INFORMATION ABOUT THE BIOLOGY AND TREATMENT OF EMETOPHOBIA

ADULT VERSION

NO VOMITING

The first thing you need to know about treatment is that you do not need to make yourself vomit. Vomiting is not part of exposure therapy because the problem is not vomiting; it is anxiety. Treatment with exposures will focus on slowly raising your anxiety to about mid-level and helping you to recognize, assess and tolerate the feeling without using a safety behavior or any attempt to calm down.

GET BACK ON THE HORSE

For as long as humans can remember, "get back on the horse" has been the accepted treatment for fears. If you fall off a horse and don't get back on immediately, then at some point you will never get back on. I suppose today the equivalent might be "get back on the bike; back on the skateboard; back on the surfboard; back behind the wheel."

Anxiety and fear, regardless of how severe, is a universal experience. If something is dangerous and could hurt you, you'll naturally be afraid of it. Problems arise when you find something dangerous that isn't. This is called a "perceived threat." Most of the time, people can tolerate this fear, so they get back on the horse. Before long, they're riding again with no fear because falling off a horse and being critically injured or dying is rare.

Vomiting is one of those things in life that *everyone* hates. However, it isn't dangerous. It can't hurt you one bit and in fact, it's meant to rid your body of poison or toxins from disease, so it actually helps you. Peter Silin, a now retired therapist said, "vomiting is your body's way of caring for you." Biologically, vomiting is "normal, natural, and neutral." It is normal because everyone does it. It's so easy a child can do it. It's natural because it is an automatic response that we don't have to think about to rid our bodies of waste and toxins, much like urinating or defecating. We have limited control over any of these bodily functions. We can feel them as imminent and get to a bathroom, but we cannot put any of them off when they really need to happen. Vomiting is neutral because on the one hand it is nasty and no one likes it, but on the other hand, it saves our lives.

EXPOSURE

For most patients, the thought of exposure is terrifying. It is important to know that exposure therapy means beginning with very simple, easy things like words or phrases, followed by drawings, cartoons, pictures of nauseous people, and so on. The idea is that you will allow your anxiety to rise, but never to the level of panic, and you practice doing nothing to try to control or lower your anxiety. Things like breathing slowly or relaxing muscles or telling yourself things like "I won't vomit" are actually safety behaviors. Safety behaviors are just that, attempts to feel safer. Unfortunately, they confirm to you that you are in 'danger' and will need to be gradually eliminated. The idea of not controlling anxiety may be foreign to you but with practice, you will get the hang of it. Trying to control and remove the anxiety actually perpetuates it.

You are already thinking and feeling distress about your fear *all the time*. Treatment is not asking you to do anything that isn't already happening. Treatment is just going to do what your brain is doing with a plan to make it

less scary. Your nervous system is already forcing exposure by making you think about it to help you overcome it. Treatment will help your brain finish what it is trying to do and stop the things that keep it from working.

NO SURPRISES

The exposure process will be scheduled and planned. Each step will be described first so you know what to expect. You can say, "yes," "no" or "not yet" to any of the steps. Rather than think of an exposure as an either/or, think of it as a continuum. You may feel unable to do something at a challenging step and are tempted to quit that step. Part of the treatment is helping you creatively think about how to break the step down into smaller steps.

TERMINOLOGY USED

Talking about this phobia is hard for most patients and quite possibly triggering. Especially at the beginning of treatment, caution will be used to avoid accidental triggers. However, it is still possible that might happen. For example, as you give your background, you might think of distressing experiences. Or the therapist might say something triggering. Often words describing the phobia are triggering and facing those challenges will be the first step. It is important to understand that successful treatment does require feeling anxious.

THE PATIENT IS IN CONTROL

With exposure therapy, the intent is to provide you with a sense of control over the entire course of treatment. Before doing an exposure together you will be fully informed about what you are about to see, and then *you* will make the decision as to whether you see it or not. If you cannot do the exposure, or cannot do it today, there should be no judgment from your therapist. You are free to take the rest of the session to talk about other issues unrelated to the phobia if you would like.

GOAL-SETTING

Setting goals for yourself is an important way to measure success in therapy. Of course, everyone has the goal of "not having emetophobia anymore." However, it's best to come up with some goals that are more specific and measurable. Some of the goals other patients have come up with are:

- Getting pregnant or having children
- Traveling
- Going ahead with a surgery or medical procedure
- Getting on to or off anti-anxiety or other medication
- Returning to school or work
- Sending one's children to school, parties, sleepovers, or playground
- Eating out at a restaurant
- Trying new foods
- Going to someone else's house for a meal or an overnight

THE IMPORTANCE OF HOMEWORK

After the session, homework will be assigned. This may be in the form of reading or listening to something about your treatment. It may also be practicing exposures that you have already done together in session or sending you

out on your own for a "real life" exposure such as eating in a coffee shop or restaurant. It might involve giving up one or more safety behaviors. These homework assignments are not only important, they are *imperative* for your treatment. Success comes through the consistent completion of homework exercises.

THE S.U.D. SCALE

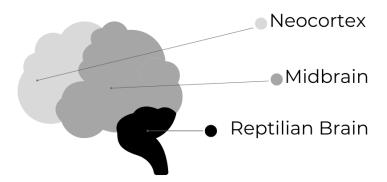
Throughout treatment, a scale from 0-10 will be used to measure your anxiety and ensure that it is neither too high nor too low. SUD stands for "Subjective Units of Distress." The key word is "subjective" which means that the number you give cannot possibly be wrong, as it is your number. On the scale, 0 means no anxiety at all, and 10 means the worst panic possible.

THE BRAIN MADE EASY

The human brain is the most complicated, intricate, and fascinating entity in the known universe. Scientists have mapped much of the brain and know a lot about it, but there is still much that we do not understand and don't know exactly how it works.

The brain is a bit like a bunch of organs all squished together. So, there are many different parts, all of which are complicated. The various parts work together in systems that produce the results of doing the work of our brains. To simplify here is an illustration that divides the brain into three parts.

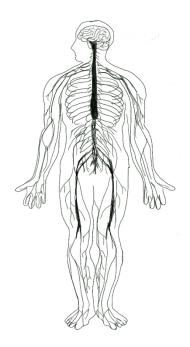
THE 3-PART BRAIN



The first part is the oldest from an evolutionary perspective. We'll call that the *reptilian brain*. It is sort of at the back of your head, in the middle, at the top of your spinal cord. The second part is called the *midbrain* and the newest part at the front (your forehead) is called the *neocortex* or "new brain" as it is newest from an evolutionary perspective. The neocortex is responsible for those functions that separate us from all other mammals.

The midbrain is responsible for many things such as walking, talking, seeing, hearing, breathing, heart-beating, emotions, music, art, envisioning, creativity and so on. The neocortex is responsible for reason, logic, mathematics,

organization, and what we call executive functions. As the brain is at the top of your spinal cord, changes in the brain are felt in or through the body, or they're carried out through the body. So, when the brain sends a signal, it's sending a signal to some other part of your body, and that part of your body is responding. It is as if the brain really looks like this continuing down the spinal column and out to all your nerve endings.



The 'reptilian' brain consists of several parts, but the most important part relative to anxiety disorders is called the amygdala. It's the Latin word for "almonds" because the amygdala are two almond-shaped organs. The amygdala have one primary function: to keep you alive. What does a reptile need to know other than to kill something and eat it before it kills and eats you? We also call this the "survival instinct." We use the word "instinct" because we don't have to think about it. Survival is an automatic response.

When triggered from a threat or perceived threat, our amygdala can only send out one message: "Danger! You're going to die!" It's a bit like sounding a fire alarm. When you hear it, you may freeze for a moment but if there's a bomb or a fire, then you will run like a cheetah. It's been said that when the brain senses danger, the amygdala can fire in 1/5000th of a second or 5000 times per second. (This may be an exaggeration. However, the amygdala are faster than a wild stallion, while one's thought process is a slow-but-steady mule.) A thought takes at least one second, maybe two or three. Meanwhile you've been told 15,000 times that you're going to die. That's why phobias are really really scary.

The body's nervous system or system of nerves at rest is called the "parasympathetic nervous system." This is a calm mental and emotional state where your heart is beating slowly but surely, your breathing is steady, and you haven't got a care in the world. Once the amygdala fires the danger signal, however, your brain automatically switches your body over to what is called the "sympathetic nervous system." Here is what goes on in your body when that happens:

- 1. An outpouring of adrenalin surges from your adrenal glands.
 - a. At low levels adrenalin feels like "butterflies in the stomach."
 - b. At higher levels people experience a "jolt" like electricity going through their body.

- c. At very high levels people have been known to gain super-human strength.
- 2. Heart rate increases.
- 3. Breathing becomes shallow and fast.
- 4. The body heats up.
- 5. Palms or other areas begin to sweat to release the heat.
- 6. Muscles tense, ready to run or fight.
- 7. Bowels loosen.
- 8. Digestion slows down or stops, causing nausea.

This sympathetic nervous system prepares you for "fight or flight." We now know that it also can make you "freeze" (which is usually temporary) or "fawn." Fawn is a newer insight which refers to the way in which people act by trying to please a dangerous person or calm the situation down. It is most prominent in those with a history of parental abuse and currently experiencing domestic violence or chaotic situations. With emetophobia, one is most likely to flee or if someone tries to hold you back from fleeing, then you will fight. "Fight" may also describe an emotion of intense anger that people with emetophobia feel toward others, for example, if they come to work sick or put a vomit scene in their movie.

When the amygdala fires because of a *perceived* danger (like vomiting), the body reaction is exactly the same as if you see a grizzly bear coming at you. If someone else is ill, you will try to run away if you can or avoid going near them in the first place. This is the "flight" or fleeing reaction. If you feel nauseous yourself, you cannot run and you cannot fight. So, although you still get all these body reactions you will also get a marked feeling of doom. It's a catastrophic feeling like you're caught in the middle of a bloody murder scene. It's horror and terror with no way out. You may feel as if you cannot breathe.

You might think you're going crazy or you're literally dying. You aren't, but that's the feeling. You can get a pounding headache and even chest pain because of your heart thumping so hard. You can get very dizzy and lightheaded because the oxygen is needed more in your arms and legs for the running and fighting. Your vision could go blurry because clear vision is not as important since grizzly bears are blatantly and manifestly obvious. As a result of all these body sensations and feelings, you may get to the point where you feel almost like you're not in reality. Some say it feels like you're swimming in a milkshake. Sometimes it is also described as tunnel vision. This non-reality feeling we call dissociation, derealization or depersonalization.

Now, if you get all of these feelings at once, or any group of them to a very high degree, we call that a *panic attack*. And it feels awful. It won't hurt you, but that is how it feels. Panic attacks only last about 15-20 minutes unless you employ a safety behavior. Using a safety behavior means you think there is an actual danger, which maintains the alarm. People with emetophobia are very skilled at employing invisible safety behaviors like reassuring themselves that they won't be sick.

Your neocortex at the front of your brain *knows* there's no danger, but it has not yet *learned* it — which sounds silly but there is a clear difference. Your body fully believes that there is a danger, and it is only acting accordingly and automatically. The learning must take place in a different way than simply having your emetophobia triggered and enduring or "white-knuckling" your way through the situation.

The good news is that it is possible for the front of your brain (neocortex) to talk to the back (amygdala). But it must do so in a structured way so that slowly and carefully your amygdala and your body *learn* that the danger is not real. With exposure therapy done properly, we want to activate your amygdala just a bit, so you're feeling no

more than maybe 5-out-of-10 afraid. And then you stay in the scary situation, for example, looking at a word or a drawing or a picture, until you can take note of, understand, and tolerate the fear, or until you no longer feel afraid. It's also important that you employ no safety behaviors while you're in the situation. Your amygdala will then learn that there's no danger because you've done nothing, and you're fine. As you've always *done something* to make yourself "safe" at least part of your brain believes that there *must* have been some danger and thank goodness you used that safety behavior, or you would have been eaten by a grizzly bear. If you can literally do nothing in the face of 5/10 anxiety, then it's like your amygdala says to itself: "There must be no danger because they're just *sitting there* (doing nothing)."

In your brain, for reasons we never really know, a superhighway was built from the stimulus: nausea or vomiting to the amygdala response: run/stop myself from vomiting. That superhighway will always be there; there's nothing we can do to remove it. However, with exposure and response prevention therapy we can build a new highway from the stimulus to a place of calm. The point is not eliminating the fear. The point is being able to tolerate the fear in many situations so that eventually it either stops showing up, or it shocks you for a moment, but you recover immediately.

FUTILITY AND HOPE



This illustrates that the road to recovery from emetophobia is long, often uphill, and fraught with fear. However, you are already on that road. You are afraid most of the time. If you exit the road by avoiding what you fear or implementing a safety behavior, this will take you around in a circle or deposit you back on the road, still in fear. It may feel good momentarily when you are off the road, but it will take you back again and again in a never-ending roundabout of anxiety. And yet there is hope. Remaining on the road and plodding away, one step at a time, will get you to your destination. Hope is so very important because an endless circle of futility and fear is such a terrible existence. Even though emetophobia is a terribly debilitating condition, it is highly treatable and many people have completely recovered from it.