

3.



How to Manage **Stress**

What does it do to you?

John Miller

Fit and healthy online



The '**How to Manage Stress**' series of four ebooks covers the following topics:

- Stress, what is it?
- Stress, where does it come from?
- Stress, what does it do to you?
- Stress, how to get ahead of it?

This is the third book in the series.

How to Manage Stress - 3. What does it do to you?

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Published by Fit and Healthy Online, November 2015

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Stress is nothing more than a socially acceptable form of mental illness.
Richard Carlson

3.1 HEALTH, FITNESS AND WELLBEING PROFILE

The mind is just one of many body systems in a complex ecosystem. The mind and the rest of the body systems are intimately connected. For instance, when we get mentally stressed, the stress registered in the mind is relayed to the body via the autonomic nervous system. Conversely when one of the other body systems becomes stressed, the stress is relayed to the mind. You may not realize how stressed you are until you complete this questionnaire but your body does. The body is incapable of dishonesty!

Circle the number appropriate to the degree to which you experience the symptoms on the left hand side of the page. The greater the symptom, the higher the score. Total the score at the bottom of the page.

| | None | | | Not much | | | A fair bit | | | A lot | | |
|---|------|---|---|----------|---|---|------------|---|---|-------|----|--|
| 1. Headaches (including migraines) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 2. Lack of energy and vitality | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 3. Candida - jock itch, thrush, tinea, furry tongue | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 4. Poor sleep. (Score 10 if on medication) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 5. Snoring and/or sleep apnoea (Use gas mask, score 10) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 6. Crook back, sore shoulders, stiff neck, RSI | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 7. Frequent colds, flu and sinus | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 8. Unsettled stomach, reflux. (If on medication score 10) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 9. Overweight - 1 point for every 2Kg overweight | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 10. Irritable bowel, constipation, diarrhoea, piles ... | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 11. Shortness of breath from asthma | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 12. Low level of fitness* | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 13. Chest pain, palpitations | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 14. Rashes, zits, skin outbreaks, psoriasis, itchy skin | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 15. Mouth ulcers, cold sores ... | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 16. Elevated blood pressure (Score 10 if on medication) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 17. Elevated blood cholesterol (Score 10 if on medication) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 18. Elevated blood glucose (Score 10 if on medication) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 19. Shakes, nervous tics and mannerisms | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 20. Grinding teeth | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 21. Drinking too much alcohol (2 points per drink/day) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 22. Smoking too many cigarettes (1 point per cigarette per day) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 23. Drinking too much caffeine (1 point per cup per day) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 24. Anxious about life, insecure, apprehensive | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 25. Are you depressed? (Score 10 if on medication) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 26. Are you in the wrong job? | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 27. Do you feel under-appreciated at work? | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 28. Do you have a poor work/life balance? | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 29. Are you unhappy with your family life? | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 30. Are you unhappy with your financial status? | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |

The score of a normal, fit and healthy human being is less than

(see next page, but not before you've completed the profile)

TOTAL

What does your score mean?

The score of a normal fit and healthy human being is less than 20.

If you got less than 20 you're in very good nick.

If you got less than 40 that's not bad, but the signs are there that certain parts of your body are not working as well as you'd like. You're starting to exhibit the signs and symptoms of general metabolic dysfunction.



Over 40 the amber light is flashing.

You're probably not as fit as you could be. You need a fitness program. You may be a little over weight, in which case you need a fitness program and the Hourglass Diet.

There's a chance there's evidence of musculo-skeletal dysfunction, in which case you're not strong or flexible enough to keep your body in alignment.

You probably need a holiday or some good distractors that distract you from feeling tired and miserable.



Over 80 and you're getting right into the red zone. It's time to take stock.

You certainly don't want things to get worse, which they will if you don't do something now. You could be in the wrong job or the wrong relationship. There's probably something going on in the top paddock that's not right and it's affecting the rest of your body.

If you don't do something now there's a good chance that pretty soon you could end up on the medical hurdy-gurdy.

It's definitely time for a lifestyle make-over.



Over 140 and there are high scores throughout the profile.

It's time to seek a counsellor and dramatically improve your lifestyle.

Step back, take a holiday and/or your long service leave. Get away.

Start making hard decisions, so that you get what you want.

Certainly though at any score you're redeemable. If you're serious you can halve your score in three months.

A lot of people brought themselves back from the brink by becoming fitter, getting themselves in the job and personal relationship they'd really like to be in.

Questions 1 - 20 deal with body system dysfunctions that are closely related to a lack of physical activity, a poor diet and an autonomic nervous system that's out of balance. You can correct them by

1. implementing a regular and systematic physical exercise program involving

- aerobic exercise
- strength training
- flexibility exercises.

2. Eating from the top of the Hourglass

- with vegetables, fruit and adequate protein and fat as the basis of your diet
- steering clear of wheat and milk
- eliminating the 'garbohydrates', (flour and sugar, on their own, combined and/or mixed with fat)
- eliminating alcohol, tobacco and aspartame
- supplementing your diet with vitamins, minerals, essential fats, and 'octane boosting' nutraceuticals

3. Meditating.

Questions 21-23 have a relationship with stress. As we become more stressed we tend to take more of the culturally acceptable chemicals.

Questions 24 - 30 are questions related to stress in your life, whether you're in the right job, whether you have the resilience to cope with your internal and external environment, if you're happy with your family and finances, whether you're doing the things unstressed people do to manage their stress.

If you're struggling with some of these issues, go and see a counsellor or a life coach. They'll give you a few signposts, act as a sounding board, help you set and then monitor progress towards your goals.

If you don't know what you want you're stuck in the headlights. If you don't go after what you want, you'll never have it. If you don't ask the question, the answer is always no. If you don't step forward you're always in the same place.

3.2

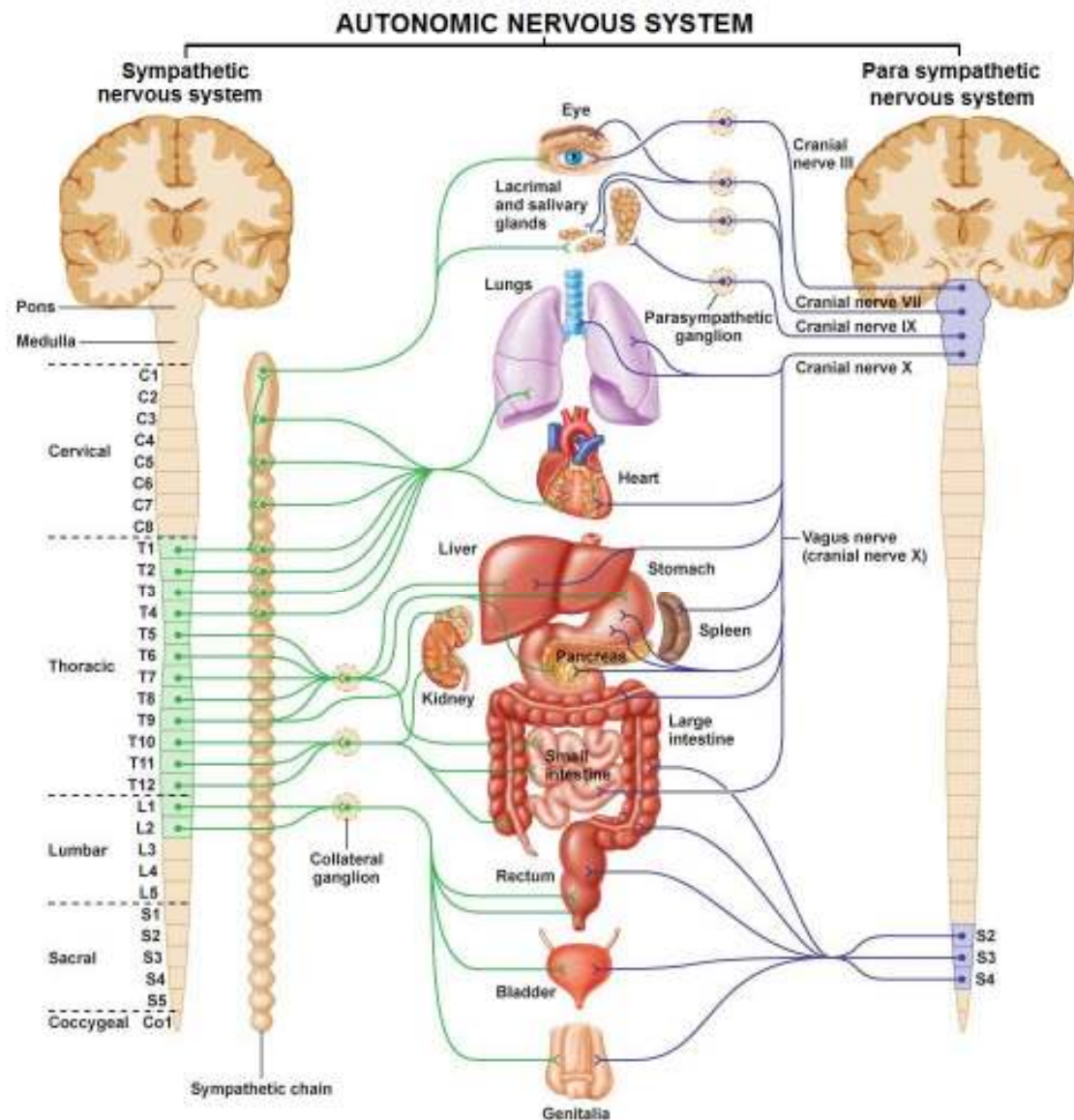
BODY SYSTEM DYSFUNCTION - AUTONOMIC NERVOUS SYSTEM RESPONSE -

For normal healthy people, the stress symptoms score on the **Health, Fitness and Wellbeing profile** on the previous page will be less than 20. They experience very few, if any of those symptoms.

If you're stressed, the first signs may be physical. The reason is that anxiety stimulates autonomic nervous system dysfunction. It is likely that a score that is high in physical symptoms will be accompanied by a high score for the emotional symptoms and that people who are fitter and vigorously physically active on a regular and systematic basis will score the lowest on both physical and emotional symptoms. There is a compelling reason to be physically active.

STRESS AND THE AUTONOMIC NERVOUS SYSTEM

The autonomic nervous system is running sub-consciously the essential functions of your body, digestion, respiration, brain activity ... all of it under unconscious control.



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The autonomic nervous system has two 'branches', the sympathetic nervous system, designed to help the body deal with stressful situations (whether they be good or bad), and the parasympathetic nervous system designed to bring the body back to a relaxed state of homeostasis.

When we become anxious and distressed there is a high likelihood that the anxiety will produce an effect on the autonomic nervous system. This will in turn produce an effect on the body. That is, the anxiety will lead to one or more body system dysfunctions.

The autonomic nervous system is a bit like the air conditioner in a large building. It is designed to maintain an even temperature throughout the day. It ticks over quietly in the background without the inhabitants being aware of it, except when it gets too hot or too cold.

THE SYMPATHETIC NERVOUS SYSTEM

RAMPAGING TIGERS - acute stress

The normal, healthy response to anxiety is stimulation of the sympathetic nervous system. You automatically activate the flight and fight response.

Imagine a tiger suddenly walking into the room. In response to the stimulus of the tiger, the brain sends a message to the endocrine system to pump out adrenalin and a range of chemicals into the blood stream, the net effect of which is to contract muscles and constrict blood vessels and generally prepare the body for action.



Acute stress - in response to the rampaging tigers.

There are occasions when we suffer from acute stress - an argument, sudden bereavement, job loss, separation ...

Acute stress is guaranteed to cause you to lose sleep. It may be accompanied by dramatic weight loss or weight gain.

What happens to many people is that they remain in a state of acute stress for long periods of time. It is extremely detrimental to the health of the body.

BOILING FROGS - chronic stress

The second form of stress is chronic stress, due to a gradual build up of tension and anxiety from all areas of life. It has the same effect on the nervous and endocrine systems.

The **boiling frog** syndrome is based on the theory that if a frog is placed in boiling water, it will jump out, but if it is placed in cold water that is slowly heated, it will stay in the pot and be boiled to death. It's a metaphor to describe the unwillingness of people to face up to recognize stress that increases gradually.



Most of the time we are not aware of the chronic stress. Just as fish don't know they are swimming in water until they are pulled out of it, and just as frogs don't jump out of a pot that's gradually warming up, so we don't consciously recognize the many stressors of life, how stressed we are, or what the stress is doing to us.

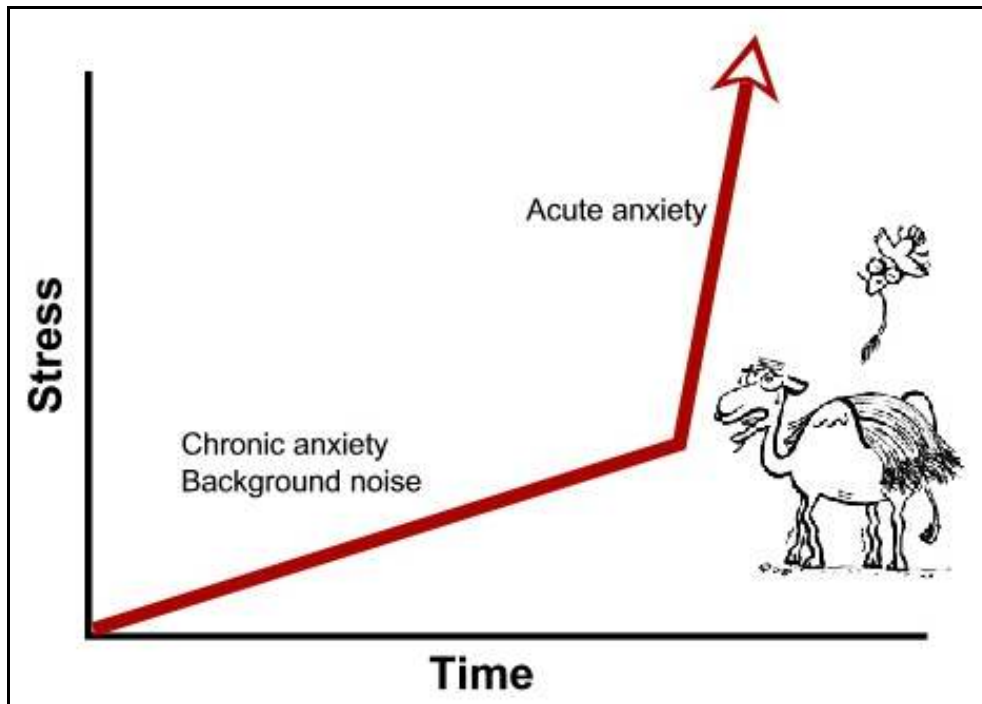
Nevertheless, the body, subconsciously through the autonomic nervous system is aware of what's going on and what's out of balance.

You may well hear people say, 'I'm not stressed'. However the very fact that they've got many of the symptoms listed in the **Health Fitness and Wellbeing Profile** is a strong indication that they are.

Often people will put their symptoms down to the fact they're getting older. If that's the case then people are getting older younger!

The symptoms won't clear up until you've cleaned up what ever it is that is causing the anxiety.

THE LAST STRAW



With acute anxiety the straw that broke the camel's back may be the only cause that's recognised.

Chronic stress may build up gradually over the minutes, hours, days, weeks, months, years and decades. You don't recognize it. You think the physical symptoms are normal even though the 'background noise' is getting louder and louder.

Then, all of a sudden the straw suddenly snaps the camel's back with a dose of acute stress. That's when you 'wake' up to yourself and realize you have a stress problem.

At the point when we 'snap', we often blame the last straw, and not the events that contributed to the build up of stress over a long period.

As a general rule it would be a nonsense to blame one thing for the cause of your distress. Of all the contributors, work usually gets blamed unfairly.

You can reduce the impact of the sympathetic nervous system by doing four things: -

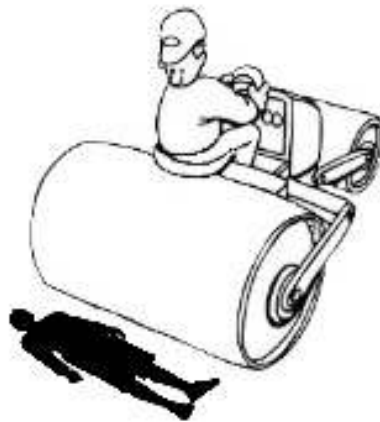
1. Clean up the cause of the anxiety. Don't sweep it under the carpet because your body will still react to it. Deal with it.
2. Engage in regular, systematic and vigorous physical activity to burn off stress chemicals. There is a compelling reason to be vigorously physically active on a regular basis.

3. Stimulate the parasympathetic nervous system, through meditation, yoga, tai chi ...
4. Distract yourself from busyness, misery and work.

THE PARASYMPATHETIC NERVOUS SYSTEM

Under normal conditions, the parasympathetic nervous system is designed to relax muscles and dilate blood vessels. When it is under-aroused, or when its functions are being over-ridden by an over-active sympathetic nervous system, it does not perform its essential function of bringing the autonomic nervous system back into balance.

One of the best ways to stimulate the parasympathetic nervous system is to meditate, using long, slow, deep, rhythmical, stomach breathing. Other activities include active relaxation, walking, gardening, yoga, tai chi, holidays, reading, romance ...



3.3

THE STRESS CYCLE

When we get stressed the body reacts in a flight and fight response. This is a normal, healthy function. However, the body was not designed to be aroused for extended periods of time. We need a balance of arousal and relaxation.

The stress cycle was originally developed as part of a primitive response. Man would be confronted by beast. Man would get frightened and run away. Once the crisis was over he returned to his normal calm self. The running contributed to the calming process by burning off the stress chemicals in the blood stream.

In the modern world, we get excited more often by nervous stress than wild beasts. And with chronic stress, every minute, hour, day, week, month, year and decade see us gradually getting more and more stressed. This is why blood pressure creeps up slowly over the years, particularly for busy people.

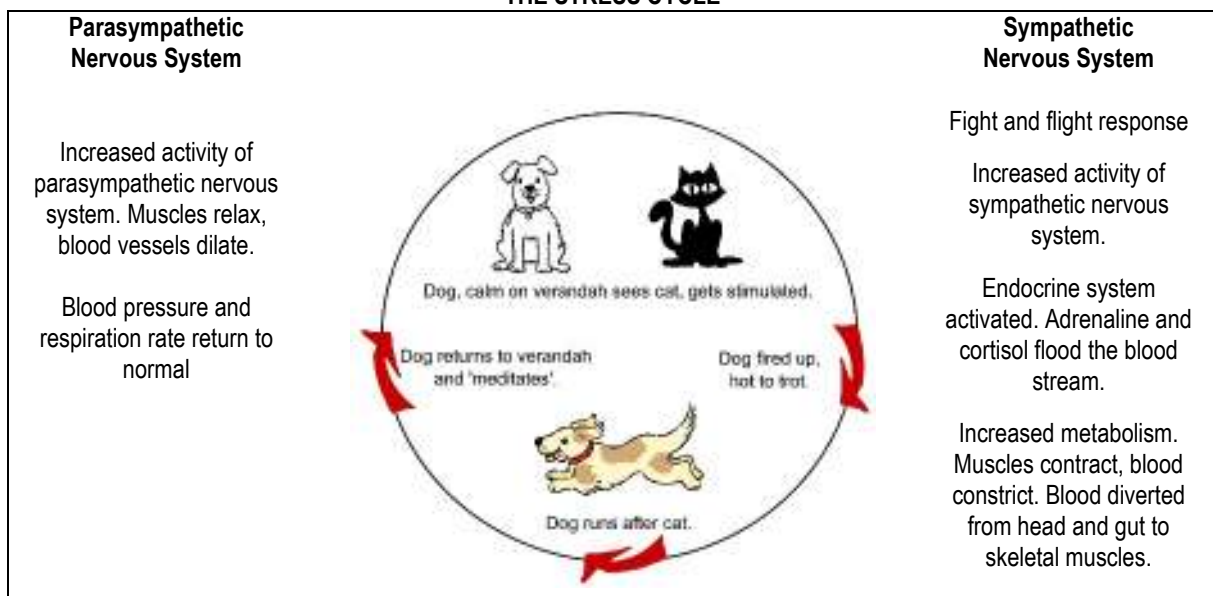
But, whilst we still get all the reactions of the flight and fight mechanism, we don't burn off the chemicals through physical activity or rest up to induce a state of calm.

ARE DOGS SMARTER THAN HUMANS?

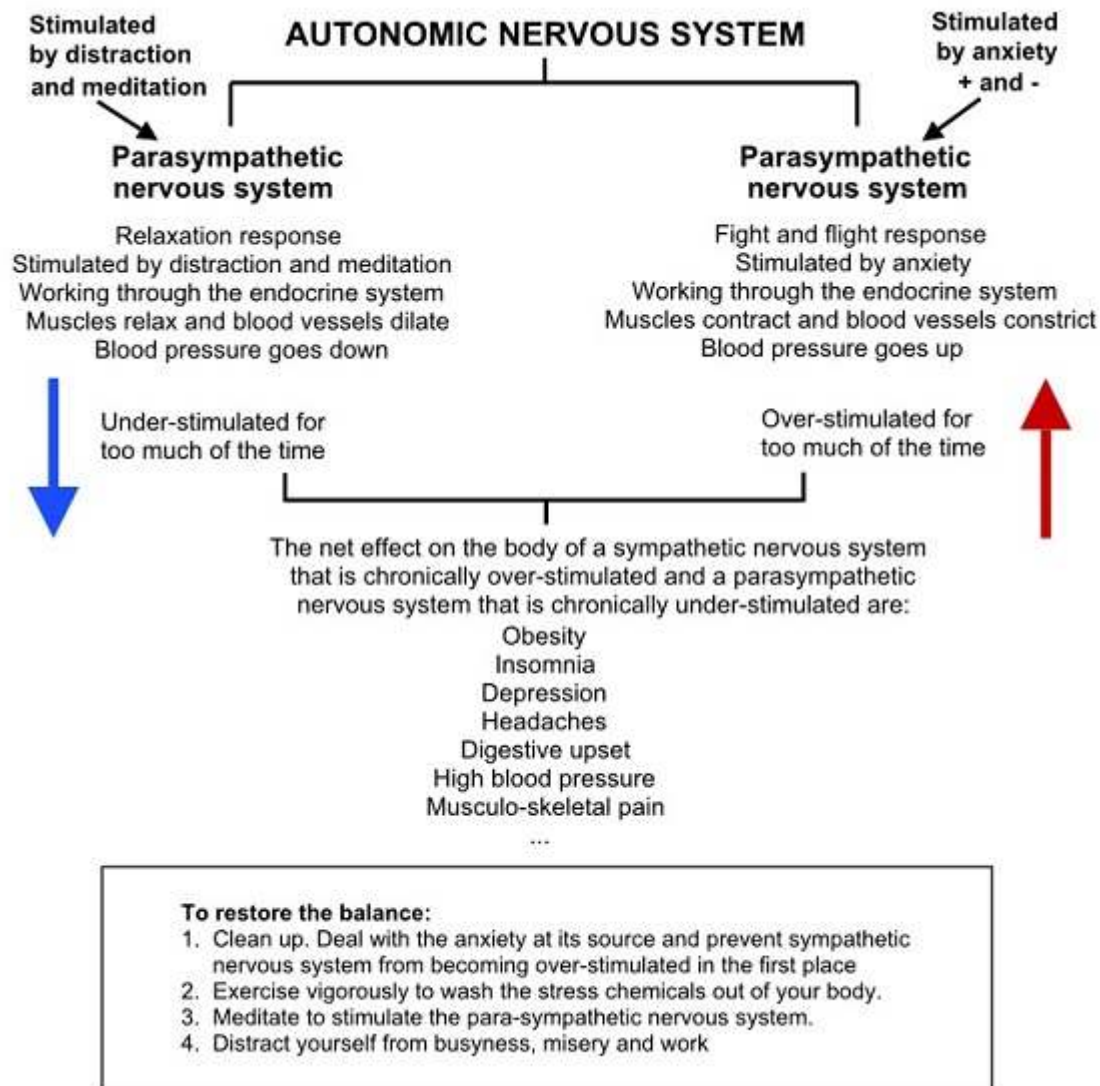
In the stress cycle illustration, imagine a dog, sitting, nicely relaxed on the verandah. He sees a cat and becomes stimulated. The sympathetic nervous system is activated. The adrenal glands produce increased amounts of adrenalin and other chemicals, causing muscles to contract, blood vessels to constrict, pulse to quicken, blood pressure to rise, blood sugar level to increase, breathing to become more rapid and blood to flow from the gut and the head out to skeletal muscles.

The dog runs after the cat, and in doing so burns off the stress chemicals. He then comes back to the verandah and 'meditates'. The physical activity and the meditation combine to 'cool down' the over active sympathetic nervous system and 'warm up' the under-stimulated parasympathetic nervous system.

THE STRESS CYCLE



If the sympathetic nervous system is over-stimulated and the parasympathetic nervous system is under-stimulated you can expect a wide range of stress symptoms to start appearing in your body.



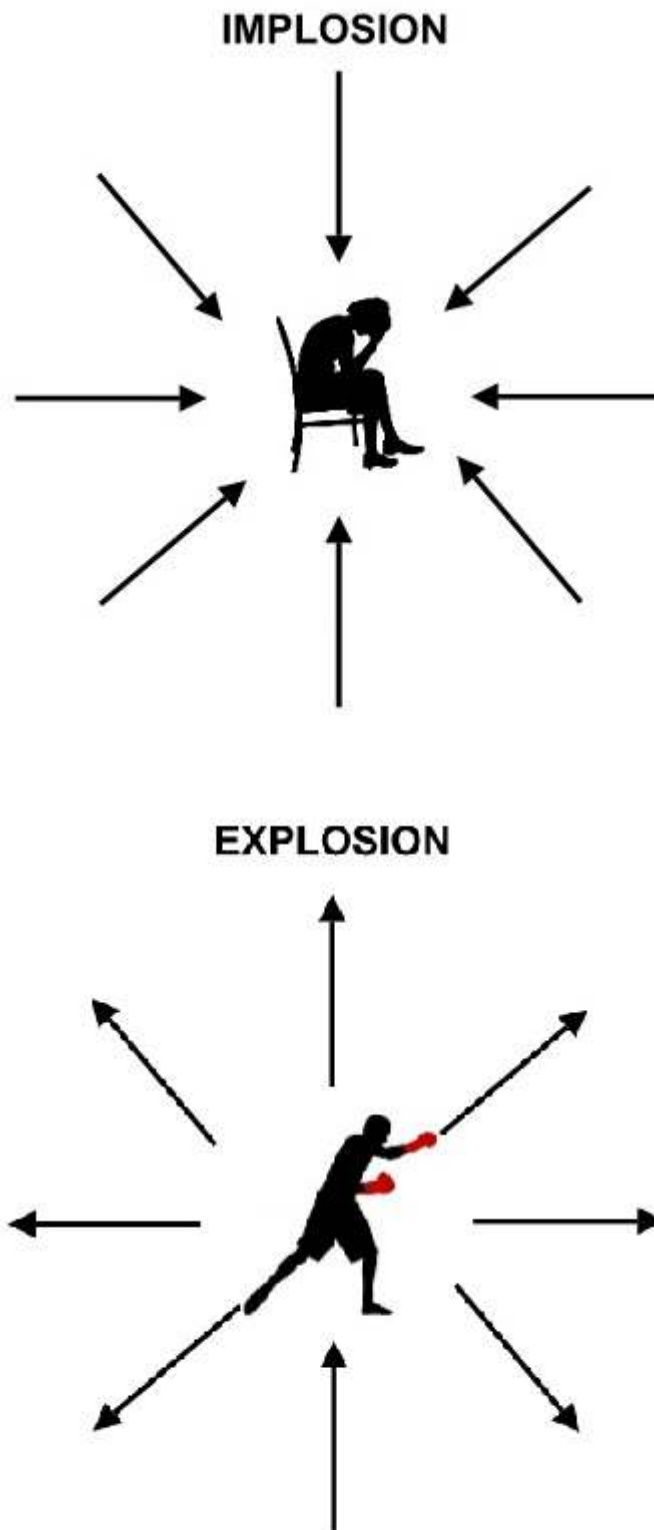
STRESS RESPONSE VERSUS THE RELAXATION RESPONSE

| | SYMPATHETIC NERVOUS SYSTEM Stress response | PARASYMPATHETIC NERVOUS SYSTEM Relaxation response |
|----------------------|--|--|
| Adrenalin | More | Less |
| Respiration | Faster | Slower |
| Heart | Faster | Slower |
| Arteries | Constrict | Dilate |
| Blood pressure | Increase | Decrease |
| Metabolism | Faster | Slower |
| Muscle tension | Increase | Decrease |
| Stomach acid | More | Less |
| Blood sugar | More | Less |
| Insulin | More | Less |
| Cholesterol in blood | More | Less |
| Brain waves | Beta - less productive | Alpha - more creative |

3.4

IMPLOSION OR EXPLOSION

When you get stress two things can happen, you implode or explode.



3.5

READING THE SIGNS

Your body is talking to you. Are you awake and are you listening?

As has already been shown, the body and the mind provide us with the physical and mental signs of stress. Think of the anxiety as an alarm going off inside your head. If you don't do anything to stop it, the ringing gets louder.

If you don't know what the signs are, or you can't read them; if you treat the background noise as normal, then it is difficult to recognize where they come from. When that happens there is not much hope that you'll do anything about it. Things will get worse.

BACKGROUND NOISE

The physiological mechanisms that the body uses to tell us we're stressed, (headaches, tight muscles, insomnia, fat gain, elevated blood pressure ...) are the background noise that accompanies stress. It is not normal. It is a warning that you can choose to listen to or ignore.

It is often the case that we don't associate these symptoms with anxiety. Instead we head off to the doctor and get a prescription which masks the symptoms, but does not alleviate the underlying anxiety which caused them.



In fact we've reached that unique point in history where you can take a tablet to mask just about every symptom of a dysfunctional autonomic nervous system. High blood pressure is the most common of the stress treatments treated in this way, but the tablet does little to release the pressure of the underlying anxiety.

The anxiety continues to build up with grave consequences for one's quality of life. Relationships fracture, jobs disintegrate, health gets worse ...

The great tragedy of modern medicine is that it covers up our anxieties and nourishes them in the guise of 'preventive health'. But preventive health is code for 'junk medicine' where drugs that mask symptoms, do not restore poor function to good.

