Functions

## **Randomized, Double-Blind, Placebo-Controlled Trial (RCT)**

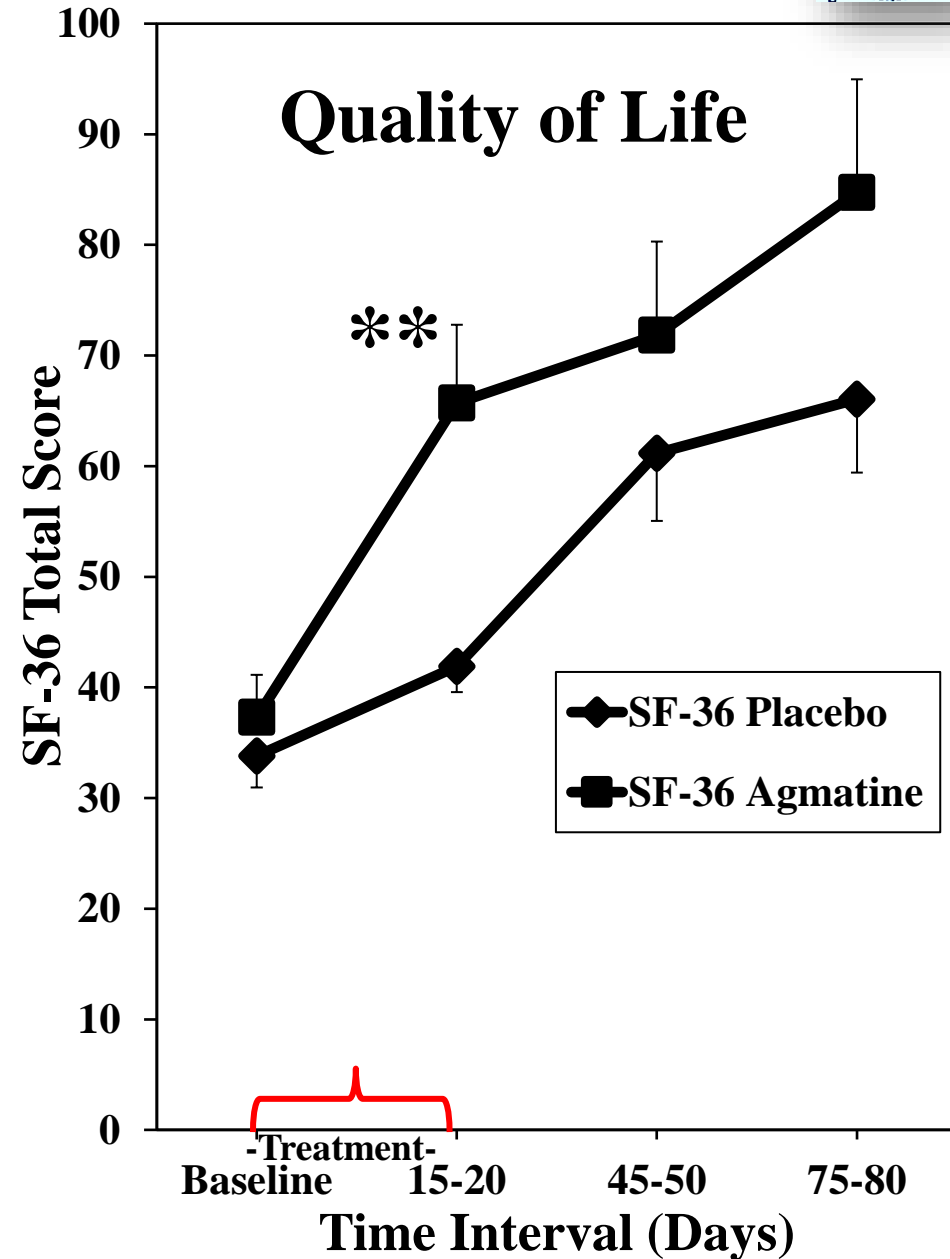
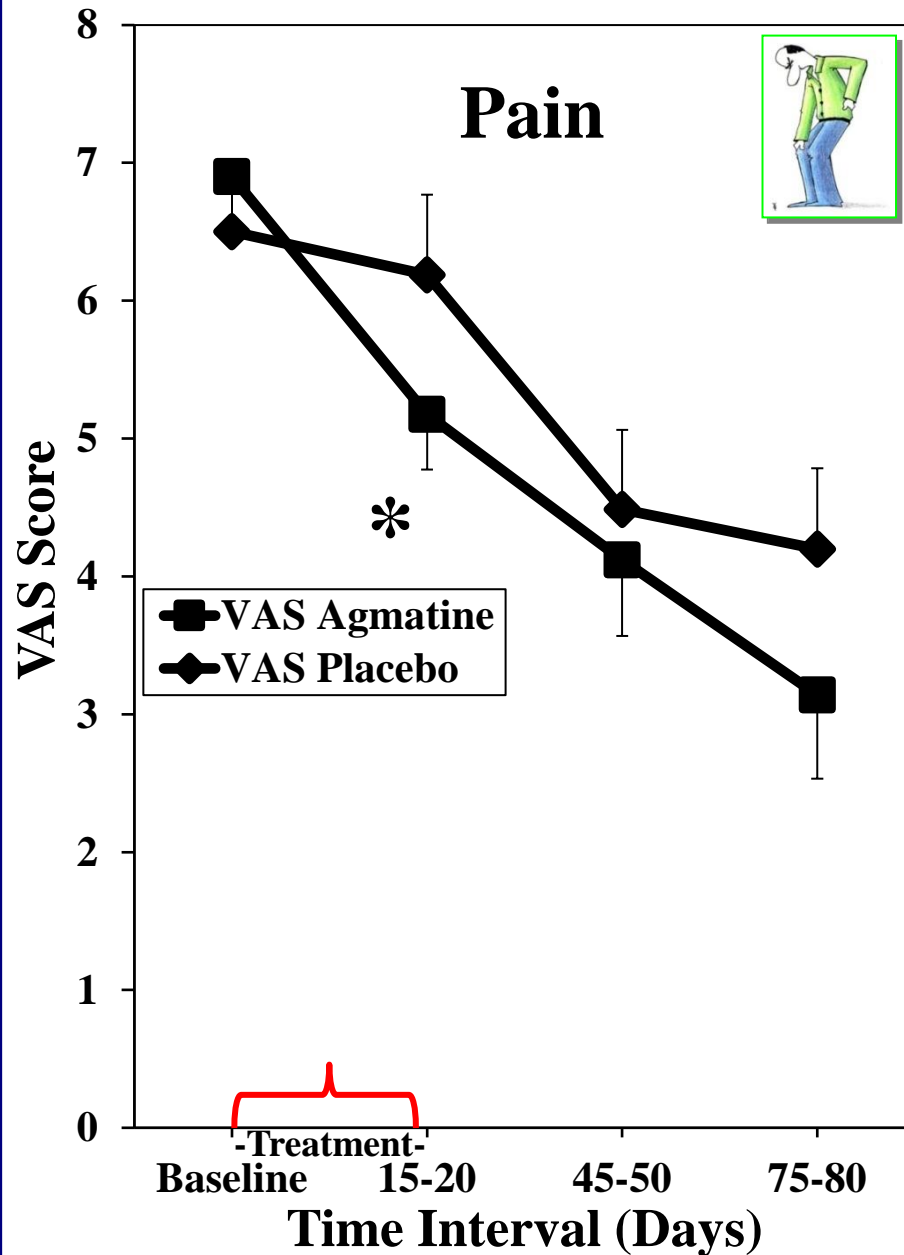
Keynan et al., *Pain Med.*, 2010;11(3):356–368

### **-Study Design-**

**2.67 g/day G-agmatine®**



# Efficacy of G-Agmatine<sup>®</sup>



# Effectiveness in Pain Associated with Small Fiber Nerve Functions -Open-Label Consecutive Case Series Study- Rosenberg et al., *Nutrients*, 2020;12(2):576

## -Study Regimen- 2.67 g/day G-agmatine® for 60 days

Pain questionnaire ratings before and after 60-day treatment with G-Agmatine®

Patients (11)	Average Pain Before Treatment	Average Pain After Treatment	Absolute Decrease (Rating Points)	Percent Decrease
Average ± SD	56.1 ± 18.2	30.1 ± 16.9	26.0 *	46.4% *

\*Highly significant ( $p < 0.00001$ , paired  $t$ -test). SD, standard deviation.

# “Proof-of-concept”

The clinical studies serve  
a “Proof-of-concept” indicating the utility of  
G-agmatine® in harsh circumstances that challenge  
healthy nerve functions.

# **Recommended Effective Regimen**

- **2 to 3 capsules twice a day with or after meals for as-long-as needed (each capsule contains 445mg of *G-Agmatine*®).**
- **Time to effect -**
  - In acute circumstances: 2 - 4 days in most, but may be as-long-as 2 to 4 weeks.**
  - Chronic conditions: 3 - 6 weeks.**
- **After the effect is established – dosage may be gradually reduced for maintenance regimen.**



# AgmaSet®

## First-of-its-Kind Dietary Supplement Containing G-Agmatine® For Nervous System Health and Proper Nerve Functions

### For Healthy Nerve Functions\*

**DIRECTIONS FOR USE:** Adults, 2 capsules twice or three-times a day with or after meals, or as recommended by your physician, pharmacist or healthcare professional.

**NOTE** - Pregnant or nursing women, children and ill or medication-taking people should consult a physician before use. May cause diarrhea.



- Keep Out of the Reach of Children.
- Do Not Use If Printed Seal Is Broken or Missing
- Store In a Closed Bottle at Temperature Not Exceeding 30°C (86°F) and Humidity Not Above 70% RH.

\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.



Gilad&Gilad LLC  
Henderson, NV 89015. Tel: 1-888-484-4523  
Info@ForNerveHealth.com  
www.ForNerveHealth.com

**Gilad&Gilad** FOR-NERVE-HEALTH™

**AgmaSet®**

The Exclusive G-Agmatine® Source

For Healthy Nerve Functions

Dietary Supplement 120 Capsules

### Supplement Facts

Serving Size: 2 Capsules  
Servings per Container: 60

Amount per Serving	% Daily Value
Calories:	less than 1
Agmatine Sulfate (as G-Agmatine®)	890 mg †
†Daily Value Not Established	

Other Ingredients: Gelatin, titanium dioxide (as capsule color), water. No allergens, preservatives or additives. Gluten-Free. Each bottle contains one (1) nontoxic desiccant packet. G-Agmatine® is a trademark brand of Gilad&Gilad LLC. Patents U.S. 8,916,612; U.S. 9,585,852.

**MADE IN THE  
U S A**





# AgmaVet®

## For Your Animal's Daily Diet Containing G-Agmatine® For Nerve Health

### For Healthy Nerve Functions

#### Directions for use:

Adult animals - Recommended administration is 1 to 3 capsules a day (depending on body weight) with or after meals. Initial administration period is 4 to 6 weeks; however, some animals may respond in a shorter time period. The number of capsules may then be gradually reduced to an effective maintenance level.



Note - For pregnant or nursing females, young ones or ill and medication-taking animals, consult a veterinarian or health professional before use. May cause diarrhea.

Visit [www.ForNerveHealth.com](http://www.ForNerveHealth.com)



Gilad&Gilad LLC  
Henderson, NV 89015. Tel: 1-888-484-4523  
[info@ForNerveHealth.com](mailto:info@ForNerveHealth.com)  
[www.ForNerveHealth.com](http://www.ForNerveHealth.com)



For Healthy Nerve Functions

120 Capsules

#### Each Capsule Contains:

Agmatine Sulfate (as G-Agmatine®).....445 mg\*

Other Ingredients: Gelatin, titanium dioxide (as capsule color), water.

No allergens, preservatives or additives. Gluten-Free.

Each bottle contains one (1) nontoxic desiccant packet.

\*Not recognized by the AAFCO as an essential animal nutrient.

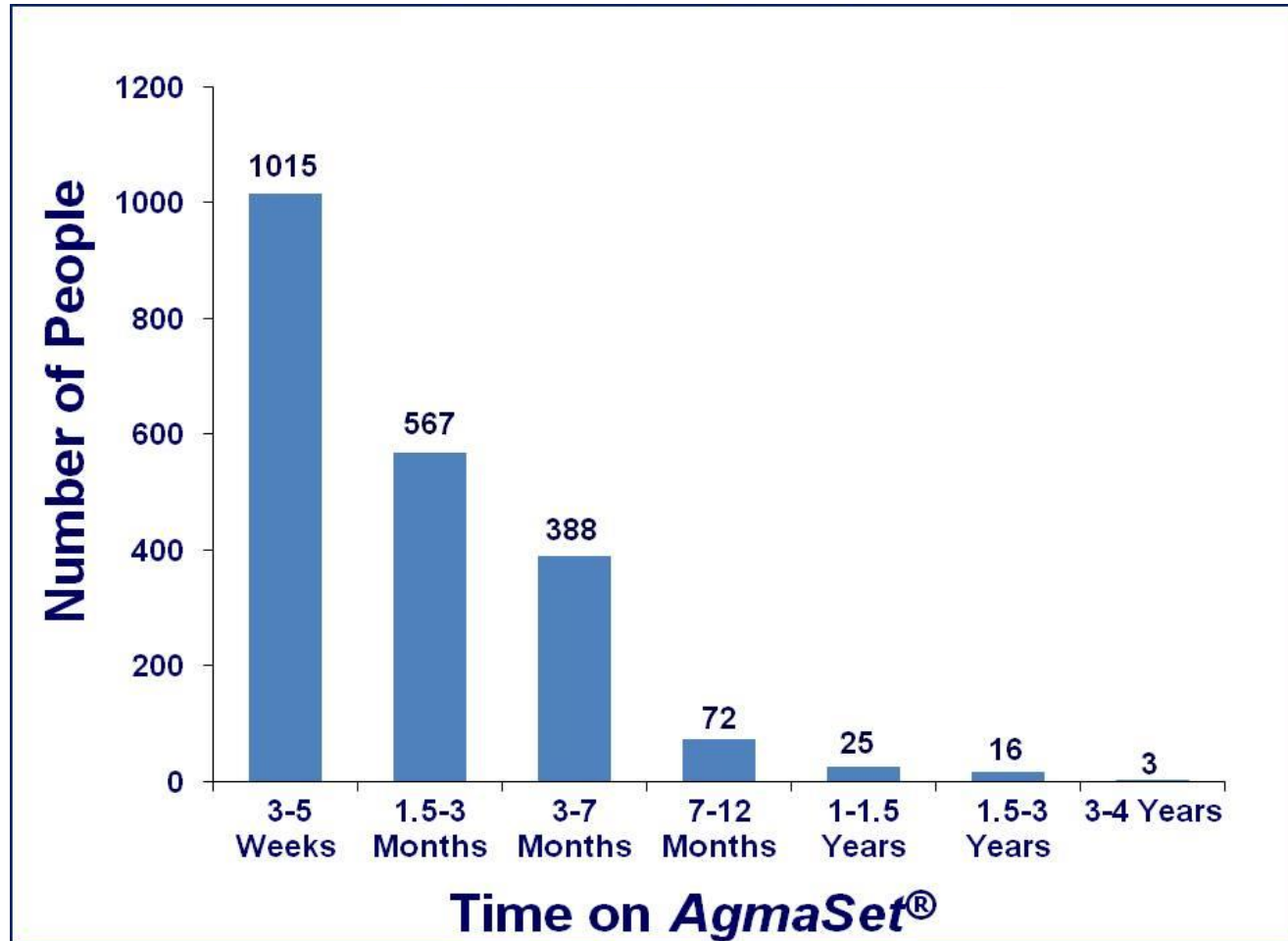
G-Agmatine® is a trademark brand of Gilad&Gilad LLC.  
Patents U.S. 8,916,612; U.S. 9,585,852.

- Keep out of the reach of children.
- Do Not Use If Printed Seal is Broken or Missing
- Store in a Closed Bottle at Temperature Not Exceeding 30°C (86°F) and Humidity Not Above 70% RH.

MADE IN THE  
**U S A**



# Safety and Effectiveness of *AgmaSet*® 2010 – 2013\*



**\*Surveillance of people who took *AgmaSet*® during the years 2010 and 2013.**

**-No adverse effects were reported. -Three people reported soft stool or mild diarrhea.**

# Agmatine Sulfate Alternative Products

- All alternative products containing agmatine sulfate are based on borrowed science. All clinical studies are borrowed from Gilad&Gilad.
- Products targeting the bodybuilding field are all touted based on scientifically unsubstantiated claims and often on downright erroneous scientific information.
  - ❖ No evidence for enhanced Growth Hormone functions.
  - ❖ Agmatine may modulate Nitric Oxide (NO) synthesis, but does not enhance NO content.
  - ❖ No evidence for enhanced muscle protein synthesis.

# THANK YOU!

## PLEASE SPREAD THE GOOD NEWS



**Any Questions ?**

Call us: (toll-free) 1-888-484-4523, or 1-702-790-2877

Contact us via email: [info@ForNerveHealth.com](mailto:info@ForNerveHealth.com)

**<https://ForNerveHealth.com>**