



## What's the point to acupuncture?

I think most people are mystified by the notion of acupuncture. In the past it has often been conveyed as a wacky Far Eastern form of healing and pain relief that has no scientific explanation. This actually is far from the truth. Indeed, acupuncture can now be obtained, if you have the lucky postcode, on the NHS. Currently, the National Institute for Health and Clinical Excellence (NICE) recommends that acupuncture is considered as a treatment option for one condition: lower back pain<sup>1</sup>.

This year a researcher, Mark J. Zylka, a neuroscience (brain and nervous system) researcher at the University of North Carolina, announced that his research paves the way for "making acupuncture a hundred times more effective". Zylka admits that he had never previously held in much regard acupuncture, because he thought there was no credible scientific explanation.

Previously, researcher, Goldman, and his team, found that needle stimulation caused the localized release of nucleotides and adenosine at acupuncture points, thereby reducing sensitivity to painful stimuli\*. (Goldman et al: Adenosine A1 receptors mediate local anti-nociceptive\* effects of acupuncture. *Nat Neurosci* 2010, 13:883–888).

Zylka's new research is all about advancing this knowledge that traditional acupuncture needles can stimulate the release of nucleotides in our body that convert into adenosine, which makes us less sensitive to pain. Nucleotides, and especially the nucleoside, adenosine, are the body's natural painkillers. Nucleotides are found naturally in the foods we eat, and our body makes billions of them every day, for a multitude of vital purposes, not least to dull chronic pain.

Back to Zylka's research! He has been working with an enzyme that makes adenosine in the body. This enzyme is used in hospitals, where it is injected into the spine, in order to provide pain relief for a few days. Because this is an invasive procedure, it generally is only used for those in excruciating pain. Zylka's research uses this protein in combination with acupuncture needles, which act as the delivery system. The research of the team aimed to mimic the pain relief that occurs with acupuncture, but have it last longer. This research has been in relative small scale so far. But, with these enzyme injections applied in typical acupuncture fashion, successfully outlasting the pain relief of traditional acupuncture one hundred times over, more exhaustive research is bound to follow. The aim is to provide up to six days of relief, lasting even longer than a dose of anaesthetic, which typically only lasts a few hours. This research was published recently in the journal *Molecular Pain*; (Zylka et al, *Molecular Pain* 2012, 8:28 doi:10.1186/1744-8069-8-28).

Acupuncture is also used to reduce the painful symptoms of Irritable Bowel Syndrome (IBS), and is effective for some sufferers. There are registered acupuncturists<sup>2</sup>, who have been trained in the use of acupuncture techniques to reduce the symptoms of cramping, pain, and other IBS symptoms.

Perhaps we should also look at our dietary intake of these wonderful pain dulling nutrients, namely nucleotides. This could be a way of making acupuncture even more effective at pain relief for IBS sufferers. Some foods naturally contain high levels of nucleotides, offal, meat, fish, and yeast extracts hold the greatest content. Unfortunately, the Western diet generally does not include much offal, such as liver, kidneys and tripe. Such foods are predominant in the diet of the countries, such as China, where acupuncture is used as a front-line treatment. Could the higher content of nucleotides in the diet of people in the Far East be one of the main reasons why acupuncture is so effective and therefore so predominant in the Far East?

It is unlikely that many people in the West will be prepared to eat offal foods, so perhaps more consideration should be taken to supplementing the diet with nucleotide-rich health products, such as IntestAid IB or NuCell IM, which are formulated with purified nucleotides, including adenosine. Clinical research on health supplement IntestAid IB conducted using participants with the symptoms of IBS, showed a significant effect on reducing abdominal pain.

What's the point, acupuncture? So, perhaps eating or taking more nucleotides as a health supplement is the 'point' for the effectiveness of acupuncture and supporting the treatment of irritable bowel syndrome!

1. NHS Choices <http://www.nhs.uk/conditions/acupuncture/Pages/Introduction.aspx>
2. British Acupuncture Council [www.acupuncture.org.uk](http://www.acupuncture.org.uk)
3. British Medical Acupuncture Society [www.medical-acupuncture.co.uk](http://www.medical-acupuncture.co.uk)
4. Nucleotide Nutrition Ltd, IntestAid®IB, NuCell®IM [www.nucleotidenutrition.com](http://www.nucleotidenutrition.com)