

part 9—A New Start

Touching Up Our Picture of Health

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Have you ever just wanted to start over in life? Maybe not from infancy, but maybe looking back you can see where a different decision made at some point would have resulted in a totally different direction in your life. The acronym NEWSTART (for nutrition, exercise, water, sunlight, temperance, air, rest, and trust in God), as we mentioned last month, embodies a lifestyle that has given thousands a new start in physical and mental health, especially in combating the effects of stress.

When feeling stressed or troubled, I have found that one of the most effective remedies for me is exercise. I can be so uptight about something, but after sweating it out, I feel like a new person. And I am not alone in enjoying these results.

Exercise

A recent study at Duke University Medical Center compared the effects of exercise and drug therapy in treating depression in older people. The 156 depressed men and women were divided into three groups. Over sixteen weeks, one group took antidepressants, the second group undertook an aerobic exercise program, and the third group used both medication and exercise. Selected results included:

The participants in all three groups improved.

The participants taking antidepressants improved the fastest.

Of the medicated group, 68.8% were no longer classified as clinically depressed after treatment. Of participants in the exercise group, 60.4% were no longer classified as clinically depressed after treatment.

Of the combination group, 47.3% were no longer classified as clinically depressed after treatment.

While participants taking antidepressants improved faster than the exercise group, the

exercise group attained nearly the same success rate without having to rely on medication or experience its side effects.¹

Exercise directly impacts brain chemistry. Researchers in Queensland, Australia, have found that regular exercise boosts *serotonin* levels, improving mood and feelings of well-being. These levels remained elevated for some days after the activity. This study appears to validate exercise as one of the safest ways to raise serotonin.²

Depression and exercise influence each other in an inverse relationship. A sedentary lifestyle increases the risk of depression, and depression increases the likelihood of a sedentary lifestyle. Another important brain chemical heightened by exercise is *melatonin*. One hour of exercise on a stationary bicycle was found to double or triple melatonin levels according to one study.³ The results of this study become much more significant when you realize just how important melatonin is.

Sunlight and Sleep

Stress causes a host of physical ailments (high blood pressure, cancer, autoimmune diseases, and heart disease). Stress hormones can destroy immune cells, thus retarding the body's ability to heal itself. Several studies have shown that melatonin plays a vital role in decreasing the impact of stress on the immune system by restoring levels of disease-fighting T-cells. Stress hormones can also damage the brain and

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even affect our capacity to think clearly and remember information. Melatonin counteracts this by preventing levels of these stress hormones from becoming too high.

Slowing the growth of breast cancer cells is an example of melatonin's protection against cancer. It helps control the endocrine system by regulating hormones like testosterone and estrogen. A true brain protector, melatonin is an anti-convulsant, anti-psychotic, and an antioxidant. In fact, melatonin is thought to be our most protective, oxidative free-radical scavenger, aiding in the control of all other antioxidants. Melatonin appears to play a pivotal role in preventing oxidative damage to the nerves and brain.⁴ Oxidative damage acts like rust in the brain. If melatonin and other antioxidant defenses are low, accelerated aging will follow. Melatonin has also been observed to lower cholesterol, blood pressure, and risk of osteoporosis and cancer.⁵ What a powerful brain chemical!

Melatonin is considered to be the chemical expression of darkness that our bodies manufacture at night within our brains and intestines. For example, if the nerves in our eyes sense light through closed eyelids, melatonin production is stunted.⁶ While light at night inhibits the production of melatonin, exposure to sunlight during the day increases melatonin as well as serotonin production.

Probably one of the worst side effects of stress is insomnia or other sleep difficulties. Because melatonin production occurs late at night, going to bed at an early hour and sleeping in pitch dark is important. According to neurosurgeon Robert Iacono, MD, city lights and even digital clocks, nightlights, and candlelight can deter melatonin synthesis.

Nutrition and eating habits also influence melatonin production. That late-evening, three-course meal, the tradition of the masses, may be a great social occasion, but it's the pits for your brain. The insulin rise, after the heavy late evening meal, blocks melatonin synthesis.

Melatonin isn't stored in your body. You need a fresh supply each day. Animal research has confirmed that increased amounts of L-tryptophan can cause a fourfold rise in blood melatonin levels. Tofu, roasted pumpkin seeds,

gluten flour, sesame seeds, and almonds are examples of tryptophan-rich foods. Foods high in melatonin include oats, corn, and rice.⁷

Significantly, thyroid function and the production of both serotonin and melatonin all appear to be closely dependent upon each other. Stress, a poor diet involving deficiency of B-vitamins, or working at night can deplete levels of these three very important chemicals.

Low thyroid can lead to fatigue and low energy. If the thyroid system does not work long enough, gastric mucosa becomes affected. Intrinsic factor production is diminished and without intrinsic factor, we cannot absorb vitamin B-12. A deficiency in B-12 leads to a whole host of nervous system problems.⁸

As Dr. Robert Iacono puts it, "Stress is a neurodegenerative disease." It is one of the last-day plagues to destroy frontal-lobe function. The Bible says it this way: In the last days, "men's hearts" will be "failing them from fear" (see Luke 21:26, NKJV). I believe this heart is speaking of the spiritual dimension of the mind, and it will be failing as a result of uncontrolled fear or *stress*. Stress is probably responsible for a whole lot more of our physical ailments than we would like to admit. Taking this small glimpse at neurotransmitters can make us more aware of how critical it is to reverse the stress cycle.

Whatever difficulties we labor under, whatever overwhelming stress we experience (which weigh down soul and body), Christ wants to set us free. He desires us to lay our perplexities and troubles at His feet and leave them there. Trust in God revives physical and mental as well as spiritual health. The damaging effects of stress cannot lay hold of the one who lives a life of trust. Psalm 34:22 tells us that "none of them that trust in Him shall be desolate," because in Him all may find a New Start.

1 Internet, "Better Health" Channel, November 7, 2001.

2 Ibid.

3 *Proof Positive*, Neil Nedley, MD, p. 204.

4 *Total Wellness*, p. 148.

5 *Proof Positive*, p. 197.

6 Ibid., p. 202.

7 Ibid., p. 204.

8 Lecture by Robert Iacono, MD, in Redlands, CA.