Do you know you have three brains?
Dr. Paul MacLean, psychobiologist and Director of the Laboratory for Brain Evolution and Behavior at the National Institute for Mental Health proposes that our skull contains three separate brains called the “Triune Brain?” Dr. MacLean claims the three brains developed at separate times in our growth cycle toward higher thinking.

These interconnected brains are:

1. **Reptilian Brain**
   - Located at the base of the brain stem.
   - Oldest and most primitive brain that controls breathing, heart beat and basic sensory motor functions like balance and muscles.
   - Communicates safety and survival issues and physical pain.
   - The reptilian brain keeps repeating same behaviors, never learning from past mistakes.

2. **Limbic System**
   - Located in the center of the brain
   - Next oldest brain (sometimes called our “mammalian brain”) that is the “seat of our emotions.”
   - Communicates how we feel, records positively and negatively charged memories and controls how our body reacts to emotional situations.
   - The limbic system has extensive pathway connections to the neocortex (higher brain) and often makes value judgments. The limbic system needs to communicate with the neocortex to process emotions.

3. **Neocortex**
   - Located over the limbic system at the top of our brain.
   - Latest, largest (two-thirds of total brain mass) and most highly developed brain.
   - Contains the most neuron cells, the building blocks for intelligence and memory.
   - The neocortex is where high order thinking, reasoning, learning and problem solving occur.
   - Divided into left and right hemispheres that are connected by a nerve bundle.
     - The “right brain is more imaginative, abstract, musical, artistic and good at creative problem solving and identifying possibilities and options.
     - The “left brain” is more linear, realistic, logical, rational, orderly and good at developing and implementing processes, procedures and schedules.
   - Operating from the neocortex is the highest level of cognition. In this state there is no “negative emotional content” to interfere with clear thinking and performance. Survival issues in the reptilian brain and negative emotions in the limbic system block access to the neocortex.

Why is this knowledge important?
According to MacLean, these brains are “three interconnected biological computers, each with its own special intelligence, its own subjectivity, its own sense of time and space and its own memory.” It is helpful to know what portions of your triune brain you are operating from so you can “up-shift” from negative and unpleasant states to more resourceful and pleasant ones.

When you experience stress, fear, anxiety, low productivity, and frustration you can be certain you are operating from the lower portions of your brain. When you experience peace-of mind, positive mental attitude, sense of well being, self actualization, high productivity and happiness you know you are operating at the higher levels. All too often your two lower brains take control and give you a “roller coaster” ride not necessarily to your liking.

How do I know what brain state I am in and what I can do to “up-shift” to better state?
The **State-of-Mind Barometer** is a helpful tool that gives you a quick and general idea what parts of your brain you are functioning within. Your responses to the statements are a function of environment, changing life situations and your thoughts. The **Brain Tune-Up** tools help you “up-shift” to a more positive, pleasant and resourceful state.

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