### Stress & The Art of Relaxation

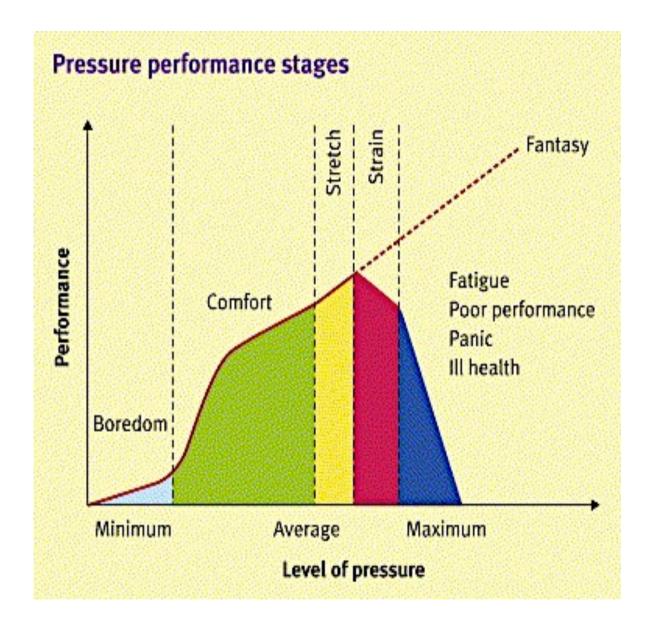
## Finding a definition of 'stress'.....

 "Stress is defined as an organism's total response to an environmental condition or stimulus, also known as a stressor. Stress typically describes a negative condition that can have an impact on an organism's mental and physical well-being." Wikipedia. Org

There are however two types of stress as coined by the endocrinologist Hans Selye

*Eustress = Positive Stress* 

Distress = Negative Stress



### Or put in another way......



# What happens when we become stressed?

The autonomic nervous, which is self-governing, has two branches supplying communication to all internal organs and blood vessels:

- 1 Sympathetic nervous system (SNS)
- 2 Parasympathetic nervous system (PNS)

Together these two systems work together to maintain homeostasis i.e. the equilibrium of internal processes, using a system of feedback controls where the body can respond to changing outside conditions. We are amazing!

When a perceived threat appears we will activate the SNS, the fight & flight response, and then once this threat has passed the PNS, the rest & digest response, is activated to return us to balance. However increasingly in modern life it seems we are initiating the SNS response when it is unnecessary and are unable to switch it off once it has begun....... See the handout on the SNS & PNS systems.......

### **Stressors**

# According to Mark Greener of Which Magazine there are three types of stressor:

- Micro Stressors everyday hassles such as journey to work, queues at post office etc.
- Mezzo Stressors Life events such as moving house, having a baby, getting divorced, receiving an award - noticing some are 'good' but still create stress!
- Macro Stressors socio-economic-political circumstances affecting large groups such as war, tax changes, bad weather etc.

Greener, M (2003), '<u>The Which? Guide to managing stress'</u>. Which? Consumer Guides.

# What are the common signs & symptoms of stress?



Note: A **symptom** is subjective i.e. from the person's point of view whereas a **sign** is objective i.e. can be seen or measured by another person

## Based upon work by Dr Udapa of Benares University, India, there are four main stages as stress accumulates and leads to disease

#### Stage 1

#### **Psychological Stage**

Initially there are psychological changes such as irritation, anger, insomnia, weeping, anxiety etc. This stage may last from days to months and if we can address it now then we do not need to progress to the following stages. We can measure this stage chemically by the levels of acetylocholine found within the blood and if observant we can all recognize the psychological and emotional signs!

#### Stage 2

#### **Psychosomatic Stage**

Now distinct physical signs of stress manifest such as high blood pressure, elevated heart rate, tremours, palpitations etc. Here the homeostasis of the body is beginning to be effected.

#### Stage 3

#### **Somatic Stage**

If this state of hyper-arousal continues more profound physical or biochemical imbalances occur, symptoms are now more fixed and there may also be some organ dysfunction, although at this stage symptoms are likely to be still prodromal, i.e. non-disease specific. The sites of the physiological effects of stress are largely dependant upon genetic or environmental factors, usually moving into our most vulnerable areas. This stage can be measured by the levels of adrenalin, or noradrenaline in the blood.

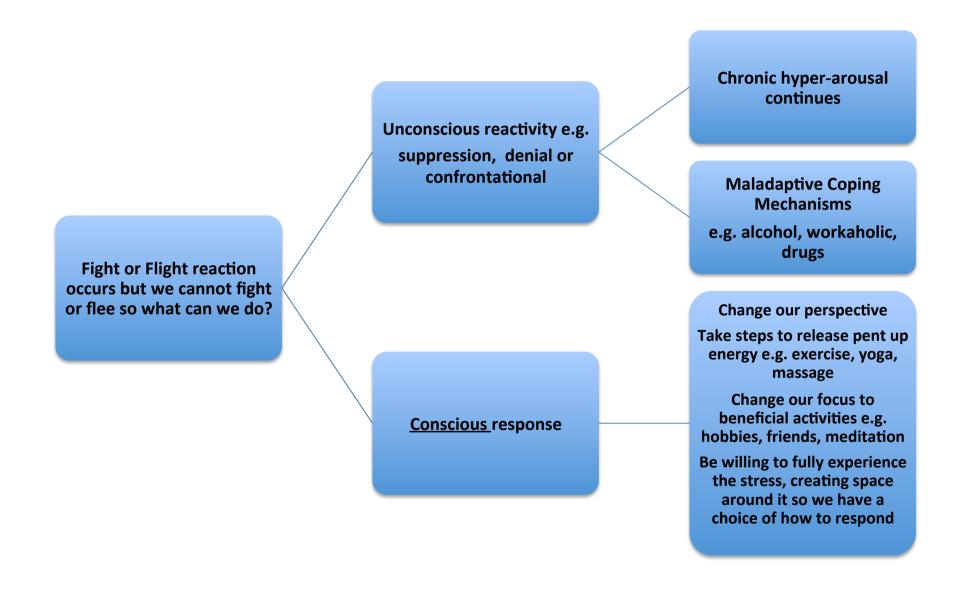
#### Stage 4

#### **Organic Stage**

Disease fully settles into a particular organ. Now we are experiencing chronic problems and organ destruction can begin. We can find the signs and symptoms of a specific clinical condition eventually requiring medical intervention such as surgery or medication.

Reference: Udupa, K.N., "Pathogenesis and Management of Stress Disorders", Quarterly Journal of Surgical Sciences, Banaras Hindu University, Vol. 13, no. 2, June 1977

### How can we stop the stress cycle?



## Perform a yoga relaxation technique to evoke the relaxation response!

There are many types of relaxation to include:

- Progressive neuro-muscular relaxation (PNR) ~ i.e. squeeze & release
- Passive muscle relaxation ~ imaging muscles are relaxed
- Autogenic ~ using mind to relax body i.e. my body is warm & heavy....
- Journey ~ creating a relaxing safe haven
- Visualisation ~ creating soothing, rejuvenating positive imagery
- Sensory relaxation ~ through sound, colour
- Breathing ~ moving the breath, extending the exhalation etc.
- Scanning the body ~ taking attention to the body
- Yoga nidra ~ deep physical and mental release & planting of a positive sankalpa as a seed within the unconscious

How does the body respond in deep relaxation?

What are the beneficial effects of deep relaxation?