



E-spoons E-zine
January 2013

EYE-ING THE NEW YEAR....

We kick start the first E-spoons of 2013 with a couple of eye opening stories. First one concerns new arrivals, *babies who arrive via c-section arrive programmed to be fat and something that borders on heresy, eating more fat is one way to decrease that troublesome oxidative stress problem, so is getting enough sleep, tired cells don't hear insulin knocking.* Next we pull the wool over your kids eyes by *turning fruit into a highly desirable snack and we take the sting out of getting those shots.* We look back on the *best posts and cartoons of 2012* and celebrate the New Year with the *RIGHT shaped glass, to avoid being tipsy.* Hope you're seeing a *FABULOUS 2013* and your *doting dog is seeing more than a can opener.* If you've resolved to be "healthier" in 2013 – kickstart your year with *31 days to Better Body Chemistry, its free.*

The E-spoons E-zine is a monthly compilation of stories appearing on [7 Big Spoons™ blog](#). The stories are based on the latest science tit bits and will help you become a little healthier, wealthier and wiser by explaining the why. As a friend of Spoonful of Science you have been included on our mailing list – should you wish to unsubscribe, follow the link at the bottom of the E-zine.

Babies who arrive via c-section arrive programmed to be fat

The way something starts, invariably sets the tone for how things end. Logic suggests a smooth easy ride into this world – is going to be better for everyone involved - so c-sections should be BETTER for everyone involved.

But avoiding the hard start, seems to be increasingly a case of NO PAIN, MORE GAIN. The gain comes in extra rolls of fat..... later. Being born the easy way, doubles your risk of being fat. [Read more about the Massachusetts study.](#)



Getting that big head into the world through a very narrow tube, requires lots of pushing, shoving and SPUTTERING. Since the task is performed head first – a whole heap of fluid gets swallowed, *en route* to the outside.

The fluid is considered to be "DIRTY", it is jam packed full of the bugs which reside in the vagina. These are the first germs baby encounters and they serve as this world's, welcoming committee. And, they're usually the GOOD GUYS.

Study after study has shown, baby's who start out the way Mother Nature intended i.e. the hard way – have the PAIN, but GAIN lots of bacteria belonging to the *Bacteroides* family. Babies who get a softer start, avoid the PAIN, but GAIN a lot more bacteria which belong to the *Firmicutes* family. And, in the long run, this really matters. Fat people consistently have an excess of *Firmicutes* and a shortage of *Bacteroides*.

Aaah..... it is a universal law - NO PAIN, NO GAIN ! So if you're in a position to choose, choose the hard way.

[Return to Table of Contents](#)

Eating more fat will take care of that oxidative stress problem

The enemy of health is too much oxidative stress.

Limiting the formation and/or mopping up those excess pesky free radicals, is probably the key to eternal youth. Okay, maybe living forever is something that only happens in movies, but living healthy into your eighth decade and beyond, definitely requires this ubiquitous stress, too be dialled down.

Fighting oxidative stress

Now there are lots of ideas out there on how to do it....

- Gobble down foods that are loaded with anti-oxidants, such as peas and carrots and raw eggs.
- Swallow medicines that have anti-oxidant properties such as statins and aspirin
- Starve yourself, if you're not up to it, at least cut your calories SIGNIFICANTLY. Not just for the week after Christmas, for the duration of your life.

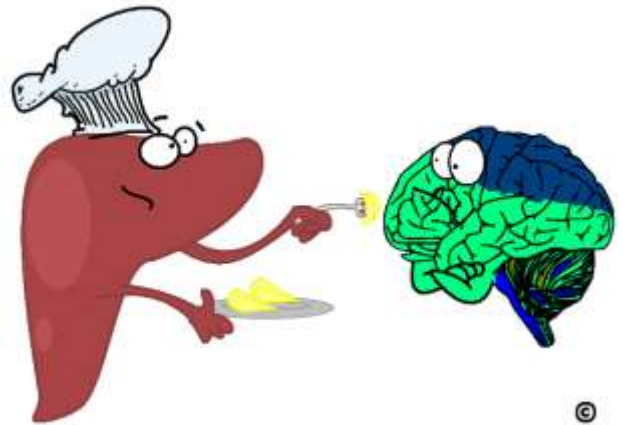
The last one seems to work for most living things, from worms to rats, but it is not something seen too often in humans – most of us eat too much. Genuine starvation, usually amps up stress and hastens demise. But scientists at the Gladstone Institute believe they have uncovered the chemistry beyond the “starvation” effect – and the good news, you don't actually have to starve to get it to work.

All you really need to do, is change your body's fuel source.

Read more about [the tale of two fuels....](#)

**YOU WANT TO RUN YOUR BODY ON FAT,
NOT CARBOHYDRATES**

A cell can throw either fuel into the mitochondrial fire - but which fuel is thrown on the fire, changes the cell's chemistry, since it takes a different set of enzymes to do the job.



When a cell is opting to use β -hydroxybutyrate (fat), it interferes with the functioning of an enzyme called HDAC1 (histone deacetylase 1). This causes a shift in the arrangement of the cell's DNA – allowing a transcription factor, a little piece of DNA which switches on genes with the matching code, to go into production.

The transcription factors which are turned on, in the presence of β -hydroxybutyrate, include FOXO3A and MT2. I know it looks a bit like alphabet soup – but the point to get is, FOXO3A and MT2 are the good guys, when it comes to oxidative stress. They help turn on the cell's protection mechanisms.

So at the end of the day – a cell burning fat, is actually way better off, than a cell burning sugar, because the cell is not under quite as much metabolic stress.

One way to burn more fat – is to eat more fat [read more.](#)

I know, for many readers this is heresy, but there is a growing body of scientific evidence, to support the idea that the route to optimum health, is a low carb, high fat (specifically saturated fat) approach, especially if you're battling with metabolic syndrome troubles i.e. you're overweight, got HIGH cholesterol and/or high blood pressure.

[Return to Table of Contents](#)

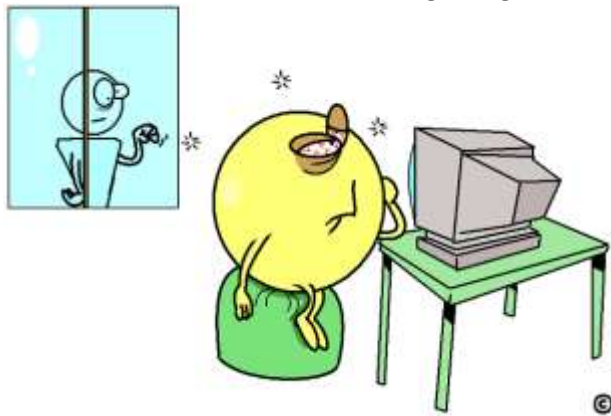
Need a little help with your cholesterol battle plan ?

High cholesterol is a sign of BAD BODY CHEMISTRY. I conduct one-on-one health conversations in Gauteng area.
Phone 083 262 5023 to book an appointment and begin “FIXING” the real trouble.

Tired cells don't hear insulin knocking

Staying up late is a way of life these days.

The trouble with these late night shenanigans, is that they make cells hard of hearing. And not being able to hear the knock-knock of insulin, is the beginning of metabolic troubles.



Even if you're young and healthy – not getting enough sleep causes "hearing" problems.

A team of researchers from the University of Pittsburgh found healthy high school students suffer insulin "deafness" when they don't get enough shut eye.

The extent of the problem was related to the level of "sleep" deprivation. Students sleeping for the least amount of time, had the most trouble responding to insulin. This inability to respond to insulin was seen in all students – black, white, green, pink etc.

Ignoring insulin the beginning of TROUBLE. [Read more](#)

Avoid hearing impairments - by getting enough shut eye.

Make getting enough sleep one of your NEW YEAR'S RESOLUTION. Sleep is one of the BIG SPOONS, necessary for GOOD HEALTH.

[Return to Table of Contents](#)



Need a little help with a health problem ?

Complete a body audit and discover the habits that are hurting your health. Then draw up a personalized action plan, to improve your overall body chemistry. To book your body audit, drop me an e-mail at drsandy@spoonfulofscience.com or phone 083 262 5023 to book an appointment.

How to turn fruit into a highly desirable snack

You want your family to eat a few more fruits and vegetables – and when pushed, they want to too. BUT....its hard ! Well, you can change the odds.... a little.

The secret to turning apples into an acceptable reached for snack.....
STICK IT RIGHT UNDER THEIR NOSE.

[Read how researchers discovered that all it really takes to get college students to snack on fruit](#), is to make it REAL EASY and REAL OBVIOUS.

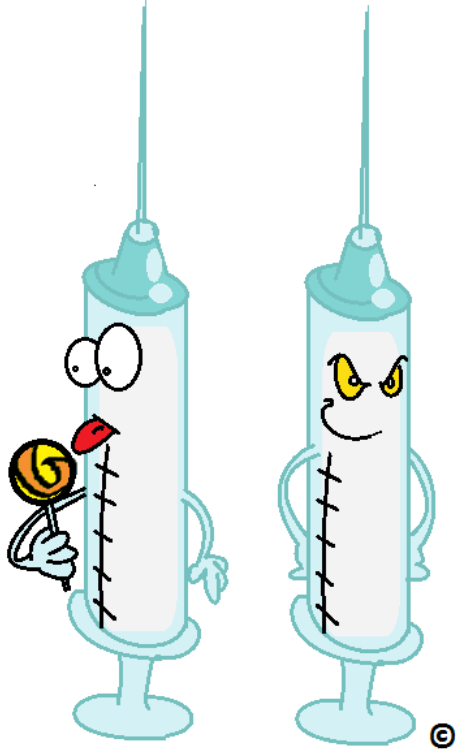
It seems logical to hide that bag of big juicy Granny Smith apples in the fridge... to keep them around for longer, but tucked away in the fridge, no one thinks about them. So they never get devoured and after a "long" time, they get cleared from the fridge, into the trash.

If the fruity snack is VISIBLE i.e. in a clear bowl and on the table where people are working – they WILL tuck into apples and carrots.

[Return to Table of Contents](#)



A spoonful of sugar REALLY does make the injection go down



Not sure how you feel about having an injection..... I may be all grown up, but the idea of a huge big needle, being thrust into my tender arm or butt, is SCARY. And for the most part, it is not just a figment of my imagination that it is going to be soar..... needles cause ouches.

As an adult, it is not acceptable to wail for hours afterwards, even if you would like to. Actually it is not even acceptable to wail in the moment – a sharp intake of air, along with a flinch, is the sum total of what is considered socially acceptable behaviour.

Babies haven't learnt this social etiquette – give a baby an injection and it will howl for as long as it ~~wants~~ needs to.... in response to the PAIN and discomfort.

But, you can take the sting out of an injection and so decrease the shrieking.....

It takes a spoonful of sugar, IMMEDIATELY PRIOR to the needle prick, to decrease the sting. This is the finding of a meta-analysis – [read more here](#).

The finding is probably not a big surprise – most grown ups know that **NICE THINGS help you cope**. And most of us have used SUGAR to medicate our STRESS. The problem with this approach, is we don't just consume a small piece of chocolate to relieve the tension and anxiety, we eat the whole slab. And this, brings on a whole lot of additional stress – **metabolic**, as well as **psychological**.

But it only takes a **smidgen of sugar** to do the trick....

So if you are dealing with the stress of getting junior his/her shots, make sure you drop a little sugar on their lips, a minute or two before the needle stabs them. To find out the best way to do this – [read here](#).

PS. The same principle applies for older children – just make sure you give the lollipop before the injection, after the event is too late to change the body chemistry. The only real benefit of the after injection lollipop, is it makes the doctor/nurse look good.

[Return to Table of Contents](#)

Best posts from 2012

This week is 7 Big Spoons official birthday – we're 2 years old. During 2012, I've learned a lot about blogging and biology, hope you have learned a little too. In this month's edition of E-spoons, I want to highlight some of my favourite posts.....

Here are my top five health tips... stuff I wish everyone knew.



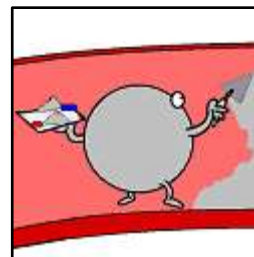
Moving more won't stop your kid from getting fat



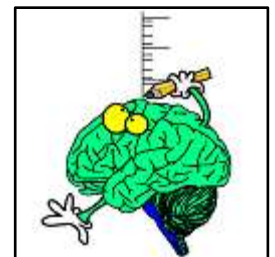
Stop grazing it will stop you packing on the pounds



Make sure you have your "annual" check-up in the summer time

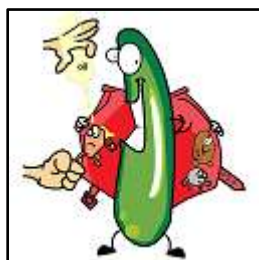


Calcium supplements are building bones and breaking hearts



Are kids with ADHD just acting according to their brain age ?

Each post is illustrated with a cartoon custom drawn by my right hand man, [Guy Alain Ngangob](#). Alain has the ability to capture my ideas and then take them to the next level. Here are MY favourites...



That salad is just lettuce leaves without the right dressing



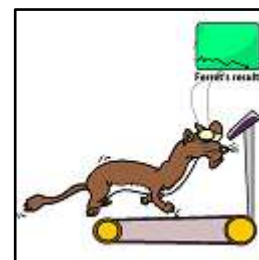
Real men need real meat to avoid heart disease



How much vitamin D do you really need ?



Fat cats don't do sugar



Ferretting out why you hate to exercise

PS. Alain has just graduated with a degree in Biotechnology – he is looking for a job. If you can help, [drop him an e-mail](#).
[Return to Table of Contents](#)

The shape of your drinks glass determines if you get tipsy

“Give me a whisky and lemonade – oh, and make sure you serve it in a straight-sided glass”.



The bar man might think you're already a little tipsy, but in actual fact, this would be one way to avoid yourself becoming tipsy, as the evening progressed.

According to a study published by researchers from Bristol's School of Experimental Psychology – the shape of the glass matters. [Read more ...](#)

How fast the alcohol is loaded into you counts. If you load up too quickly, the amount of alcohol landing in your system, can overwhelm your enzymes – leaving you woozy and light headed or if you really overdo it – **dead headed**.

So you need to keep an eye on the speed at which you're drinking. If you're drinking out of a curved glass – you won't be able to do this as well.

Avoid silly behaviour and insist your bar man serves you that drink in....

A straight lined glass.

[Return to Table of Contents](#)

Does your dog see you as a can opener ?



A wagging tail and a loving stare..... is dog talk. But what is the thinking behind the dog discourse ? Who exactly is your dog talking to ?

Is it....

- A friend
- The leader of the pack
- A can opener

In the case of Jozie, our psychotic dalmation – the answer is easy. Jozie sees the humans in her life, as her personal chef. She genuinely believes that every human action is designed to provide her with delicious food. And the stuff that comes out of the packet, ironically enough labelled DOG FOOD, is for the birds. That said, **she doesn't necessarily always like to share it with them**.

Emory University researchers decided to apply a little state of the art brain technology, to the minds of a couple of pooches. They wired up a functional Magnetic Resonance Imaging (fMRI) machine, so it could accommodate a wide awake dog. [Read more...](#)

Their conclusions.....

Just like in humans, **dog's have a reward centre**. The caudate region of both dogs, lit up like a Christmas tree, in response to the good things are coming your way, hand signals. When the bad news hand signal flashed – the brain region failed to glimmer.

Humans, who love dogs, often give their dog human emotions and feelings. Non dog lovers think they're nuts. This study confirms, there definitely is a little chemistry between a man and his dog.

Go on, **cuddle a canine** – in an instant you'll create an explosion of good body chemistry in you and the dog. Even if your dog thinks it is hugging a can opener.

[Return to Table of Contents](#)

Are your feeling.....



Keen to start the New Year off on a healthy note ? [Sign up for the free e-course 31 Days to Better Body Chemistry.](#)
[Return to Table of Contents](#)

Thank you for taking the time to read the e-zine. I love hearing from readers, so [drop me an e-mail](#) to let me know which story you enjoyed the most, did you learn something new or do you have a different perspective.

Did you enjoy the E-zine ? Forward the E-zine to a friend or

Give us a like on **facebook**

Next month we will exploring BONES & BOWS. Look out for the next edition of E-spoons in your inbox on 6 February 2013 (the first Wednesday of the month).

Yours scientifically

Dr Sandy

Tel : 27-11-452-2207

Mobile : 083 262 5023

Website : www.spoonfulofscience.com

Blog : www.7bigspoons.com

The cartoons were drawn by [Guy Alain Ngangob](#) – drop him an e-mail if you need a cartoon or two. If you want to access the science articles used to compile the newsletter, visit the relevant pages on the blog and follow the link.

Copyright © 2012 by Sandra Evans. YOU ARE WELCOME TO COPY the e-Zine's contents for use in your own newsletter, company or club publication, BLOG or website. Please give proper credit and a link back to <http://www.7bigspoons.com>.

Disclaimer : The e-zine is provided as a service. Dr Sandy's reports and opinions are for information only, and are not intended to diagnose or prescribe. For your specific diagnosis and treatment, consult your doctor or health care provider.