

BRAIN RULES

12 Principles for Surviving and Thriving at Work, Home and School

JOHN MEDINA

JOHN MEDINA is a developmental molecular biologist. He specializes in studying the genes involved in human brain development and the genetics of psychiatric disorders. Dr. Medina holds joint affiliate faculty appointments at the University of Washington School of Medicine, in its Department of Bioengineering, and at Seattle Pacific University, where he is the director of the Brain Center for Applied Learning Research. He was the founding director of the Talaris Research Institute, a research center focused on how infants encode and process information at the cognitive, cellular, and molecular levels. Dr Medina is the author of eight books including *The Genetic Inferno*, *The Clock of Ages* and *The Outer Limits of Life*.

The Web site for this book is at www.BrainRules.net.

SUMMARIES.COM is a concentrated business information service. Every week, subscribers are e-mailed a concise summary of a different business book. Each summary is about 8 pages long and contains the stripped-down essential ideas from the entire book in a time-saving format. By investing less than one hour per week in these summaries, subscribers gain a working knowledge of the top business titles. Subscriptions are available on a monthly or yearly basis. Further information is available at www.summaries.com.

MAIN IDEA

While there is much that is still a mystery about how the human mind operates, “Brain Rules” are the twelve things scientists know for sure about how the human brain functions. If you have a better idea of how the brain actually works, you can then start to do those things which will help you get the most out of your brain.

“Most of us have no idea how the brain works. This has strange consequences. We try to talk on our cell phones and drive at the same time, even though it is literally impossible for our brains to multitask when it comes to paying attention. We have created high-stress office environments, even though a stressed brain is significantly less productive. Our schools are designed so that most real learning has to occur at home. This would be funny if it wasn’t so harmful. Blame it on the fact that brain scientists rarely have a conversation with teachers and business professionals, educations majors and accountants, superintendents and CEOs. Unless you have the Journal of Neuroscience sitting on your coffee table, you’re out of the loop. The 12 Brain Rules are meant to get you into the loop and introduce you to 12 things we know about how the brain works.”

– John Medina

Brain Rules	▶ 1	Exercise	Physical exercise boosts brain power quite substantially. To be smarter, incorporate some physical movement into your meetings and work schedule. You'll think more clearly that way.	Page 2
	▶ 2	Evolution	Humans are the smartest species, not the strongest. We thrive because we learn from our mistakes, solve problems and form alliances. To prosper, form good relationships with others.	Page 2
	▶ 3	Wiring	Every brain on the planet is wired a little differently from others. That means everyone learns their own way. If you cannot allow for this flexibility, your cognitive abilities are not fully utilized.	Page 3
	▶ 4	Attention Span	We don't pay attention to boring things, and we can only ever pay attention to one thing at a time. Forget about trying to multi-task. It can't be done. Pay attention to what you're doing.	Page 3
	▶ 5	Short-Term Memory	The human brain can only hold about seven pieces of information for 30-seconds at a time. Therefore, to learn something, repeat it over and over. Embed what you want to know through repetition.	Page 4
	▶ 6	Long-term Memory	If you want to remember something, remember to repeat your exposure to it periodically. It takes years for the human brain to consolidate a memory so stick with it.	Page 4
	▶ 7	Sleep	The more you sleep, the better your brain works because it has more time to arrange what you've learned. If you can nap while working, you'll be able to think even more clearly.	Page 5
	▶ 8	Stress	Long-term stress is bad because it dilutes your ability to think clearly. Do everything you can to minimize stress. Stress in one part of life always spills over into all other parts as well.	Page 5
	▶ 9	Senses	The senses always work in unison. To remember more, embed more sensory clues into what you're learning. Sight, sound, smell, touch and taste are catalysts to effective thinking.	Page 6
	▶ 10	Vision	Vision is the most powerful sense by a long way. Incorporate pictures into what you're learning and you'll remember 55% more information. Pictures trump reading every time.	Page 6
	▶ 11	Gender	Male and female brains are different. They process emotions in different ways. To help people learn more, pay attention to the emotional content of what you're saying and tailor it.	Page 7
	▶ 12	Exploration	Humans are natural explorers. We love to hypothesize, experiment, observe and then reach conclusions on our own. To use this, incorporate exploration into what you present.	Page 8

