TRAIN YOUR BRAIN!
(building mental muscle)
Lawrence Biscontini, MA, 
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I. INTRODUCTIONS
1. Nämaste! (“My inner peace meets, greets, and salutes your inner light”)
2. Lawrence’s Background & Golden Door Spa
3. Our Purpose Today:
4. Learning Tools/Equipment: (small box w/7 objects…)
5. www.findlawrence.com
6. Languages

II. THEORY
1. Major Sections/Areas of the Brain

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<th>PARIETAL LOBE</th>
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<td>LEFT SIDE OF BODY</td>
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<td>VISUAL DETAILS</td>
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<td>MEMORY OF IMAGES &amp; FACES</td>
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CENTER BRAIN
EMOTIONS
EXECUTIVE AND SOCIAL FUNCTIONS
FRONT
LONG TERM AND SHORT TERM MEMORY
MEMORY OF SOUND, SIGHT, SMELL IN SEPARATE PLACES

If I can be of assistance to you in fitness in any way, please contact me. Nämaste!
2. Major Functions of the Brain
   Including MEMORY: both LONG AND SHORT TERM, plus EXECUTIVE & SOCIAL, EMOTIONAL, LANGUAGE, MATH, AND SPATIAL SKILLS
3. Factors Affecting Function
   - MEMORY WORKS BEST UP TO 7 ITEMS
   - ↑CORTISOL = ↓MEMORY (CORTISOL KILLS OFF BRAIN CELLS!)
   - ↑SLEEP + REST = ↑COGNITIVE PROBLEM SOLVING
     - ↑GLUCOSE = ↑MEMORY
   - ↑ANTIOXIDANTS + CHOLINE= ↑MEMORY
   - ↑BACKGROUND MUSIC + NOISE = ↓MEMORY
   - ↑STORIES = ↑MEMORY, ↑LISTS = ↓MEMORY
     - ↑DEPRESSION = ↓MEMORY
     - ↑STRESS = ↓MEMORY
4. What You CANNOT Change
5. What you CAN Change by Training

III. PRACTICAL

Class Sample Script:

This class will help train your brain like a muscle. The more you use it the more results you will get. Your brain can get stronger. Just like in the gym, you will get tired after a certain number of repetitions, so only do what's comfortable. You will find some of these exercises easy and some difficult, just like working the other muscles.

SHORT TERM MEMORY WITH NO ORAL CUES
1. OPEN THE BOX AND TAKE OUT ITEMS 7 FOR GUESTS TO SEE.
2. PUT CONTENTS BACK IN THE BOX.
3. ASK GUESTS TO RECALL TO THEMSELVES THE ITEMS IN SILENCE ONLY

SHORT TERM MEMORY WITH ORAL CUES
OPEN THE BOX AND TAKE OUT ITEMS FOR GUESTS TO SEE, THIS TIME ONLY SAYING OUT LOUD THE NAME OF EACH ITEM
1. HAVE GUESTS REPEAT OUT LOUD TO THEMSELVES THE CONTENTS
2. PUT CONTENTS BACK IN THE BOX
3. HAVE GUESTS RECALL OUT LOUD TO THEMSELVES THE OBJECT NAMES

SHORT TERM MEMORY WITH A STORY
TELL A STORY WITH OBJECTS FOR EASIER RECALL OR MAKE ANAGRAM

1. ASK GUESTS TO RECALL WHAT IS YOUR NAME
2. Party Idea: My name is _____ ____. I’m coming to a party and I’m bringing (L__) and (B__). What are you bringing? You can or cannot come.
3. I’m going to the grocery story and getting milk. Next person repeats and adds one item. Continue until at least 7 items are chosen and repeated.
4. Rit’as Party Introduction: My name is Rita and I’m from Puerto Rico and I love to dance on a table. Next person
SPATIAL BRAIN EXERCISE: 5 MINUTES TOTAL

EXERCISE: Shapes in space

What we see is partly governed by what we expect to see related to past experience. Research on monkeys isolated specific areas in different parts of the brain that respond only to food (a yellow banana but not a yellow flower, for example), another area that responds to objects seen before, but not new ones (a large red balloon but not a small blue one), and a still different area that recognizes different faces.

The brain can perceive only one interpretation of a shape at one time. Our experience may lead us to expect that the "background" is less significant than what we see as a "shape" in the "foreground." We try to identify shapes with familiar objects ("If it looks a lot like a wrench, it's a wrench") and we can be wildly mistaken. The images on this page demonstrate some of those tricks of the mind.

How good are your right-brain compositional skills? Did you already identify these three familiar objects from the two sets of broken drawings on the two preceding pages?

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MEMORY BRAIN EXERCISE: 5 MINUTES
EXERCISE: MAKE THE 10 MOST LOGICAL PAIRINGS OF THE BELOW ITEMS. THERE ARE NO INCORRECT ANSWERS

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EMOTIONAL, CREATIVE, AND SPATIAL BRAIN EXERCISE: 5 MINUTES

What do you see?

One way of answering this question might be: “Some black lines on a blue page.”
Let’s change the question: What might this be?

FOCUS ON THE DOT IN THE CENTRE AND MOVE YOU HEAD BACKWARDS AND FORWARDS. WEIRD HEY...
SHORT TERM MEMORY BRAIN EXERCISE: 4 MINUTES
EXERCISE: BELOW THERE ARE 2 OF ALMOST EVERYTHING. WHICH
ARE THE OBJECTS THAT APPEAR ONLY ONCE?

Hint: Look for warm-blooded animals and the tea that is most pleasing to

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EXERCISE: Fox, goose, and grain

A "familial dilemma" is a variant of the old farmer, fox, goose, and grain riddle. It goes like this:

A farmer wants to ferry a fox, a goose, and a sack of grain across a river. However, his boat is only big enough to hold one at a time. If he leaves the fox and goose alone together on either bank, the fox will eat the goose. If he leaves the goose and the grain together, the goose will eat the grain.

How can he get all three to the other side?
Look at the chart and say the **COLOUR** not the word

**YELLOW**  **BLUE**  **ORANGE**

**BLACK**  **RED**  **GREEN**

**PURPLE**  **YELLOW**  **RED**

**ORANGE**  **GREEN**  **BLACK**

**BLUE**  **RED**  **PURPLE**

**GREEN**  **BLUE**  **ORANGE**

**Left – Right Conflict**
Your right brain tries to say the colour but your left brain insists on reading the word.
Preventing Brain Drain: Nutritional Strategies for Boosting Brain Power

By Monique Ryan, M.S., R.D.

What and when you eat and drink affects your intellect, memory and thinking. Have you ever postponed eating despite feeling hungry and then felt your whole brain come alive when you finally sat down for a meal? Your headache dissipates and your concentration and focus return. Just like your heart, your brain is an organ that benefits from optimal care and premium fuel. Nutrition can also affect brain chemicals, brain cell structure and function, and the ability of the brain to transmit electrical messages. Though nutritional neuroscience is in its infancy, there are specific foods that you can incorporate into your daily meals and snacks that may prevent brain drain.

Fuel First

While all the macronutrients in our diet—carbohydrates, proteins and fats—serve important functions, our bodies continually run on some type of carbohydrate fuel whether at rest or participating in mild- or high-intensity activity. Your brain is no different. In fact, your brain and other tissues in your nervous system are very dependent upon glucose for their energy needs and, except under conditions of starvation, it is their only major fuel. When our blood glucose levels drop below normal, we become dizzy and light-headed. Under normal conditions, your brain and nervous system require a minimum of 150 grams of glucose each day.

Practically speaking, your brain benefits when you consume your meals and snacks on time. Carbohydrate consumption boosts blood
glucose levels, which then slowly drop off over the next two to three hours. When levels run low, your liver can pitch in and send its own carbohydrate supply into the bloodstream. One of the biggest brain-drain mistakes you can make is skipping breakfast. We awake with low liver carbohydrate stores that have been steadily depleted overnight. Breakfast not only boosts blood glucose levels, but restores our liver fuel supply. From breakfast on, eating every three to five hours works well for many of us, but it is best to plan around your exercise and work schedule. It is also essential that you consume moderate doses of nutrient-dense carbohydrates, such as whole grains, fruits and vegetables, combined with some high-quality protein. In contrast, very large carbohydrate meals or high-fat meals can decrease alertness, as can sugar-laden foods.

**Nutrient Boost**

Emphasizing good food sources of specific nutrients in your diet can also give your brain a boost. Start with the mineral iron, which aids in the transport of oxygen in your red blood cells to your brain and within each brain cell. Adequate oxygen means your brain cells can metabolize fuel for energy. The level of oxygen that your brain consumes on a daily basis is significant and iron deficiency or anaemia is linked to shortened attention span and mental slurriness. Iron is also required for manufacturing brain proteins and the normal functioning of various brain chemicals. Iron-rich foods include lean red meat, pork, poultry, legumes, raisins, dried apricots and iron-fortified cereals. Men and postmenopausal women generally have lower iron requirements than menstruating women. A serum ferritin level is the most sensitive indicator of iron status.

Of all the vitamins in your diet, the B vitamins, mainly B₁₂, folic acid, B₉, thiamin and niacin, appear to be the most important for your brain health. Vitamin B₁₂ is essential for your nervous system and lack of this nutrient can result in degeneration of brain tissue, spinal cord and peripheral nerves. Good food sources of B₁₂ include animal protein foods such as milk, cheese, yogurt, beef and poultry. Vegans should ensure that they take a B₁₂ supplement, and absorption of this nutrient may be decreased in older persons. Vitamin B₉ or pyridoxine is needed for normal development and maintenance of the nervous system from conception to adulthood. Vitamin B₉ is found in wheat germ and whole grain cereals, pork, legumes, potatoes, bananas and oatmeal. Thiamin helps us extract energy from glucose and is found in breads, cereals and wheat germ. Niacin plays a role in the manufacture of many nerve chemicals. Good sources of niacin include chicken, salmon, peanut butter and wheat germ. Folic acid should also be emphasized in the diet as it helps to maintain good choline levels in the blood. Choline is involved in the formation of acetylcholine, an important neurotransmitter in the brain. Good sources of folate include orange juice, kidney beans and other dried beans, and dark green leafy vegetables such as spinach, asparagus and broccoli. Food sources of vitamin C include oatmeal, soybeans, cauliflower, cabbage, eggs and peanuts.

Our brains generate many free radicals, which are highly reactive substances that need to be kept in check. Antioxidant nutrients, such as vitamins C and E, can deactivate free radicals and are therefore important to brain health. Good sources of vitamin C include orange juice and other citrus fruits and juices, strawberries and green peppers. Consuming six or more servings of fruits and vegetables each day ensures that you have a very good vitamin C intake. Vitamin C can be found in leafy green vegetables, wheat germ, avocado, almonds, peanuts and sunflower seeds.

After body fat, brain cell membranes are the next richest storage area of fat. Omega-3 fatty acids, the same healthy fat found in fish, can be found in the most metabolically active parts of your brain. While the mechanisms are not clear, Omega-3s appear to enhance brain-cell communication.

**Building a Better Brain**

While you can emphasize good food sources of B vitamins and iron, and add more fish to your diet, a daily multivitamin mineral supplement providing 100 percent of the daily values ensures that you meet your daily requirements of these important nutrients without the concerns of excess supplementation.

If you reach for the stars, all you get are the stars, but I’ve got a whole new spin: if you reach for the heavens, you get the stars thrown in!

Final Take-Home Messages:

This program is conceived and offered at Golden Door Spas, which all proudly feature Reebok University programming and unique fusion creations like “Yo-Chi”®