



ACTIVEPHYSIO®

If it's not active it's not physio

PatientInformation

Relaxation Methods



Information on relaxation strategies

Relaxation has 3 aims:

- 1 Prevention of wear and tear on the body – particularly the parts of the body involved in stress related reactions
- 2 Relieve stress in stress related conditions
- 3 Improve pain management
- 4 Improve the clarity of the mind's thinking

About the condition

Physiological background:

The body's systems associated with states of stress and relaxation include:

- 1 The Autonomic System (ANS)
- 2 The Endocrine System
- 3 The skeletal musculature

The Autonomic System (ANS)

The ANS has two branches the sympathetic and parasympathetic. The sympathetic increases arousal when the organism is under threat: "the fight flight response". These include increases in:

- Heart rate (palpitations)
- Blood pressure
- Respiratory rate (hyper-ventilation)
- Blood flow to muscles
- Sweat gland activity (cold sweats)
- Awareness of all the senses (disturbed or light sleeping)

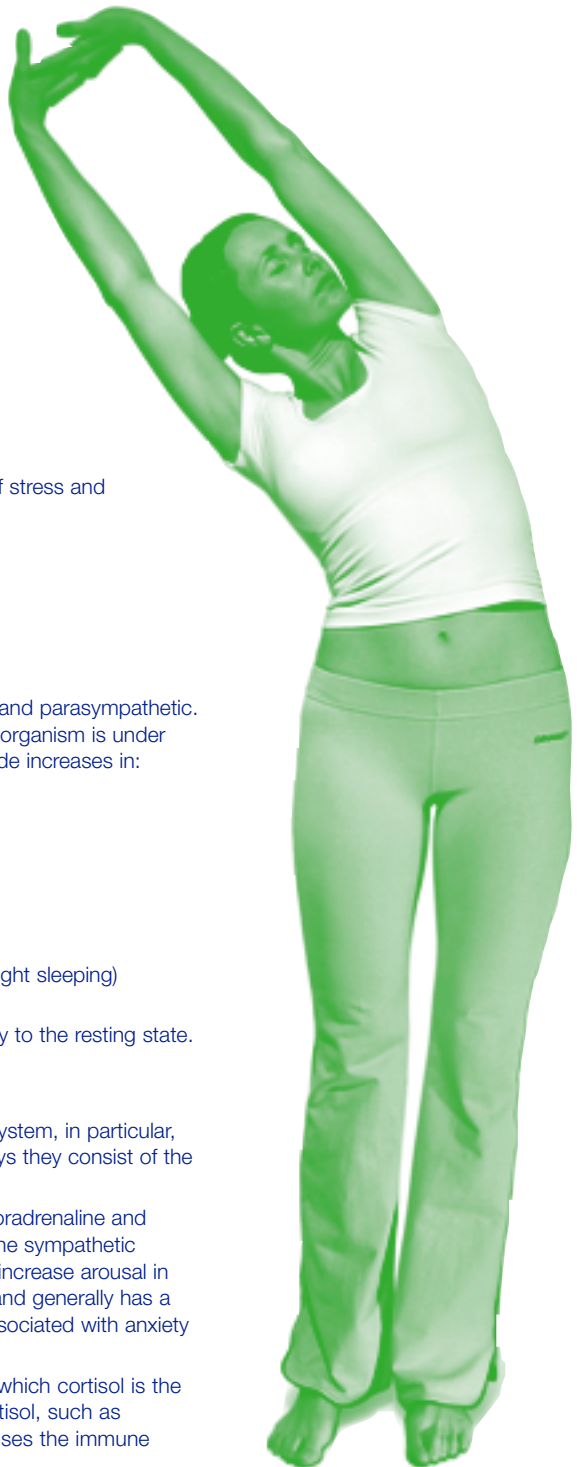
The parasympathetic system returns the body to the resting state.

The Endocrine System

Closely related to the ANS is the endocrine system, in particular, the adrenal glands. Situated above the kidneys they consist of the adrenal cortex and medulla.

The medulla produces the catecholamines noradrenaline and adrenaline and their release is controlled by the sympathetic nervous system. Noradrenaline is thought to increase arousal in regard to aggression and fighting behaviour and generally has a pleasant feeling of alertness. Adrenaline is associated with anxiety and flight behaviour and feelings of threat.

The adrenal cortex produces glucocorticoid which cortisol is the most important. Prolonged high levels of cortisol, such as through stress or pharmaceutical doses, causes the immune



system to become suppressed. That is why people can have multiple health problems. When the “challenge” passes the parasympathetic nervous system produces another chemical transmitter, acetylcholine that brings about the relaxed state of body rest.

Skeletal Musculature

Researchers have found that the release in tension in the muscle has the effect of de-activating the part of the brain, which has control over the sympathetic and parasympathetic system.

Psychological Theories

- 1 Cognitive
- 2 Behaviour
- 3 Cognitive-behaviour

Cognitive Theory

Feelings are seen as a function of thought. Anxiety and depression are seen as a product of “wrong thinking” with the individual having a distorted view of events e.g.

- Blaming yourself when you are not responsible
- Feeling of rejection
- Over catastrophes

The treatment approach considers the individual has power over their thought and therefore can modify their feeling and behaviour e.g. retraining the individual from “self defeating thought patterns”.

Behaviour Theory

This theory considers the environment governs the individual's behaviour e.g. Pavlov's dogs. The treatment approach include muscular relaxation, graded exposure to stress, distraction and social skills (e.g. assertiveness training)

Cognitive-behaviour Theory

This approach integrates the theories above. It aims to promote behavioural change through restructuring of thoughts. This is termed the “self talk” or the internal dialogue we conduct with

ourselves in order to interrupt the world. Positive self-talk leads to achievement and increased confidence. Negative self-talk leads to feelings of defeat including loss of control.

In this treatment approach there are 3 phases:

Education of awareness of thought, feelings, sensations and behaviours.

Restructure of the self talk from negative to positive alongside coping skills such as relaxation are learnt.

The new responses are applied to events through mental rehearsal, role playing and graded exposure.

Usual symptoms include

When the body is subjected to challenging stimuli (such as stress or prolonged pain) a characteristic response occurs.

There are 3 stages:

- Alarm
- Resistance
- Exhaustion

Exposure to a challenge results in release of hormones and chemicals whose purpose it to create the physiological response of “fight and flight”.

If exposure to the stressor is withdrawn the response is cancelled.

If exposure to the stressor is prolonged the body will adapt by developing a resistance which serves the body well for a time.

Eventually however, the body's reserves are used up and the body's resources becomes depleted and a stage of exhaustion is reached.

Symptoms of Stress

Physiological symptoms include:

- Raised heart rate
- Increased blood pressure
- Sweating
- Increased ventilation
- Raised blood glucose

Subjective symptoms include:

- Tiredness/sleeping disturbances
- Muscle tension
- Indigestion, constipation, diarrhoea
- Palpitations
- Headaches
- Difficulty in concentrating
- Impatience, anger and worry

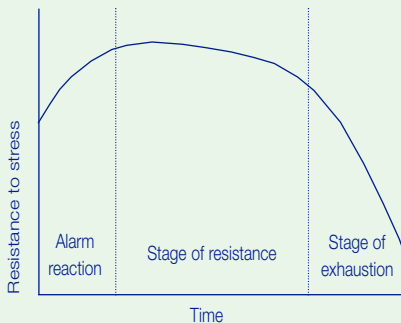
Behavioural symptoms include:

- Increased consumption of alcohol, tobacco, food etc
- Loss of appetite or excessive eating
- Restlessness
- Loss of sexual interest
- A tendency to experience accidents

Sources of Stress:

- Work environment
- Social environment
- Personality type
- Loss of control or the perceived loss of control by the individual
- Having unclear goals
- Indecision
- Bottling up emotions
- Low self esteem

General adaptation syndrome



What we can do to help

Stress Management therefore involves 4 steps:

- 1 Cognitive Restructuring: Helping you know how you think
- 2 Relaxation for reducing the physiological arousal
- 3 Social skills e.g. assertiveness training
- 4 Self-monitoring: e.g. recognising the items, which cause stress.

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