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Stress and Traumatic Life Events

Many studies clearly indicate that traumatic life events can trigger biochemical depressions—as well as numerous other physical disorders. In fact, stress precedes most episodes of illness and is associated with the onset of 70 to 80 percent of depressions.

Since severe stress can create both physical and emotional problems, we cannot assume an illness evolving from psychological stress is necessarily purely psychological. Each of us has our genetically inborn body system vulnerability—the part of the dam which cracks first. The same degree of stress may give Joe an ulcer, and make Mary wheeze from asthma; it may overwhelm your best friend with feelings of inadequacy and leave you feeling challenged and alive.

LOSS AND DEATH

Life events scales have been devised which list all the stressful events in our lives and rate them according to severity and the likelihood of precipitating illness. The most weighty and potentially damaging

stress of all is when someone we love dies, especially if we are quite dependent on them, such as in a long-term marriage or a child's loss of a parent.

Other potentially incapacitating stresses are divorce, illness, and various losses such as failure of a business, loss of money, a demotion in position or importance, and consequent losses of self-esteem. When the person suffering the loss does not have enough support from her family and friends, the damage is multiplied.

We all have problems with loss and need to work to prepare ourselves not to overreact to it. We have numerous other options besides breakdown, but we need to understand them before we can use them.

Because of its finality, the most devastating loss we can sustain is the death of someone we love. This loss is also the most complex to work through because we can no longer interact with the real person but must interact with our memories of her, with what we have been able to incorporate into our psyche.

Approximately eight million Americans will experience the death of an immediate family member this year and 10 to 20 percent of their grief reactions will progress to depression. Loss is the bottom line for all the psychological explanations of depression. There is nothing about which we feel more helpless and immobilized, and no change we may more innately want to resist. Nothing challenges our adaptive and coping capabilities more than loss by death. By its very nature of engendering our sense of helplessness, it sets us up for extreme stress reactions.

Attachment and bonding are powerful forces, and the pain of severing any emotional bond can be hard to bear, but the brutality of the experience is directly related to our philosophy about life, about continuing on and about losses. Those who believe in reincarnation or who have strong spiritual beliefs in the conti-

nity of life after death do seem to deal with loss better than those without such belief systems. Those prone to extreme dependency, bitterness and a sense of victimization, or to spiritual doubt and disbelief are vulnerable to exaggerated, prolonged loss reactions.

Yet no matter how you may prepare yourself, when loss comes through the death of a loved one it can be temporarily overwhelming. The key word is "temporary." It must be temporary to avoid a total erosion of your life and health. You must reach out for support and help. You must not withdraw and isolate yourself. If you have no close friends or family to turn to, you must find support organizations, telephone hot lines, church groups, whatever and whoever will lend you an understanding, supportive, caring ear, along with positive suggestions for how you may get through this period without too much damage. (You will also find some reading suggestions in the bibliography.)

Remember that any temporary destructive escapes will only make you feel worse in the end. Alcohol, drugs and other self-abusive behavior will directly deplete your brain's chemical resources for fighting stress or depressed feelings. Force yourself to eat well, and make sure to use the supplements recommended in this book.

We always have choices—we can eat or starve, we can sleep or wake, we can wallow or win, we can emotionally lie down and give up or we can keep searching until a new life line is cast our way.

MOURNING OR DEPRESSION?

Pure grief is temporary. Initially intense and seemingly overwhelming, it remits as time goes by. The

bereaved may be consumed with sadness and tears, disbelief, thoughts of the lost one, and so on. This can be constant to begin with, but as regular life continues, the grieving feelings will begin to come and go. Your basic mood improves between bouts of acute feelings of grief. In time, these intense feelings of loss come less and less frequently as a new life is developed. This normal grieving process can take anywhere from six months to two years.

"Uncomplicated bereavement" is the psychiatric label given to this normal grief response, even though, temporarily, it can look like a full depressive syndrome with poor appetite, weight loss and insomnia.

Grieving is abnormal when it gets worse with time or is prolonged and protracted. The grief periods exceed the relief periods. Feelings of worthlessness, prolonged or marked impairment in functioning and slowed activity indicate that depression has set in.

The psychological process of grieving is important to experience. That is why we have funerals, wakes, shivas. These procedures are for the survivors, not for the departed. It is healthy to immerse oneself in the feelings of loss in order to express and gradually release them. Unexpressed, unacknowledged grief cannot be released.

Because they have avoided clear acknowledgment of their loss, many of my patients progress to later depression. They have not attended the funeral, they have never visited the gravesite (if there is one), they have refused to "release" the lost one. This holding on keeps them emotionally bound and leads to depression.

One person in particular comes to mind. Janet was young, intelligent, beautiful, happily married, with everything going her way. She was also depressed.

As an only child in white South Africa, Janet had

developed an intensely loving and dependent bond with her mother. Her mother had died six years earlier. Janet did not attend the funeral and on some level continued to hold on to her mother. She desperately wanted a child but had had two miscarriages. As the problem became more evident, I asked her to confront the situation by writing a "goodbye letter" to her mother. She was to say everything she would want to say if her mother were sitting right before her for the last time. At the end, she was to say goodbye and to let go. She first responded with horror, cried and said she couldn't do it.

Finally, after a few weeks, at my urging, she spent several painful days writing the goodbye letter. At last she truly mourned and it had a remarkable effect on her. The depression lifted. She soon became pregnant and was able to carry the baby to term. She had finished therapy by then, and it was wonderful later to receive a photo and announcement of the birth of her beautiful baby girl.

Saying goodbye does not mean erasing the person from your mind. It involves holding onto your loving, good thoughts about him, and giving up your own feeling of loss and of being torn apart.

The grief reaction is one of the most stressful psychological events we endure. There is some suggestion that even in a "normal" grief reaction biochemical changes occur in the brain. We know, for example, that grieving infant monkeys who were separated from their mothers recovered from their grief when treated with an antidepressant drug.

UNIQUE RESPONSE TO TRAUMA

We all have traumas in our lives, and each of us has different ways of responding emotionally to these

unfortunate events. We are stressed in varying degrees by all painful experiences, but some of us react more intensely than others.

One of the most positive persons I have ever known responded to the death of a loved one by sitting and watching television for two solid days and nights—after which she miraculously bounced back to being her usual cheerful self.

Another, very negative person decided she loved a man from her past with whom she had had no contact for years and who had subsequently married. She built up a fantasy about their undying love and proceeded to pursue him. When he did not respond similarly, she slid into a deep depression and entertained ideas of suicide.

We don't yet completely understand the myriad factors which determine the intensity and type of response each individual may have to stress, but flexibility and adaptability are significant parameters in determining our ability to cope with the vicissitudes of life.

Researchers believe we are born with certain patterns of reaction, some of which make life harder and others which make life easier. Studies on newborn babies have clearly indicated extreme variations of reaction to the same stressful stimuli, such as unpleasant noise. This is not a learned response, but something inherent. Perhaps these reactions to unpleasant noise (that is, to stress) are mediated at a purely biochemical level. If this is so, the intensity of the reaction might then be determined by the intensity of the electrochemical discharge which is created by stressful stimuli, and by the subsequent imbalance created by these biochemical changes brought on by the stress reaction. Perhaps the ultimate degree of reactivity and sub-

sequent chemical disruption is genetically determined.

In an interesting study, a group of rats was subjected to the stress of immobilization for thirty minutes. During and following the stress, their amino acids were measured. Some of the amino acids were decreased and others were increased by the stress, and the patterns of response were consistent from animal to animal. But the magnitude of the responses varied considerably, with some rats having much greater chemical changes than others, suggesting the possibility of individual biochemical patterns of reaction to stress.

Optimum nutrition, healthy habits of living, and cultivated "right thinking" dramatically help to protect us from the potentially damaging effects of stress by decreasing the magnitude of our biochemical stress reactions within the framework of our own body systems.

WHAT IS A BIOCHEMICAL STRESS REACTION?

Emotion per se is the experience of physiological and psychological arousal. You not only experience fear in your thoughts—you sweat, your heart pounds, your stomach turns and your muscles tense. Fear, hate, love, loneliness—virtually any emotional state can and does cause biochemical changes in your body. The critical factor is whether the emotion is positive or negative.

Technically, a stress response is a physiological event during which your bodily chemistry and reactions change in response to your environment. So really any emotion constitutes some kind of stress. But the intensity of any stress or emotional reaction

is created by how we personally and uniquely perceive what happens to and around us as well as by our individual biochemistry.

Two young American women, along with two Indonesian boatmen, were lost on a small boat in the South Seas for twenty-one days. When they were rescued, the women only needed a good meal and a full night's sleep to recover, while the men were treated for shock and dehydration. What made the difference? The men had been convinced they were going to die, and lived in a state of panic for most of the time at sea. The women were certain of their eventual rescue. Fear changed the men's chemistry and, in essence, poisoned their systems with stress chemicals.

Even though it has been researched intensively, the biochemical stress reaction is too complex yet to be fully understood. We do know there is no "single" stress hormone, but that, in stressful situations, our body temporarily produces more of certain chemicals. Three of the most important are epinephrine, norepinephrine and cortisol.

Epinephrine (adrenaline), the "fight or flight" hormone, accounts for the feeling you get following a near accident in your car, sounds of trespassers in your backyard at night, and so on. It is secreted by your adrenal glands. Your body requires a certain optimum release of adrenaline for best functioning; either too much or too little will interfere with your mental and physical performance. Any arousal by either pleasant or unpleasant stimulation will increase your adrenaline levels as compared to a neutral non-arousing condition.

Norepinephrine is one of the powerful mood determining neurotransmitters we've already discussed. It also functions as a hormone in some body reactions.

When it acts as a neurotransmitter, it is secreted by certain brain cells in the area where it exerts its action, and when it functions as a hormone, it is secreted by the adrenal glands.

When you experience chronic stress, your body is constantly creating and utilizing extra amounts of norepinephrine. And when there are not enough precursors available for this continuous replacement, depletion with subsequent low moods or depression can follow.

Besides affecting norepinephrine levels, stress has been found to deplete your brain levels of tryptophan directly, by changing how tryptophan binds to a substance called albumin, which carries tryptophan into your brain.

Cortisol (cortisone) is a multifunctioning hormone also secreted by your adrenal glands. Among other things, it increases the excitation of your brain and causes the release of other body hormones. The chronic excess cortisol produced by sustained stress will increase the amount of tryptophan used by your body. This makes less available for the creation of serotonin in your brain and can indirectly lead to the biochemical disturbance of mood disorders.

NOREPINEPHRINE VERSUS EPINEPHRINE

Under normal, nonstress conditions norepinephrine production is four to five times greater than epinephrine (adrenaline) production. In other words, they exist in an approximate four to one ratio.

Your body's ability to produce norepinephrine increases with physical fitness. Physically fit people also release less norepinephrine per workload, but can attain overall much higher levels during in-

creased exercise than can those who are sedentary. This supports the obvious: a fit person responds better physiologically to stress than an unfit person does.

Some research indicates that physical work or exercise causes a 200 percent increase in norepinephrine and a 50 percent increase in adrenaline. This is one reason physical activity can elevate your mood. Conversely, psychological stress causes only a 50 percent increase in norepinephrine but a 100 percent increase in adrenaline. Thus psychological stress reverses the usual normal ratio from four to one to one to two and upsets the normal balance of these substances.

Perhaps norepinephrine is more important to daily bodily processes than is epinephrine, because it exists in greater supply under normal nonstress conditions and because it is conserved by our bodies—unlike adrenaline, which is entirely metabolized and excreted in the urine.

Research has shown that the better you secrete norepinephrine and adrenaline in response to acute threat or challenge, the greater is your well-being and performance efficiency—up to a point. If you are regularly stressed and secreting these chemicals on an ongoing basis, you will have more sickness and earlier death. Also, animal studies have shown increases of norepinephrine release following acute stress and an ensuing depletion of stores after chronic stress. It is as if intermittent stress is okay, even desirable—but continuous stress can spell disaster. If you are going through a period of consistent stress in your life, but are not depressed, using the basic vitamins and minerals mentioned in Chapter 5 and a balanced amino acid preparation can help protect you from some of the physical and psychological consequences of that stress.

CONTROL VERSUS HELPLESSNESS

Even if you are exposed to chronic adverse events, you will have less adrenaline response to them when you feel "in control." The damaging chronic adrenaline responses occur when you are feeling helpless and not in control.

If I'm moving to a different house because I love it and have chosen to live there, it's very different from moving to a different house because my husband has left me, the bank has foreclosed on the mortgage and I am unable to think of any other resources. But even in this situation it's important for me to exercise my choices and to get help in creatively recognizing all my positive alternatives, if I'm unable to think of them on my own—in other words, to take some control of the situation.

Compared to those who never get depressed, the person prone to depression is more inclined to emotional passivity and to not taking control, even when not depressed. This behavior can be extremely hazardous to your health. In recent research it was found that those who felt helpless showed little or none of the normal expected changes in brain norepinephrine and adrenaline when they were challenged with a difficult situation. They were probably already chemically depleted and depressed in the first place. We've seen that when rats are put in a situation where they are helpless, their brain norepinephrine will eventually decrease. But first the levels elevate as the rats attempt to escape and to cope. On the other hand, if the brain norepinephrine is artificially depleted in rats first, they display totally helpless behavior from the onset of their stress.

Psychotherapy and psychological methods can help teach you how to assume control over your life, even if you have been surrounded by those who be-

have helplessly. Helplessness is learned, and so, too, can a sense of control be learned. Take the attitude that something can always actively be done to take control. Certainly you do not have to be in control of all areas of your life—but the overall balance must tip in that direction for you to avoid the biochemical changes caused by chronic helplessness.

PROTEST VERSUS DESPAIR

Along with control or helplessness go the concepts of protest and despair. Protesting isn't complaining but taking control. Despair is the opposite, a passive submission. When baby monkeys are separated from their mothers but still able to see them, they fuss and vocally protest but their body chemistry shows no stress changes. When they are separated from and unable to see their mothers, they seem to despair, are very quiet and show high biological stress responses in their bodies.

I am certainly not urging all of you to go around being cranky and demanding, but studies have indicated that more outspoken, demanding people have tendencies toward longer life spans than passive, dependent types. Those with cancer and other life-threatening illnesses tend to have a better prognosis when they are vocal in and actively participate in the decision-making processes rather than being swept along by the medical machine.

A person who is willing to take some control is usually open to changes. The helpless person, of course, feels change is impossible. If you work to positively change your attitudes, behavior or life in any way great or small, it is well worth your time. The more you know about health and about maximizing your life potentials, the more you are able to imple-

ment what is necessary for you. The more you know about yourself and your illness—the more control you have. This mobilizes healing forces.

If you are physically or mentally suffering, you are usually bound to that plane of existence. Taking care of your body and mind machine on the physical plane provides the foundation or launching pad for movement into other spiritual and psychological realms.