THE FOUNTAIN OF YOUTH PEPTIDE EPITALON

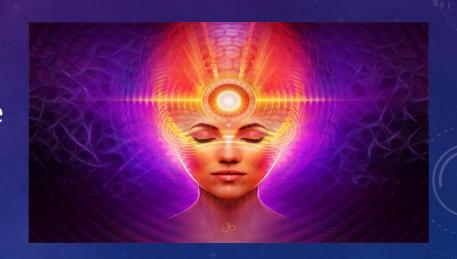
EDWIN LEE MD, FACE

CO FOUNDER OF CLINICAL PEPTIDE SOCIETY



THIRD EYE- PINEAL GLAND

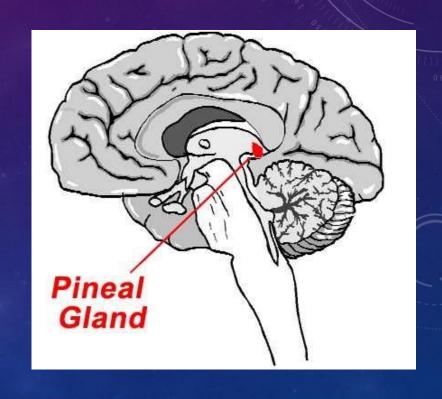
- Small gland is located in the middle of the brain
- Third eye has been regarded as the gate to the spiritual world
- Produces Melatonin and Epitalon





PINEAL GLAND — THIRD EYE

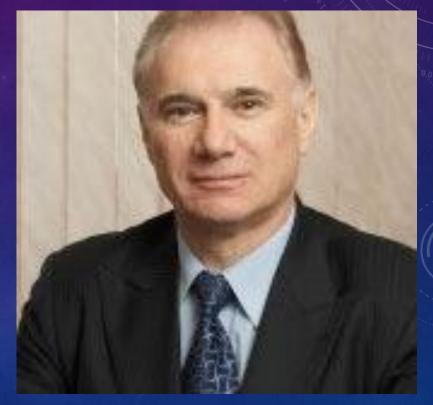
- Pineal gland resembles like a pine cone
- Glandular tissue predominates in children and young adults
- Becomes fibrous and calcified with age





EPITALON – DISCOVERED IN THE 1970'S

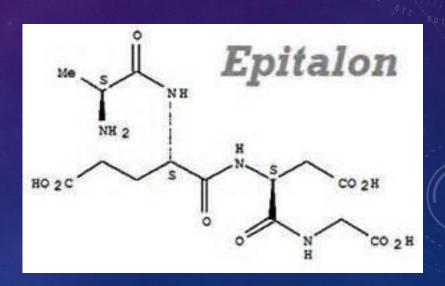
- 4 amino acid
- AEDG peptide
- Approved for general use in the Soviet Union in 1990 and has been used in gerontology
- No adverse side effects according to Dr Khavinson





EPITHALON = EPITALON VS EPITHALAMIN

 Epithalamin (from bovine pineal gland) and its active fragment is epitalon





EPITALON INCREASED LONGEVITY AND REDUCED CANCER IN ANIMAL STUDIES

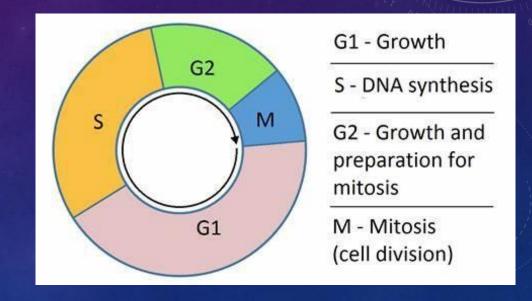




HOW DOES EPITALON INCREASE LIFESPAN?

KHAVINSON V, ET AL., AEDG PEPTIDE (EPITALON) STIMULATES GENE EXPRESSION AND PROTEIN SYNTHESIS DURING NEUROGENESIS: POSSIBLE EPIGENETIC MECHANISM. MOLECULES. 2020 JAN 30;25(3):609.

- Epitalon controls cell cycle
- Epitalon can interact with the genes for cell replication



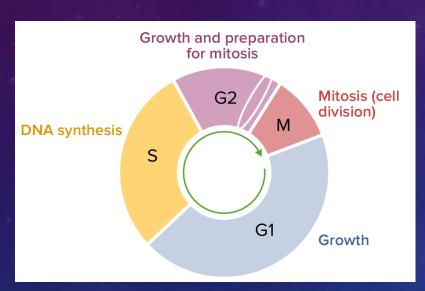


CELL CYCLE ARREST- SENESCENCE- AGE RELATED DISEASES

- Epitalon controls cell cycle
- If Cell cycle arrest occurs then accumulation of senescent cells followed with organ dysfunction
- No Epitalon? Cell cycle arrest will occur



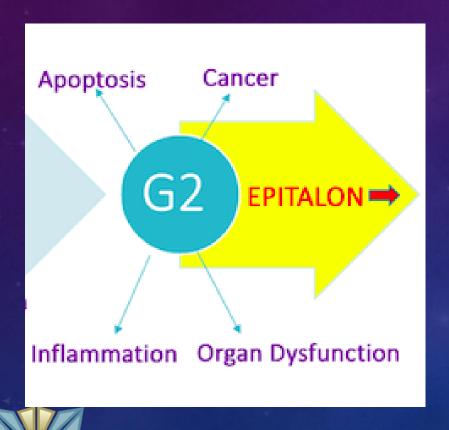
EPITALON HELPS CELLS TO SELF REPLICATE



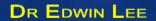




EPITALON HELPS CELLS TO SELF REPLICATE





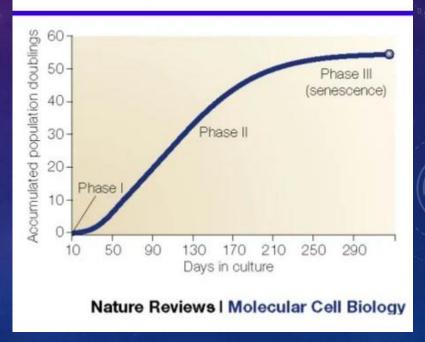


EPITALON PROLONGS CELL LIFE APPROX 25%

KHAVINSON VKH, BONDAREV IE, BUTYUGOV AA, SMIRNOVA TD. PEPTIDE PROMOTES OVERCOMING OF THE DIVISION LIMIT IN HUMAN SOMATIC CELL. BULL EXP BIOL MED. 2004 MAY;137(5):503-6.

- Epitalon used on aging cells made 10 extra divisions (44 passages) in comparison with a max of 34 passages.
- Human fetal pulmonary fibroblast cells were used

Hayflick's Limit





EPITALON on generating neurons from stem cells

KHAVINSON V, ET AL., AEDG PEPTIDE (EPITALON) STIMULATES GENE EXPRESSION AND PROTEIN SYNTHESIS DURING NEUROGENESIS: POSSIBLE EPIGENETIC MECHANISM. MOLECULES. 2020 JAN 30;25(3):609.

> Molecules. 2020 Jan 30;25(3):609. doi: 10.3390/molecules25030609.

AEDG Peptide (Epitalon) Stimulates Gene Expression and Protein Synthesis during Neurogenesis: Possible Epigenetic Mechanism



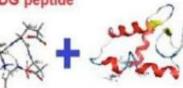
EPITALON on generating neurons from stem cells

KHAVINSON V, ET AL., AEDG PEPTIDE (EPITALON) STIMULATES GENE EXPRESSION AND PROTEIN SYNTHESIS DURING NEUROGENESIS: POSSIBLE EPIGENETIC MECHANISM. MOLECULES. 2020 JAN 30;25(3):609.

Stem Cells



AEDG peptide

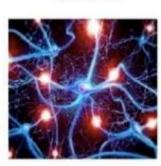


histone

activation of neurogenesis genes transcription



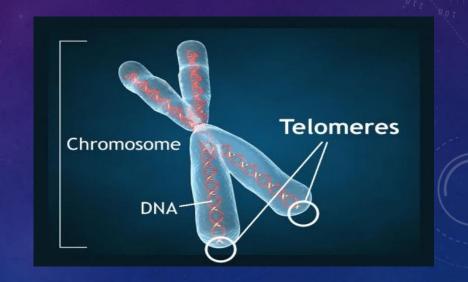
activation of Nestin, GAP43, beta III Tubulin, Dobleocortin synthesis Neurones





EPITALON

- Epitalon stimulates telomerase which in turn increases telomeres in our DNA
- Increase the telomeres by 33%
- Anisimov VN¹, Khavinson VKh.
 Biogerontology. 2010 Apr;11(2):139-49. doi: 10.1007/s10522-009-9249-8.
- Khavisnon VKh, et al. <u>Bull Exp Biol Med.</u> 2003 Jun;135(6):590-2





EPITHALAMIN STUDY IN ELDERLY FROM 1992 TO 2005

- Results of 15* year follow up study
- N = 79
- Age 60-69 with Stable CAD
- Khavinson VK, et al. Byulleten' Eksperimental'noi Biologii i Meditsiny, Vol. 151, No. 3, pp. 343-347, March, 2011

- Group 1 received
 Epithalamin 6 courses over
 3 years 1992 to 1995
- 10 mg in 2 ml saline IM every 3 days – 5 shots per course, (dose of 50 mg)
- 50 mg every 6 months x 3 years
- Total dose 300 mg over 3 years



EPITHALAMIN

KHAVINSON VK, ET AL. BYULLETEN' EKSPERIMENTAL'NOI BIOLOGII I MEDITSINY, VOL. 151, NO. 3, PP. 343-347, 2011

	Control	Epithalamin
Cardiovascular Death	20/24 (83%)	6/13 (46.2%)
Survival	16/40 (40%)	26/39 (66.7%)



EPITALON AND CANCER

KOSSOY G, ET. AL., EPITALON AND COLON CARCINOGENESIS IN RATS: PROLIFERATIVE ACTIVITY AND APOPTOSIS IN COLON TUMORS AND MUCOSA. INT J MOL MED. 2003 OCT;12(4):473-7.

- In a study with rats with colon cancer (given DMH that causes colon cancer)
- Mitotic activity of tumor cells was significantly inhibited by Epitalon 1 microgram, five times a week, for 6 months





EPITALON CAN RESTORE MELATONIN AND CORTISOL

Regulatory Effect of Epithalon on Production of Melatonin and Cortisol in Old Monkeys

N. D. Goncharova, B. Kh. Khavinson*, and B. A. Lapin

Translated from Byulleten' Eksperimental'noi Biologii i Meditsiny, Vol. 131, No. 4, pp. 466-468, April, 2001 Original article submitted February 28, 2001

Epithalon not only stimulated melatonin synthesis in old monkeys, but also normalized circadian rhythms of peripheral blood cortisol concentration (Fig. 1, b). Cortisol content in old animals did not drop in evening (21.00), which indicated a decrease in the amplitude of its circadian rhythms (similarly to humans [12]).



5 BENEFITS FROM EPITALON

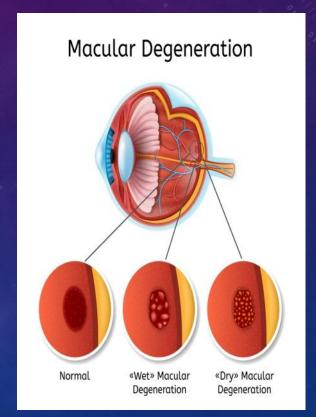
- 1) Improve Sleep
- 2) Anti Cancer Effects
- 3) Promotes Cellular Replication
- 4) Prevents Senescence
- 5) Promotes longevity





EPITALON DOSING

- Vial is 10 mg/ml 5 ml vial
- Use 1/2 cc (5 mg) or 50 units SQ for 10 days daily for a total dose of 50 mg in 10 days
- Repeat every 6 months





PINEALON

- Pinealon (Glu-Asp-Arg)
- Epitalon (Ala-Glu-Asp-Arg)
- Pinealon composed of glutamic acid, aspartic acid, and arginine
- Discovered by the Russians





PINEALON

- Pinealon (Glu-Asp-Arg)
- Epitalon (Ala-Glu-Asp-Arg)
- Pinealon composed of glutamic acid, aspartic acid, and arginine
- Discovered by the Russians



Dr Vladimir Khavinson



PINEALON Protects neurons from hypoxia

KOZINA LS, ET.AL. REGULATORY PEPTIDES PROTECT BRAIN NEURONS FROM HYPOXIA IN VIVO. DOKL BIOL SCI. 2008 JAN-FEB;418:7-10.

- Rodent study
- Injected daily at a dose of 10 µg/kg body weight intraperitoneously for five days before hypoxia.
- (Vilon immune regulator and Vesugen –vascular)

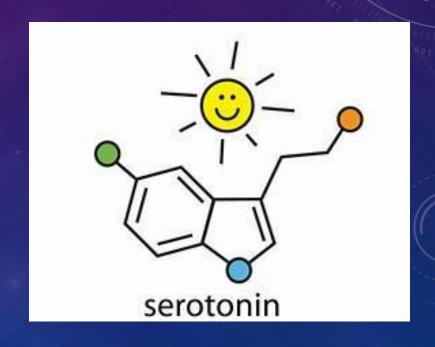
Compound studied	Time until respiration arrest, s
Control	72 ± 10
Vilon	$149 \pm 47 \ (p < 0.08)$
Vesugen	88 ± 9
Pinealon	$184 \pm 30 \ (p < 0.014)$
Epitalon	$150 \pm 38 \ (p < 0.08)$



PINEALON: Stimulate serotonin expression in cells of brain cortex

KHAVINSON VKH, ET AL., SHORT PEPTIDES STIMULATE SEROTONIN EXPRESSION IN CELLS OF BRAIN CORTEX. BULL EXP BIOL MED. 2014 MAY;157(1):77-80

- Rodent study
- Stimulate serotonin expression in aging cultures of brain cortex cells
- Pinealon turns on 5tryptophan hydroxylase gene encoding the enzyme involved in serotonin synthesis

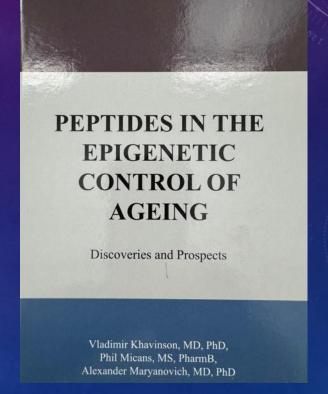




Clinical trial #1 in humans w/ TBI on pinealon

Peptides in the epigenetic control of ageing Chapter 5 page 97

- In a clinical trial involving 72
 patients with extreme weakness
 after cranial trauma (ages 30 74 years)
- Pinealon the dosage of 0.2 mg twice daily for 20-30 days was added to conventional therapy.
- Improvement in speech, memory and headaches with pinealon

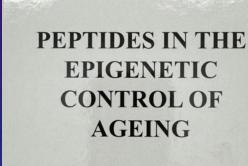




Clinical trial #2 improving memory in humans with pinealon

Peptides in the epigenetic control of ageing Chapter 5 page 97

- Pinealon in capsules (one capsule twice daily for two weeks) was given to 75 elderly human subjects to correct cognitive decline
- Improvements of the short-term and long-term memory



Discoveries and Prospects

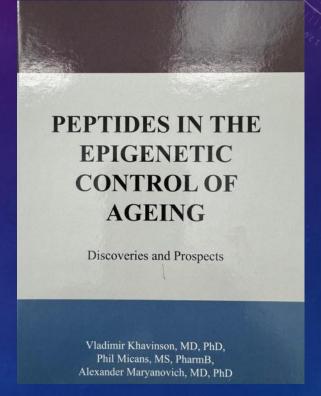
Vladimir Khavinson, MD, PhD, Phil Micans, MS, PharmB, Alexander Maryanovich, MD, PhD



Clinical trial #3 improving memory in humans after MVA with pinealon

Peptides in the epigenetic control of ageing Chapter 5 page 97

- The combined peroral administration of Pinealon and Vesugen (One capsule twice daily for 30 days) to subjects aged 20 to 75 years who have been being influenced by 150 MVA helped to improve their memory, attention, cognition, perception and motor responses
- Vesugen is a blood vessel bio regulator



PINEALON DOSING

Pill

- Pinealon capsule comes in 0.1 mg
- In the study it was 0.2 mg
 BID for 20 to 30 days then
 cycle it every 6 months

Injection

- Comes in 10 mg/ ml in a 5 ml vial
- Use 5 mg SQ x 20 days (need 2 of the 5 ml vials) repeat every 6 months



CONCLUSION

- Epitalon increases
 longevity in animals and in
 humans and decreases
 experimental
 cancerogenesis.
- Pinealon is very similar to Epitalon and has shown to improve cognition and increase serotonin





MY APPROACH OF PRACTICING MEDICINE

Old School-Supplement/Medications

New School- Epitalon





Special Discount Code of \$200 off \$999 – Use the Code AMMG



Longevity Summit Jan 24, 2026







