

# RESTORE YOURSELF

by James Bone

Relaxation can reverse the effects of stress, even at the level of our genes. A study in 2008 found that practices like yoga appear to be able to switch off the stress genes and so reverse the effects of damaging chronic stress. This is interesting – as we often think only in terms of structure, cells and chemistry – but the study portrayed change at the deepest cellular level – the genes controlling actions within our cells.

## Relaxation Response

This type of relaxation had been given the name the “relaxation response” by one of the study authors, Dr Herbert Benson. The relaxation response is characterized by reduction in oxygen intake, increase in exhalation of nitric oxide, and lower psychological distress. Many experts see this as the counterpart to the "flight or fight" or stress response that has already been shown by a number of studies to have a distinct pattern of physiological and gene expression changes. Overwhelming evidence is showing that chronic stress can be very damaging to our health.

At a biochemical level the study indicated that the relaxation response changed the expression of genes involved with inflammation, programmed cell death and the handling of free radicals. Free radicals are normal byproducts of cell metabolism that the body neutralizes in order to stop damage to cells and tissues, also possibly the culprits contributing to ageing.

*"What we have found is that when you evoke the relaxation response, the very genes that are turned on or off by stress are turned the other way. The mind can actively turn on and turn off genes. The mind is not separated from the body."*

*Dr Herbert Benson*

## Prepare Prepare Prepare

I often have yoga students say that they enjoy the relaxation section best at the end of the class. However, one observation I have found is that the practice of physical yoga, breathing, and the mindfulness associated with the practice ie awareness given to the practice, contributes greatly to achieving a greater relaxation than if one simply went straight into the relaxation without any preparation.

## Stimulate – Relax

Drs Nagendra and Nagarathna from Bangalore Yoga University also found that a deeper relaxation can be achieved by combining ‘stimulating’ then ‘relaxing’ practices to achieve a greater relaxation response.

Try for yourself – which works better – going straight into relaxation or doing some physical practices first. If you are feeling stressed I think you may find relaxation after physical practices works better.

## Restorative Yoga

One interesting compromise is do what is called ‘restorative yoga’. In this practice, deep relaxation is practised while sustaining yoga postures. This is achieved by using supports in the practice so that you can stay in the practice for a period of

time without effort and in a comfortable way.

There are many restorative practices and it is beyond the scope of this article, but a good reference for this is "Relax and Renew" by Judith Lassater.

One practice I enjoy and many of my students find beneficial is called Viparita Karani or Legs Up the Wall Posture.

Place blankets, pillows or bolster near a wall, sit side-on to the wall on the supports. As you lie down, pivot and swing your legs up the wall, head on the floor, with support adjusted to allow your back and pelvis to feel comfortable. Relax and breathe for a few minutes.....

This is a very simple inversion posture with few side effects and can be great for lower limb circulation problems, and painful feet or legs.

CARE with this practice – some people can get headaches with legs elevated.

### *Reference*

- Dusaek et al "Genomic Counter-Stress Changes Induced by the Relaxation Response"  
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