Turning the Tide with The Buoyant Brain

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Turning the Tide with the Buoyant Brain

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   • Perception
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Brain Background
Our Brains

• Weighs about 3 lbs.

• Consists of approx. 100 billion nerve cells (neurons)

**Brain Plasticity** - the brain’s ability to change throughout life. It’s endlessly adaptable.

• Learning changes the brain! When repeat impulses travel the same neuron during repeat experiences such as a crossword puzzle, practicing piano, or a sport that reinforces that electrochemical pathway.

• Neurons start to deteriorate later in life. Physical and mental exercise help to slow this decline.

Source: amnh.org/education/brain

Image: http://brainworksworks.com/what-is-brain-plasticity/
Neurological Health
Brain Health: How to Take Care of Your Brain

Muscle Power- Use it or Lose it!

**Exercise- Aerobic Activity**
- Example: Walk, run, play sports
- **Benefits:**
  - Improves memory, thinking, mood, and sleep
  - Reduces stress, anxiety

**Exercise- Brain Strengthening**
- Example: Luminosity.com, Nintendo Brain Age, learn a new language, take a cooking class
- **Benefits:**
  - Improves cognitive reserve
  - Protects against age-related damage

Brain Health: How to Take Care of Your Brain

Food: MIND Diet: Mediterranean-Intervention for Neurodegenerative Delay

- Fish- Omega 3 fatty acids help with brain function
- Green leafy veggies- Vitamin K slows cognitive decline
- EVOO- Polyphenols (antioxidants) improves learning/memory
- Blueberries- anthocyanin (antioxidant) increases mental sharpness

Water- staying hydrated is important


Brain Health

A little R and R...

Sleep
• Approximately 8 hours recommended

Take a REAL vacation
• Set-up out-of-office replies
• Unplug!

Source: https://hbr.org/2014/07/the-right-way-to-unplug-when-youre-on-vacation

Image from The Battleship New Jersey
Brain Challenges: Memory

I have this cool app that says if I play it every day, it will help with my memory!

Sounds neat. Does it work?

I'm not sure... I keep forgetting to play it.

Image: http://failureconfetti.smackjeeves.com/comics/1299415/memory-app/
Memory Challenge 1

Look at this list for 20 seconds and try to remember as many words as possible...

SURF  WAVE  
OCEAN  WATER  
TIDE  UMBRELLA  
SAND  LIFEGUARD  
SEAGULL  ATLANTIC
Memory Challenge 2

Please watch the following 2 minute Honda commercial. Memory recall questions will be asked after the commercial.

Source: https://www.youtube.com/watch?v=x13DH6olcQ&feature=player_embedded
How to Boost Your Memory

Lifestyle changes:
• Exercise
• Drink coffee- caffeine helps store memories better
• Lower stress
• Be social- stimulating conversation has been shown to help executive functioning skills, memory

Practical Tips:
• Jot down a note (Take time for it to register in the brain)
• Set notifications/alarms as reminders
• Create a goofy visual/story to remember names/parking spots… Nick Hudson (Santa in a River)
• Purchase GPS tracker for keys

Source: Better Homes and Gardens, Total Recall, September 2016
Brain Challenges: Perception
Perception Challenge

Directions:
Observe this picture...

Perception: Empathy

How can perceptions differ?

• Compare differences in perceptions of static images versus dynamic interactions such as telephone calls or meetings.

• Has your perception ever differed from a colleague? Try empathy, meaning putting yourself in someone else’s shoes.

• The supramarginal gyrus of the brain is responsible for empathy/compassion.

• To reinforce these neuronal networks of empathy:
  - Volunteer
  - Give back
  - Meditate/prayer- send loving thoughts and forgiveness to others... and yourself!

Source: https://www.psychologytoday.com/blog/the-athletes-way/201310/the-neuroscience-empathy
Brain Challenges: Positive Thinking

JUST LIKE MOONS AND LIKE SUNS WITH THE CERTAINTY OF TIDES, JUST LIKE HOPES SPRINGING HIGH, STILL I’LL RISE.

- MAYA ANGELOU
Today was the absolute worst day ever
And don't try to convince me that
There's something good in every day
Because, when you take a closer look,
This world is a pretty evil place.
Even if
Some goodness does shine through once in a while
Satisfaction and happiness don't last.
And it's not true that
It's all in the mind and heart
Because
True happiness can be obtained
Only if one's surroundings are good
It's not true that good exists
I'm sure you can agree that
The reality
Creates
My attitude
It's all beyond my control
And you'll never in a million years hear me say that
Today was a good day.
Positive Thinking: Brain

Repeat positive thinking and actions rewrites the brain for positive thoughts.

Enemies of Positive thinking:
- Fear of failure: think about your abilities
- Worrying: disrupt the thought to help you stop
- Complaining: remind yourself of all that you're grateful for

Survival is a state of mind:
Critical survivalist when faced with a difficult situation are trained to say to themselves: I WILL SURVIVE, I WILL NOT GIVE UP!

Source: http://www.backcountryattitude.com/survival_attitude.html

Images: https://pinterest.com
We've got a problem, Heart, what do you think we should do?

Let's COMPLAIN about it until it MAGICALLY DISAPPEARS!!!
Practical Take Away Tips

Write It Down

People remember handwritten notes better than typed notes.

Why? When taking notes by hand you are forced to be more selective as you can’t write as fast you type. One of the thoughts behind this idea is that you are already processing the information.

(Source: The Pen is Mightier than the Keyboard, Mueller and Oppenheimer)
Practical Take Away Tips

Partition Your Day

Task positive/task negative network parts of the brain.
- Task positive- active when focused on task and undistracted.
- Task negative- daydreaming mode.

Insula is the part of the brain that regulates this attention see-saw

Suggestion: Check email/social media/texts at designated times, not all day

Image: https://blog.dashburst.com/presentation/killing-time-ways-to-ruin-productivity/
Practical Take Away Tips

3 B’s of Creativity
According to Einstein, we think creatively when we are unfocused- the bed, the bath, and the bus.

There are benefits to mind-wandering:
- Generating future scenarios
- Reflecting
- Incubating new ideas

Suggestion: Keep a notepad handy to jot down these ideas!

(Source: Time’s article on Focus: The Hidden Drive of Excellence, Goleman)
Practical Take Away Tips

Step Outside of Your Comfort Zone

Optimal Anxiety- A little bit of anxiety can bring out the best in us.

How to infuse moderate anxiety?
- Step out of your routine
- Drive a different route to work
- Try a new lunch spot
- Go vegetarian for a week

The Buoyant Brain Conclusions

• Remember the brain can change!

• Take care of your brain.

• Exercise and challenge your brain to improve memory, empathy, and positive thinking.

• Implement practical take away tips.