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— Health education —

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Understanding & Managing Stress: Plus Three Proven Stress-Protection Methods

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Modern life is stressful – and if we fail to learn how to manage stress our health is likely to suffer. Can you tell if stress is affecting your health? To see how your own body and mind is standing up to your present stress load make a list of any symptoms you might have - however unimportant you may consider them. List anything which is out of the ordinary, whether serious enough for you to have sought medical advice or not. For example you may have noticed that you have been waking with less energy and verve than you used to; or that your appetite for food is not what it was; or that interest in sex is declining; or perhaps that you get periodic indigestion, odd aches and pains, have dandruff - and so on. List these, and next to each item you have listed, try to think of aspects of your lifestyle and behaviour that might be contributing to it.

- Energy decline/ loss of appetite for food and sex? Ask yourself which stresses in your life might be contributing to these changes?
- Indigestion - Are you eating too quickly? Or too much junk food? Or don't chew well enough? Is worry the cause?
- Frequent colds? Are you not getting enough sleep or exercise? Could anxiety over your job or relationships be contributing?
- Aches and pains - Is repressed anger, or perhaps frustration, causes?and so on.

The ideas you come up with as to connections between your symptoms and the stresses in your life may not always be accurate, but it can be a useful exercise in trying to see whether you are able to make any such associations. The fact is that there are seldom direct links between any single stress and a specific symptom, more usually a combination of stress factors interact with your unique, inborn and acquired characteristics, to produce whatever symptoms your particular susceptibilities dictate. Remember also that all symptoms are not necessarily 'bad' - they may actually represent evidence of your body dealing with problems. For example the symptoms we get when we have an infection, when the immune system is fighting microorganisms, may be unpleasant, but without the temperature and all that flows from it we might not survive!

Symptoms are usually signals

We should listen to messages from the body for they may represent early warning of worse to come - unless we do something about the causes, which are all too often well within our control. Ask yourself whether you 'hear' and respond to the signals your body sends you many times each day.

- When you are thirsty do you always get something to drink?
- When you are hungry do you always eat, or do you skip meals at times?
- When your bowels indicate a need to move, do you sometimes/often ignore that signal?
- Do you pride yourself on 'bladder control'- and ignore urges to urinate?
- Do you ignore tiredness - staying up later than sleep needs demand, perhaps by using stimulants (coffee or alcohol for example) to 'keep you going' ?
- If you feel a yawn coming on do you try to suppress this?
- Is your work load so intense that when you have a break you don't know how to stop?

Learning to listen to your body, to respect the natural rhythms of life, is a good starting point in stress-management. The rhythms of life cannot be denied without penalty. Yes you can survive by doing all of the ignoring listed above, but the price you will pay will be a gradual decline in efficiency brought on by these stressful demands, as your normal functions slowly adapt to a less efficient pattern of living, and sooner rather than later illness may develop. In fact, current research has shown without question that two basic rhythms in particular are critically capable of contributing to serious illhealth (Bray 2007, Solomon 2008, Geliebter 2001):

- when and how much you sleep
- when and how much (and what) you eat.

A brief summary of these basic health requirements includes:

- Eat a breakfast containing significant protein content
- Eat 3 meals a day – 5 to 6 hours between each
- Avoid snacks
- Never eat after dinner
- Allow 11-12 hours between dinner and breakfast.
- Generally finish eating dinner at least 3 hours before bed
- Do not eat large meals
- Eat slowly

- Reduce the overall amount of carbohydrates eaten, (e.g cereals/fructose!)
- Get adequate exercise
- Ensure 7 hours sleep per night
- Enhance stress coping strategies (see below)

Learning to listen to our body

The various interpretations given below as to how the body/mind may respond to different emotional states represent possibilities, and are not the only possible reasons for problems of this sort. Ask yourself whether any of these suggestions could be accurate in your own case - or if not what you consider might be background reasons contributing to whatever symptoms you are experiencing.

Remember that when we look at the actual way the body handles strong emotions such as fear, anger and joy - they are remarkably similar:

- Headaches may result from feelings of extreme frustration
- Pain in the face, mouth or jaw may represent unexpressed anger
- Throat problems can also be linked to powerful feelings which are unspoken
- Shoulder symptoms may represent overload. Have you taken on too much?
- Stomach and digestive problems can relate to almost any apprehension (apart from when they are due to poor eating habits) - relating to 'something' which is going to happen which is feared; or the cause may lie in unresolved or unaccepted conflicts?
- Low back problems may relate to exhaustion, perhaps due to not enough rest or exercise plus excessive work, or to strong fear or guilt feelings?
- Leg problems may be linked to fear of change, or to inflexible attitudes?
- Arm problems might connect with anger and frustration?

What we need to do is to learn to listen to our body, to hear its complaints, and to make appropriate adjustments to our life and the way we live in order to better meet the needs we have for adequate diet, rest, exercise and peace of mind. How well we are depends greatly on our attitudes and reactions. The more optimistic we are the better the chance of recovery and a return to wellbeing.

Hardiness

The characteristics of 'hardiness' include having:

- a sense of control over your destiny
- a feeling of commitment and wholehearted involvement when undertaking tasks

- an attitude that 'life makes sense' and is coherent
- a sense that problems are challenges to be overcome, not to be overwhelmed by, a feeling of being part of a larger community of people and not isolated, of being involved rather than detached from society.

These characteristics are major elements in what make someone 'hardy' and healthy – and they are not necessarily inborn.....we can acquire them. One way of acquiring aspects of these learned personality features, is to mimic them, to 'pretend' that this is how you are, and to see whether you can replace your present attitudes and responses with ones which fit better with these more desirable ones.

Example : Let's say you have bad news, something is happening or about to happen which has the potential to cause you harm or to change your life in some way which you don't want. Your normal reaction might be to brood, to think the worst, to bottle up your feelings, to feel yourself a victim –

- try instead speaking about how you feel to people who you trust, even though normally this would be something you would avoid doing
- try to look at the best possible outcome rather than the worst and actually working towards that end
- try to see what is happening in a wider context, not just how it relates to you, and see that it needs to be dealt with suitably rather than just screamed about
- try to see what can be gained from the event, or threat - how you might be able to make the best of the inevitable, to turn a possible disaster into a gain
- see what actions you can take to modify the situation, to minimise the damage, alter the outcome, to exercise some control over events.

The consequence of actions such as these could be a lessening of stress for you, and those around you, plus a greater sense of bonding with people you know, as well as increased confidence when things turn out not to be as bad as you imagined. There is evidence that we can change, over time, to a hardier more resilient form of behaviour. It may not always be possible to do this alone, and could require assistance, from a counsellor, or a psychotherapist, in one-on-one therapy sessions, or group/class exercise settings, but it can be done.

What if you are "Type A"

The same is true of anyone who is a 'type A' (busy, working to time constraints, rushing to do two things at a time etc) and who sees the need to change. By observing the characteristics which would make a 'type B' (laid back, slow moving, easy about time), and by mimicking these, one by one, taking time to acquire new behaviour patterns, type A's have become type Bs - and have secured as a result the health benefits which come with a more laid-back lifestyle (i.e. less ill health).

The sort of changes which are needed include starting to –

- listen to what people are saying and to responding appropriately
- find a positive channel for the expression of anger such as exercise or a creative activity
- do just one thing at a time
- copy how 'type B's' respond to situations which would usually make you explode
- appreciate that there is more to 'success' than position and wealth or that you need to fight for this
- accept that you are human, are allowed to make mistakes, to be late or lazy at times, and that you do not have to be perfect
- forgive other people's shortcomings and behaviour, making allowances, being compassionate
- keep a watchful eye which triggers alarm bells inside when you start being bossy aggressive, angry - and starting to turn these responses around, to behave in the opposite, gentler way
- alter the way you work, reducing your load, avoiding deadlines, saying no to tasks which previously you would have added to your list of things to be done....

One by one, in no particular sequence, the application of these changes will modify the most dedicated type A into a far more pleasant, healthier, and far less stressed Type B. Eating a balanced diet, and getting enough exercise (see below) and practicing some form of relaxation (see below) - are all ways in which you can learn to handle stress more effectively. Relaxation exercises focus on the body and its responses to stress, trying to reverse these, bringing about a calming of the mind and through this a relaxation response.

Three Powerful Stress Protecting Exercises

1. Autogenic Training
2. Progressive Muscular Relaxation
3. Aerobic Exercise

Autogenic training (AT)

AT is a form of exercise that combines the best of both relaxation and meditation. The modified AT exercise described below offers an excellent way of achieving effective relaxation.

Every day, ideally twice a day, for ten minutes at a time do the following:

- Lie on the floor or bed in a comfortable position, small cushion under the head, knees bent if that makes the back feel easier, eyes closed.

- Practise one of the breathing exercises described on Self-help Sheets 2 or 2A for a few minutes before you start the AT exercise.
- Focus attention on your dominant (say right) hand/arm and silently say to yourself 'my right arm (or hand) feels heavy'
- Try to sense the arm relaxed and heavy, its weight sinking into the surface it rests on. Feel its weight. Over a period of about a minute repeat the affirmation ('My arm/hand feels heavy') several times and try to stay focused on its weight and heaviness.
- You will almost certainly lose focus as your mind wanders from time to time. This is part of the training in the exercise – to stay focused, so don't be upset, just go back to the arm and its heaviness which you may or may not be able to sense.
- If it does feel heavy, stay with it and enjoy the sense of release – of letting go – that comes with it.
- Next focus on your left hand/arm where you do exactly the same thing for about a minute.

Move to the left leg and then the right leg, for about a minute each, with the same messages and focused attention in each, for about one minute each.

- Go back to your right hand/arm and this time affirm a message which tells you that you sense a greater degree of warmth there. 'My hand is feeling warm (or hot)'.
- After a minute or so go to the left hand/arm, then the left leg and then finally the right leg, each time with the 'warming' message and focused attention. If warmth is sensed stay with it for a while and feel it spread.

Enjoy it.

- Finally focus on your forehead and affirm that it feels cool and refreshed. Hold this cool and calm thought for a minute before completing the exercise.
- Finish by clenching your fists, bending your elbows and stretching out your arms. The exercise is complete.
- By repeating the whole exercise at least once a day (10 to 15 minutes is all it will take) you will gradually find you can stay focused on each region and sensation.

Explanation

'Heaviness' represents what you feel when muscles relax and 'warmth' is what you feel when your circulation to an area is increased, while 'coolness' is the opposite, a reduction in circulation for a short while - usually followed by an increase due to the overall relaxation of the muscles.

Measurable changes occur in circulation and temperature in the regions being focussed on during these training sessions.

Success requires persistence - daily use for at least six weeks - before benefits are noticed, usually a profound sense of relaxation and better sleep.

How to use these skills for health enhancement by visualising change

- What this offers in pain control terms is of enormous value:
- If there is pain related to muscle tension the training can be used to focus on the area and by getting that area to 'feel' heavy this will reduce tension.
- If there is pain related to poor circulation the 'warmth' instruction can be used to improve it (a skin thermometer shows an increase of up to a degree when an area is 'made' warmer after autogenic training has been practised for a while)
- If there is inflammation related to pain this can be reduced by 'thinking' the area 'cool'.
- The new skills gained by A.T. can be used to focus on any area – and most importantly helps to allow you to be able to stay focused – to introduce other images - 'seeing' in the mind's eye a stiff joint easing and moving, or a congested swollen area melting back to normality - or any other helpful change which would ease whatever health problem there might be.

Progressive muscular relaxation

When we are anxious muscles become tense, and often uncomfortable, and certainly waste a lot of energy. It is not possible for a muscle to be both relaxed and tense at the same time, and so learning to release tension in muscles is a major step towards stress coping.

We all realise that when we respond to a stressful situation, or to inner worries, our muscles tense. Over time this can become chronic so that after a while we are not even aware of the tension, and cannot easily 'let go' and release it.

As a first step towards liberating ourselves from this state we can use well-tried muscular relaxation exercise methods, the best known of which is called 'progressive muscular relaxation'.

If you are very tense and you are asked to 'relax' you will probably tighten your muscles even more - mainly because you have forgotten what 'relaxation' feels like. It is as though you have forgotten what to do to achieve release of tension in your own muscles. Relaxation has to be relearned.

One way to achieve this is to introduce a series of contractions or tightening efforts which exaggerate the degree of tension in particular areas - so that as they are released you gradually become aware of the difference between 'tension' and 'release' of the particular muscle group.

Preparation : Wear loose clothing, lie on a carpet or rug, make sure there are no draughts, and that you are unlikely to be disturbed for about 20 to 25 minutes.

- Lie comfortable so that your arms and legs are comfortably outstretched.
- Tense the fist of your dominant hand and hold this in a tight squeeze for about ten (10) seconds.
- Release this clenched fist and stay in this released state for about half a minute savouring the sense of freedom, heaviness and release you feel.

- Repeat this same muscle tension (dominant hand) at least once more before relaxing it and resting in total 'ease' for half a minute.
- Now do the same to the other hand (at least twice)
- Now go to the foot on the side of your dominant hand and draw the toes upwards towards the knee, tightening the muscles and holding this for 10 seconds.
- Release and relax for half a minute and then repeat at least once more before going to the other foot.

Perform this same sequence in at least 5 other sites (each of these should be on both sides of the body, which makes an additional 10 sites) such as :-

back of lower legs by pointing toes instead of drawing them up

upper leg - by pulling kneecap towards the hip

buttocks - by squeezing them together

chest/shoulders by holding an inhaled breath and at the same time

drawing shoulder blades together

abdominal area by pulling in or pushing out strongly

arms and shoulders by drawing upper arm into shoulder strongly

neck area by drawing it into the shoulders or pushing it against the floor

face by tightening and contracting the muscles around the eyes and

mouth in particular, or by frowning strongly

Additional muscles can be dealt with in the same way by working out just what tightens them. The process of holding extreme tightness, followed by release, will in time give you an awareness of what tension feels like, because you will have regained a point of reference, something to compare it with. This allows you to recognise muscular tension as it builds and to begin to stop it before it becomes locked in.

After a week or so of doing this daily (twice daily would be better still) you can start to combine muscle groups, so that the entire hand/arm on both sides can be tensed and then relaxed together, followed by the face and neck, then the chest, shoulders and back and finally the legs and feet.

After another week the tension element of the exercise can be abandoned, and you can simply lie down and focus on the different regions and note whether they are tense or not, and instruct them to relax. Results come quickly but only if the exercise is performed regularly ! While learning to relax in this way you can also use breathing to relax yourself - see notes on **“Four Exercises for better breathing”**

Aerobics

Exercise causes the release in the body of hormonal substances which have a directly stress countering effect and it is therefore highly useful in helping us to handle stress more effectively. Active exercising can involve working out at a gym, or participation in organised sport, or just as usefully could involve skipping at home, learning a dance routine - ballroom, Latin, folk, square dance, ballet, jazzercise etc - or simply acquiring and using a skipping rope or going cycling, swimming or walking.

In other words regular stress-busting exercise can be applied at home, or in a social setting, or even as a solitary endeavour, for example. People who regularly exercise are not only physically fitter but are more 'emotionally and psychologically fit' than people who avoid exercise according to researchers who investigated the effects of aerobic activity on thousands of individuals. In some studies it was shown that precisely the same calming effects which are achieved by meditation could be acquired by regular swimming, jogging, walking and yoga.

The key is not the type of exercise but the degree of regularity. Three sessions a week, of not less than 20 minutes each, with never more than a two day break in between, are ideal.

Finding your safety pulse rates for aerobics.

There is a formula devised by the developers of aerobic exercising which you can use to discover what your particular aerobic levels are in order to get fit, and most importantly what you must not exceed to stay safe when exercising.

Everyone, at whatever level of fitness, can do aerobic, cardiovascular training, exercise and achieve stress reduction, but to be safe and effective you must do these calculations substituting YOUR pulse rate and YOUR age for the numbers used in the example given below.

- Take your morning resting pulse for a few days and find the average. In the example given here we will say that it is 72.
- Add this number to your age. If you are now 36, we have $72 + 36 = 108$.
- Subtract this number from 220. ($220 - 108 = 112$)
- Calculate 60% (divide by 10 and multiply by 6) and also 80% (divide by 10 and multiply by 8) of this number (112)
- 60% of 112 = 67
- 80% of 112 = 90
- Add back your morning pulse to these two numbers (72 was our example)
- $67 + 72 = 139$.

When exercising in order to achieve an aerobic effect your pulse must be higher than 139 beats per minute for 20 minutes.

- $90 + 72 = 162$, When exercising in order to perform aerobics safely your pulse must not exceed 162.

When exercising check your pulse regularly, either by means of a special pulse monitor (any sports store) or by learning to take your pulse for ten seconds and multiply by six. These key numbers (130 and 162 in our example) will change as you get fitter and older, because the numbers will alter - your resting pulse may get slower, and you will certainly get older. So recalculate every year. Remember to substitute your own age and resting pulse for these example numbers.

- Your resting pulse is
- Your pulse..... + your age..... =
- This number taken away from 220 =
- 60% of this last number is
- 80% of this last number is
- Add your resting pulse rate to the 60% number..... This is the rate of pulse you need to achieve to exercise aerobically
- Add your resting pulse rate to the 80% number..... This is the rate of pulse you must not exceed when exercising
- Whether you walk, jog, swim or dance you can use these numbers to keep a check on your progress.

As you get fitter your pulse rate will probably change, and as you get older you will need to recalculate the figures.

Speak to your doctor before starting aerobic exercises - and learn to take your pulse rate regularly when exercising - or buy a pulse meter from a sports supply shop.

Bray M Young M 2007 Circadian rhythms in the development of obesity: Potential role for the circadian clock within the adipocyte Obesity Reviews 8 (2):169-181

Geliebter A 2001 Night-eating syndrome in obesity. Nutrition 17(6):483-484

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