**[Pharma & Healthcare](http://www.forbes.com/healthcare)**

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**Eat, Smoke, Meditate: Why Your Brain Cares How You Cope**

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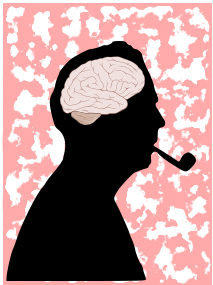
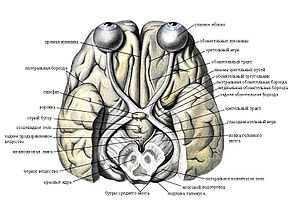
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Image via Wikipedia

Most people do what they have to do to get through the day. Though this may sound dire, let’s face it, it’s the human condition. Given the number of people who are depressed or anxious, it’s not surprising that big pharma is doing as well as it is. But for millennia before we turned to government-approved drugs, humans devised clever ways of coping: Taking a walk, eating psychedelic mushrooms, breathing deeply, snorting things, praying, running, smoking, and meditating are just some of the inventive ways humans have found to deal with the unhappy rovings of their minds.

[Penetrating Postures: The Science of Yoga](http://www.forbes.com/sites/alicegwalton/2011/06/16/penetrating-postures-the-science-of-yoga/) [*[Alice G. Walton](http://www.forbes.com/sites/alicegwalton/)****Alice G. Walton*** *Contributor*](http://www.forbes.com/sites/alicegwalton/)

[The Perfect Marriage: Science Begins To Explain Why Antidepressants and Talk Therapy Go Hand in Hand](http://www.forbes.com/sites/alicegwalton/2011/12/26/the-perfect-marriage-science-begins-to-explain-why-antidepressants-and-talk-therapy-go-hand-in-hand/) [*[Alice G. Walton](http://www.forbes.com/sites/alicegwalton/)****Alice G. Walton*** *Contributor*](http://www.forbes.com/sites/alicegwalton/)

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But which methods actually work?

Most people would agree that a lot of our unhappiness comes from the mind’s annoying chatter, which includes obsessions, worries, drifts from this stress to that stress, and our compulsive and exhausting need to anticipate the future. Not surprisingly, the goal of most adults is to get the mind to shut up, calm down, and chill out. For this reason, we turn to our diverse array of feel-good tools (cigarettes, deep breathing, and what have you). Some are healthier and more effective than others, and researchers are finally understanding why certain methods break the cycle and others exacerbate it.

Last year, a [Harvard study](http://www.thedoctorwillseeyounow.com/content/behavior/art3132.html) confirmed that there’s a clear connection between mind wandering and unhappiness. Not only did  the study find that if you’re awake, your mind is wandering almost half the time, it also found that this wandering is linked to a less happy state. (You can actually use the [iPhone app](http://www.trackyourhappiness.org/) used in the study to track your own happiness.) This is not surprising, since when your mind is wandering, it’s not generally to the sweet things in your life: More likely, it’s to thoughts like why your electric bill was so high, why your boss was rude to you today, or why your ex-husband is being so difficult.

[Another study](http://www.sciencemag.org/content/315/5810/393.short) found that mind wandering is linked to activation of network of brain cells called the default mode network (DMN), which is active not when we’re doing high-level processing, but when we’re drifting about in “self-referential” thoughts (read: when our brain is flitting from one life-worry to the next).

Meditation is an interesting method for increasing one’s sense of happiness because not only has it stood the test of time, but it’s also been tested quite extensively in the lab. Part of the effect of mindfulness meditation is to quiet the mind by acknowledging non-judgmentally and then relinquishing (rather than obsessing about) unhappy or stress-inducing thoughts.

New research by [Judson Brewer, MD, PhD](http://psychiatry.yale.edu/people/judson_brewer.profile) and his group at [Yale University](http://www.forbes.com/colleges/yale-university/) has found that experienced meditators not only report less mind wandering during meditation, but actually have markedly decreased activity in their DMN. [Earlier research](http://www.ncbi.nlm.nih.gov/pubmed/20331548) had shown that meditators have less activity in regions governing thoughts about the self, like the medial prefrontal cortex: Brewer says that what’s likely going on in experienced meditators is that these “‘me’ centers of the brain are being deactivated.”

They also found that when the brain’s “me” centers were activated, meditators *also* co-activated areas important in self-monitoring and cognitive control, which may indicate that they are on the constant lookout for “me” thoughts or mind-wandering – and when their minds do wander, they bring them back to the present moment. Even better, meditators not only did this during meditation, but *when not being told to do anything in particular*. This suggests that they may have formed a *new* default mode: one that is more present-centered (and less “me”-centered), no matter what they are doing.

“This is really cool,” Brewer says. “As far as we know, nobody has seen this type of connectivity pattern before. These networks have previously been shown to be anti-correlated.”

So is being happy all about shifting our tendency away from focus on ourselves? Research in other areas, like neurotheology (literally the neurology of religion), suggests that there may be something to this. [Andy Newberg, MD](http://andrewnewberg.com/default.asp) at the [University of Pennsylvania](http://www.forbes.com/colleges/university-of-pennsylvania/) has found that both in meditating monks *and* in praying nuns, areas of the brain important in concentration and attention were activated, while areas that govern how a person relates to the external world were deactivated. These findings may suggest that for people who practice meditation or prayer, the focus becomes less on the self as a distinct entity from the external world, and more on connection between the two.  This reflects the idea discussed earlier where shifting attention from inside to outside is at least part of what quells unhappiness.  
  
What about using other tools like cigarettes, food, or alcohol, as a method for finding pleasure and calming the mind? Don’t these things take a person outside of him or herself, and move the focus from the inner world of stressful thoughts to something outside, or “other”? Looking forward to the next hit of caffeine, nicotine, or coke might seem like a valid method of moving attention from the inside to the outside, but if you look closer, it actually intensifies the unpleasantness.

Brewer uses the [example of smoking](http://www.sciencedirect.com/science/article/pii/S0376871611002535) to illustrate why addiction fuels negative thoughts rather than abates them. In addition to the pleasurable associations, smoking actually creates a negative feedback loop, where you are linking stress and craving with the oh-so-good act of smoking. So whenever you experience a negative emotion, craving returns and intensifies over time, so that you are actually even less happy than before. A cigarette may quiet the mind temporarily – during the act of smoking – but in between cigarettes is where things get bad, because craving creeps in. Though we’re using craving as the example, unhappiness, self-referential thoughts, or everyday worries can all be substituted in.

Substituting a carrot stick or other behavior for your actual craving (or other form of unhappiness) is a typical method of treatment, but it doesn’t often work, says Brewer, because the feedback loop is still there. Addressing the process itself with other methods (like meditation), which allow you to ride out the craving/unhappiness by attending to it and accepting it, and then letting it go, has been more successful, because it actually breaks the cycle rather than masks it.

So if you’re dealing with unhappiness of any kind, whether it’s every day worries, or more severe depression or anxiety, the method you choose for coping matters. Finding one that solves the problem – breaking the cycle, rather than masking it – is crucial.

What type of coping method do you use?