



Eat and think your way to higher work performance Article by Health Connect 19 November 2012

Group wellness and corporate wellbeing is vital in any organisation and is the common denominator to strong and effective leadership. Any good manager or leader needs optimal energy and acute mental alertness as they navigate their way through their daily tasks which are increasingly 'laced' with risks.

And as life in the fast lane continues, many companies in a globalised economy are saturated by sick leave, absenteeism, and general lethargy resulting in below par productivity, and diminished morale.

So how does an organisation turn the tide on these issues, and aim for optimum energy and morale in the workforce and ultimately a more productive employee and organisation?

Essentially, the bulk of the answer lies within the **nutrients** we consume; this is the core of a human's energy source. These nutrients perform the necessary functions within our bodies everyday and are so often taken for granted. Nutrients supply our bodies and brain with 'fuel' for power, and enable our organ functions to be carried out.

Sugar imbalances are often the cause of the low energy levels we may experience, and this may be one of the causes resulting in 'dips' in employee workplace productivity. These low blood sugar levels result in employees resorting to their 'afternoon fix' at around 3 or 4pm normally through a quick cup of coffee with sugar or a chocolate bar to perk themselves up in order to complete the rest of their day's work. Understandably, when some of these employees gather in the later part of the afternoon for their coffee or 'smoke ritual', their employers may regard this behaviour as abuse of company time, particularly as productivity is affected when these employees are not at their posts and working. Upon more careful consideration, might it be possible that these employees may not be congregating over a quick cup of coffee by choice, but rather because they actually "**have**" to get their boost in order to complete their day?

It therefore follows that brain chemistry, and the correct supply of nutrients is even more important to employees in top management who are often faced with tremendous stress levels and lots of responsibility.

That said, interestingly, the human brain has the capacity to store trillions of memories. It also, very importantly, sends messages to parts of the body -- that is from one neuron to another -- through 'components' called "*neurotransmitters*" – or "messengers" if you like. These messages are vital in making us feel good, satisfied, happy, energised, focussed and are important in protecting us.

Neurotransmitters are connected by *dentrites* and cross gaps called *synapses* to reach one another in the brain. The sending neuron produces the chemical neurotransmitter, pushing it to the receiving neuron which has a receptor. Where this process becomes complicated, is that the neurotransmitters have to exactly "fit" in order to be activated. If they do not "fit" then the message is not received.

So why is this important for group wellness and corporate wellbeing? Receiving the correct nutrients -- in its proper proportions -- is essential for optimum thinking, for focus and energy. Of course it is expected that strong leadership flows from a healthy body and a healthy mind, and when there is a strong and healthy leader, it provides fertile grounds wherein people may flourish and in the context of business, promote team spirit. Without delving into the detail, let us look at a few well known neurotransmitters to understand their importance in the proper functioning of the human mind and body.

First there's *serotonin*; this is the mellow transmitter which assists in improving sleep and avoiding depression. Then there's *adrenalin*, which most of us know; it makes us feel energized and sharp and it is also the "motivator" when we find ourselves in a challenging situation. One of the neurotransmitters which is not that often spoken of is *taurine*; it produces calmness, good digestion, sleep and seizure control. There are a few other neurotransmitters such as *dopamine*, *endorphins* and *GABA*.

All neurotransmitters are made from *amino acids* (which are the building blocks of protein). These are found in eggs, meat, chicken, fish, nuts and seeds and dairy. But unfortunately there are a number of other factors involved in getting these messages across the body.





Firstly, the human body must have plentiful vitamin B (2, 6 and 12), zinc and magnesium, including healthy fats such as omega 3 and 6, which form 40% of the human brain. Healthy fats help the neurotransmitters connect to the synapses (which we spoke of earlier).

Secondly, there is a process called *methylation*. This process is an incredible way whereupon the human brain manages to turn the amino acids into transmitters. A billion transmitters are produced every couple of seconds and are completely dependent on nutrients (which come from amino acids, vitamins and minerals from foods).

Following this rather brief explanation of what is a very complex process, a person can now understand when the human body is deficient in a neurotransmitter -- which can happen rather easily through stress, poor diet, fasting, dieting, or even over indulgence in certain substances -- how the brain then mimics messages to compensate the lack of its own neurotransmitters by trying to make us feel "awake", satisfied and happy by craving things like sugar, caffeine or cigarettes. This in turn causes even more deficiency and so the vicious habitual cycle continues.

These substances generally cause a desire for more of its consumption, which then results in a dependency upon sugar, caffeine and so forth. Some substances like smoking for example, are more severe than others. Unfortunately, the matter of quitting the habit by "sheer will power" is just not enough when attempting to stop the intake of these substances. And why so -- confused brain messages lie in the answer.

What is fascinating to note is how in a regulated and healthy body a cup of coffee, or spoon of sugar now and then for example will not hurt the body. But in an unregulated system (or deficient system), the "hit" is required more and more frequently to re-balance.

A distressing observation is that hypoglycaemia is often a precursor to diabetes. Under normal conditions when sugar is consumed, glucose is released from the liver into the blood stream and used for energy. Insulin is then released from the pancreas into the blood stream to restore the sugar levels. The excess sugar is then stored in the liver as glycogen. When the blood sugar levels fall too low, secretions from the adrenal cortex convert the stored glycogen from the liver back into glucose again. However when this cycle continuously occurs the pancreas burns out, which then results in becoming insulin dependent and eventually diabetic.

One of the safest and surest ways to rectify the balance in insulin production and brain chemistry is through proper dietary therapy. Eating a diet rich in green vegetables, fish, eggs, tofu, lamb, chicken, grains, seeds, nuts and beans as well as avoiding processed and refined sugars and stimulants is the key. Staying clear of colourings, additives and preservatives which also over-tax our delicate system, is also important. Substituting foods containing sugar with natural alternatives, such as fresh or dried fruit, molasses or Xylotol is of great value. Supplementation with further vitamins, and amino acids can be of major benefit where food is not enough and in many cases, it isn't.

Organisations who are concerned with their overall wellbeing, may soon be expected to provide guidelines to their employees regarding their personal health; and this may well form part of determining the health of the business and its succession management and future planning.

WORDS: 1,284

Claire Bell, D.N. D.th.D (Knowledge Connect - 083 412 2251) <u>claire@knowledgeconnect.co.za</u> / <u>www.knowledgeconnect.co.za</u>

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