Slide 1

I WASN'T AWARE- BRAIN FUNCTION; WHY DO WE HAVE ONE?

Dr. Vincent Kiechlin, DC, DACNB

Slide 2

OVERVIEW

- The primary function of the brain:
  - the basic workings of brain cells
  - why they communicate with each other
  - how their function can be changed
- The basic development of the brain and nervous system and how the development can affect learning
- How trauma can affects the brain
- The role of chiropractic care and its relationship to changing the nervous system
- Activities that everyone can do to help maintain a healthy brain and nervous system

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THE PRIMARY FUNCTION OF THE BRAIN

Is to know where you are in space and where the objects are around you.

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WHY IS THIS SO IMPORTANT?

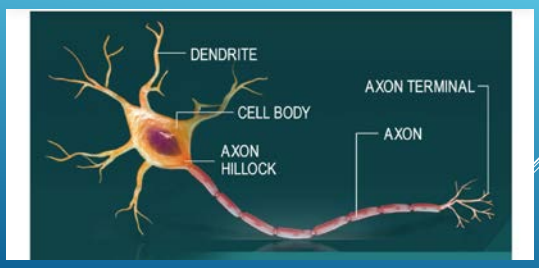
Because knowing where you are is required in order to move in space.

Slide 5

ANIMALS WHICH DO NOT MOVE, DO NOT HAVE BRAINS AND NERVOUS SYSTEMS

Slide 6

NEURONS



Slide 7

NEURONS

The primary job of a neuron is to survive.

The secondary job of a neuron is to transmit and receive information.

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NEURONS

Every time a neuron is stimulated without being overstimulated, it creates new genes.

These new genes are then used by the neurons to create proteins.

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NEURONS

Proteins are then used by the cell to create organelles, such as mitochondria, which is the powerhouse of the cell, as well as branches to other nerve cells. This is the mechanism by which neuroplasticity occurs.

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NEUROPLASTICITY

Allows nerve cells to:

- Survive
- Grow stronger
- Enhance connection to other nerve cell

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THIS MECHANISM IS THE BASIS OF ALL LEARNING!

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SO HOW DO WE GET OUR NERVE CELLS TO BECOME STIMULATED?

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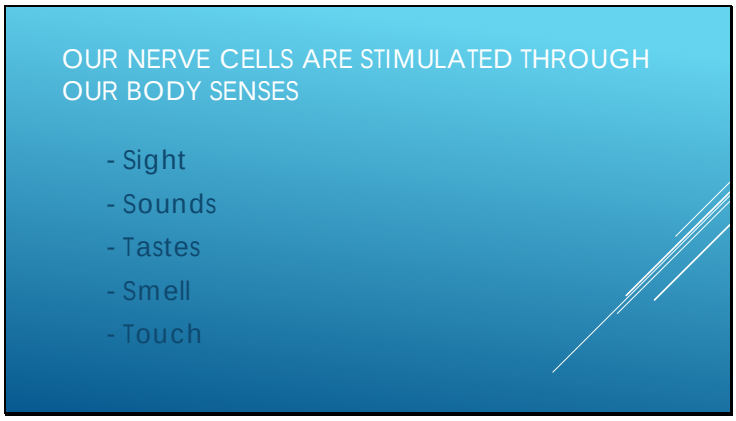

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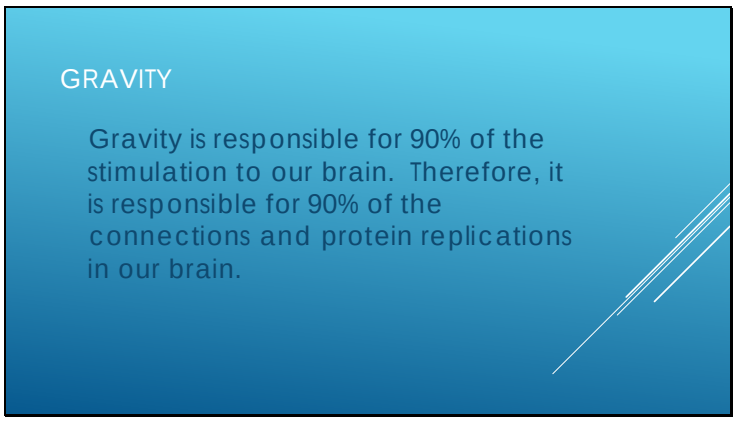

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WHY SO MUCH?

Because gravity is a constant.

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DEVELOPMENT OF OUR BRAIN

The brains starts to develop
3 weeks after conception

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WHATEVER NERVE CELLS ARE BORN ON THE SAME DAY WILL ALWAYS HOLD HANDS UNTIL THE DAY YOU DIE

Because of this rule, motor and sensory learning can enhance cognitive and behavioral learning.

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WHAT SENSES GROWN THE BABY'S BRAIN DURING FETAL DEVELOPMENT?

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GRAVITY AND THE MOVEMENT OF MOMMY

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SO KNOWING WHERE YOU ARE IN THE EARTH'S GRAVITATIONAL FIELD IS THE FIRST SENSE A BABY EXPERIENCES

Gravity becomes the largest stimulation to our brain throughout our lives.

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SO WHAT HAPPENS WHEN SOMEONE INJURES THEIR BRAIN?

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WHEN THE BRAIN IS INJURED THE CONNECTIONS TO OTHER CELLS ARE DISRUPTED THROUGH INFLAMMATION AND SHEARING OF THE BRANCHES BETWEEN NEURONS.

Slide 24

THIS DISRUPTS THE CONNECTIONS BETWEEN BRAIN CELLS AND THEREFORE A LACK OF:

- Communication between cells
- New genes
- Protein replication
- Neuroplasticity

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WHEN THIS OCCURS, CELLS GO INTO SURVIVAL MODE

They stop transmitting and receiving information from other cells.

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SO HOW DOES CHIROPRACTIC FIT INTO ALL OF THIS?

Chiropractic adjustments increase the brain sensitivity to gravity.

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CHIROPRACTIC ADJUSTMENTS

- Increase communication between brain cells
- Increase genetic expression
- Increase protein replication in the nerve cells
- Increase the brains ability to strengthen itself and its connections
- Enhance neuroplasticity

Slide 28

SO WHAT CAN WE DO ON OUR OWN TO MAKE OUR BRAIN STRONGER?

Rule:

Frequent activity for short duration.

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WALK UPRIGHT IN GRAVITY

Frequent walks in short duration

Slide 30

SPEAK

READ

WRITE

Slide 31

SLEEP

Slide 32

DELAY SELF GRATIFICATION