

#SCIENCE #TECHNOLOGY #FOOD #MIND #STUFF

GURU

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CONTENTS

ARRIVALS LOUNGE	4
<i>A word from the editor, Dr. Stu.</i>	
#MIND	
<hr/>	
DECISIONS, DECISIONS... ..	5
<i>Why is it so hard to make a good decision?</i>	
#FOOD	
<hr/>	
THE BURNS NIGHT FACE-OFF	7
<i>The battle for supremacy – haggis or Big Mac?</i>	
MEET THE GURUS!	10
#SCIENCE	
<hr/>	
THE TOP TEN MEDICAL MYTHS	11
<i>TV doctors may be sexy, but they're not always right...</i>	
#TECHNOLOGY	
<hr/>	
OUT OF THIS WORLD!	15
<i>Got ten grand to spare? Shoot to the moon!</i>	
#STUFF	
<hr/>	
CONFESSIONS OF A SOCIAL MEDIA ADDICT	18
<i>A Guru struggles to keep control...</i>	
DEPARTURE LOUNGE	20

ARRIVALS LOUNGE

Salutations, fair reader!

You are lucky enough to have got your hands on the first edition of **Guru**, a digital magazine which looks at the world with a scientific slant (but without the lab goggles). Deliberately light-hearted and in the style of a lifestyle magazine, it's the sort of thing you don't need a PhD to get your head around.

Written by you, and for you – **Guru** is a new breed of journalism. This issue should give you a flavour of what it's all about. Maybe you'd like to get involved? If you like what you read, why not follow us on Twitter **@GuruMag** for the latest updates. We'd love to hear from you – so let us know what you think!

DECISIONS, DECISIONS...

Making your mind up...

All of us struggle with making decisions from time to time. The key to us making better decisions could lie in the secrets of our memory...

Do you ever struggle like me to make decisions when out shopping? If you were to ever meet me in a supermarket, you would probably find me wandering the breakfast cereal aisle pacing up and down, scrutinising packets – completely unable to make a decision. Perhaps it's not the supermarket that you struggle with – maybe it's buying new shoes or deciding what shirt to wear in the morning?

Picture the scene: you're in the supermarket, hoping to buy some washing powder. Staring back at you are a dozen or more varieties: which would you choose? The cheapest? What about the eco-friendly one?

You might try to logically weigh up the pros and cons of each – but to be honest: you're going to struggle. You could just pick one at random, but then you might face the nagging remorse of 'If only I had chosen the environmentally friendly one!'

If you ever face dilemmas that you just can't seem to resolve: fret not, because there's a scientific reason for this. We human beings were programmed that way and it's all to do with our extremely limited and fallible working memory.

Try a Memory Test

Imagine playing a game where you are shown a collection of random, unrelated objects on a tray for a few seconds. If those objects were then covered over, how many do you think you could remember? If you've ever tried doing this, you'll appreciate how difficult it can be to remember more than a handful of things.

Suppose you were read a list of 15 unrelated words (e.g. 'egg', 'chair', 'interest', 'episode', 'moon' ...) how many do you think you could remember?

When most people try these tests, the best they can do is seven different objects or words. This is the typical size of the human working memory and was first discovered by psychologist George Miller in the 1950s. He called it the 'Magic Number Seven' and it seems to be true regardless of culture or creed. Incidentally, it's probably for this reason that telephone numbers aren't normally longer than six or seven numbers long (excluding the area code). This inherent neurological limit means that when we are faced with complex problems that have multiple important features (like cost, efficiency, aesthetics, functionality, etc.) it is simply not possible to be mindful of all the different factors at the same time! Four or five options are fine, but more than that and the working memory quickly becomes swamped and making a thoroughly logical decision becomes impossible.

The 11 billion neuron cells crammed into your cranium just can't seem to be able to juggle all those different factors around at the same time – cue procrastination!

If you turned your shopping dilemma into numbers, then a computer could process the calculations in seconds (e.g. cost vs. quality, functionality vs. aesthetics). But we have another trick up our sleeves that no computer has that is an extremely powerful decision-maker: intuition.

Top Trumps has the Answers!

Give one person a pile of 'Top Trumps' cards (say for cars) that have seven or more features on them (fuel economy, top speed, price, acceleration, etc). Ask them to try to 'work out' which is the best. Give them a few minutes to think it over.

Now give a second person the same 'Top Trumps' deck and get them to read them through. Then ask them which they 'feel' is the best car.

It is surprising to find out that the person who nearly always makes the best choice is the person who relies on their 'feel'. When we are faced with difficult problems which overwhelm our working memory, the mind is still somehow able to account for and weigh up the different pros and cons. This isn't done as a conscious calculation (like $5 \times 7 = 35$) but is processed on a deeper, more primitive level. Given time and providing you've read all the available information, the different factors are fed into the limbic system (the part of the brain that handles emotions). Under test conditions, our 'gut feelings' consistently come up with the best decisions for complex real-life situations.

So, is there a solution to your supermarket woes and troublesome dilemmas? Yes, and it is a simple one: stop thinking so hard! Rather than 'working out' the best choice, it is more effective to consider all the factors that matter and then rely upon your intuition. In situations where you don't have time to write a full list of pros and cons on paper, it really does work!

Dr. Stu is the magazine's Science Guru. Originally trained as a medical doctor, he now lectures at Wiltshire College, UK. Stu says, "I love seeing science in the everyday and extraordinary". Follow his scientific musings on Twitter @realdocstorstu and on Dr. Stu's Science Blog, realdocstorstu.com.

Information Sources & Further Reading:

- Explore your memory with BBC Science
<http://www.bbc.co.uk/science/humanbody/mind/surveys/memory/>
- Read more about the life of George Miller
<http://www.lifecircles-inc.com/Learningtheories/IP/GAMiller.html>
- Read the original 'Magic Number Seven' article
<http://www.musanim.com/miller1956/>
- Read more about how memory works (Discovery Health)
<http://health.howstuffworks.com/human-body/systems/nervous-system/human-memory.htm>

THE BURNS NIGHT FACE-OFF

Haggis versus the Big Mac! Which is really better?

Haggis is like Marmite: people love it or hate it. Banned in the USA and slammed by health critics, just how bad can this Scottish delicacy really be?

Haggis is no longer the reserve of the ardent kilt-wearing Scot, because more and more Burn's Night revellers are opting for this authentic fare. Not helped by its anaemic appearance, the haggis has an image problem. Fans of this 'boil in a bag' of sheep innards claim that it is authentic, traditional, and no worse than the fast foods many of us eat.

On the promise not to use any offal puns, I cast a critical eye on the evidence for and against this Scottish national dish.

So what goes into a Haggis?

The culinary contents of a haggis don't sound particularly appealing: sheep lungs, heart and liver, mixed with oats, onions and stewed in a bag of animal intestines...

I would be the first to concede that sheep offal doesn't look very attractive, but how much worse is it really to other animal-based foods?

It is worth considering where some of our more 'acceptable' delicacies come from: black pudding is dried blood and a traditionally-made sausage is coated in intestines (although the ones from the shops are more likely to come in a synthetic casing).

So let's get down to some numbers... Nutritionally, how does haggis line up against familiar, more socially acceptable foods?

Well, haggis is certainly not going to qualify as one of your five-a-day (even though it looks a bit like a mouldy aubergine). It would also miss the 'low fat' and 'healthy' categories by the distance of a good caber toss. But when you compare the nutritional facts of a haggis and it's more fashionable meat counterparts, the Haggis is pretty similar to sausage (and gram-for-gram has less fat)!

Nutrition facts per 100g			
	Haggis	Pork sausage	Half a Big Mac
Calories	310	302	257
Total fat	21.7g	26.5g	15.0g
of which saturates	7.6g	8.8g	3.8g
Carbohydrates	19.2g	0.0g	20.1g
Protein	10.7g	15.1g	11.8g

An adult should eat approximately 2000 calories and up to 65g of fat

Why is Haggis so uncool?

I can understand people who are squeamish about eating offal; apart from steak and kidney pie, we just don't eat animal organs very much anymore. But historically, offal would have been in all sorts of pies and sausages. Current legislation states that offal isn't allowed to be labelled 'meat'. Many old-fashioned foodies think that this distinction is a little unfair – as offal has important nutritional benefits you won't find in a Big Mac or a sausage – both liver and kidney are great sources vitamins A, B and iron!

Safety Concerns

The most controversial ingredient in haggis is sheep lungs. When the BSE (Mad Cow Disease) outbreak was in full flow in the 1980s and 90s, there was a ban on all foods containing cow brain and spine. This rather sensible precaution was because Mad Cow Disease seems to be spread by infectious proteins called 'prions' that accumulate in an infected cow's nervous system. It was in the midst of this public panic and uncertainty that sheep lung was temporarily banned as a 'precautionary' measure. There is still a lot we don't understand about BSE and how it is transmitted but sheep products have been shown to be safe (as far as is reasonably possible) by the UK Food Standards Agency (FSA). To the fury of many a Scot, the ban still exists in some parts of the world...

Some have been worried that offal may contain toxic heavy metals and carcinogens (like 'dioxins') or might cause food poisoning. The FSA performed a comprehensive survey of British food and showed that such foods tested were quite safe. Poorly washed sheep intestines can increase your chance of food poisoning, especially if not cooked all the way through – but considering most haggis doesn't even contain intestines anymore, the overwhelming conclusion is that Haggis is safe to eat.

To eat or not to eat?

Haggis is a high-fat, salty food, as are many foods that we eat. But in treating yourself to a portion of haggis you aren't likely to send yourself to an early grave. I'd definitely treat myself to a haggis on Burn's night – especially considering as it has some nutritional benefits when compared to a pork sausage or a Big Mac.

Taste-wise, I have become quite partial to the haggis... Perhaps I can persuade McDonalds to consider a more nutritious addition to the menu...

You saw it here first: the McHaggis Sandwich! I'll have mine with a side of neeps, please...

Dr. Stu

Health Note: *Given that Haggis is a good source of vitamins A, B and iron, pregnant women should probably limit their haggis intake (as excessive vitamin A can lead to problems).*

Information Sources & Further Reading:

- Is Haggis inedible? The American government think so!
<http://www.deadlinenews.co.uk/2011/01/23/haggis-inedible-says-us-government/>
- Find out what makes up part of your Five-A-Day:
<http://www.nhs.uk/livewell/5aday/Pages/5ADAYhome.aspx>
- Nutritional information from <http://nutritiondata.self.com> and Haggis nutritional information is taken as an average of eight commercially available samples of haggis
- Confused about different types of offal? Read more here:
<http://www.beachcuisine.com/Articles/MPGF/Terminology.htm>
- Advice on healthy eating during pregnancy available from BBC Health:
http://www.bbc.co.uk/health/physical_health/pregnancy/pregnancy_diet.shtml
- Read more about how the USA is lifting its ban on Haggis (Guardian.co.uk): <http://www.guardian.co.uk/uk/2010/jan/24/america-haggis-ban-lifted-burns>
- The Food Standards Agency's 2006 reports on toxic metals in offal (<http://www.food.gov.uk/multimedia/pdfs/fsis1406.pdf>) and other toxins in offal (<http://www.food.gov.uk/multimedia/pdfs/fsis1506.pdf>)
- The European Commission's full 2007 report on BSE risk posed by offal products: http://www.efsa.europa.eu/en/efsajournal/doc/biohaz_op_ej442_qra_sheep_en,3.pdf

MEET THE GURUS!

Guru is about people who are passionate about a range of different subjects. So, on that note, meet the team:

Science Guru

Doctor Stu originally trained as a medical doctor before branching out into lecturing. He drinks too much coffee, eats ice cream and has a bizarre love of keeping fit.

You can read Doctor Stu's blog at realdocorstu.com.

Design Guru

Sarah is the graphic designer responsible for Guru's design & layout. Her dream is to live in Hong Kong reading comics and eating mango pudding.

Read Sarah's design & illustration blog at www.randompanda.co.cc.

Media Guru

Ben is a PR professional & social media enthusiast based in Wiltshire, UK. Ben studied Film at university and still spends far too much time in front of a screen.

Read Ben's marketing, PR & social media blog at benvealpr.com.

THE TOP TEN MEDICAL MYTHS

We all love a good hospital drama. They can tick all the boxes of great TV: life and death situations, steamy relationships, ethical dilemmas and blood and gore. But just how accurate are they?

It's surprising to discover just how many inaccuracies today's hospital TV dramas have in them. Here are the Top Ten things you'll only ever see in a TV hospital...

10. The White Coat Myth

Doctors have always liked to wear garments that set them apart, but did you know that in the past doctors wore black suits? It was only about 100 years ago that medics switched to wearing white coats – a type of power-dressing symbolising science and cleanliness.

But unlike what you see on TV, very few doctors wear white coats anymore! Ironically, most hospitals have now stripped doctors of their distinguished white garb because they are far from being the sterile things they're supposed to be! Despite surveys showing that most of us prefer to be treated by a white-coated Doc, incredibly, at least a third of those coats harbour disease-causing bacteria and 'superbugs' like MRSA.

So remember, you should never trust a doctor in a white coat...

9. The Successful Resuscitation Myth

Any self-respecting medical drama must have at least one emergency resuscitation per episode. Anything less just wouldn't be right. We all know the formula: doctor-heroes sprint to the aid of a collapsed patient, stethoscopes swinging. Mere moments after arriving, and a bit of chest pushing or a shock with a "defib", the patient splutters back to life. These TV depictions are sadly far too optimistic. The reality is pretty grim: Cardio-Pulmonary-Resuscitation (CPR) rarely works – and this was my experience when I was a hospital doctor. Even with the best equipment and training only about 5-10% of hospital resuscitation attempts succeed.

8. The Next-of-Kin Myth

Incapacitated by some dreadful condition, relatives are invited for a serious discussion with doctors about the treatment of their loved-one:

"We need to ask you, Mr and Mrs Smith, should we try to save Jonny's life even though he's suffering so much?"

In the many countries (such as the UK), such a situation should never happen: the next of kin has no power to make decisions. In US hospitals life and death decisions may be handled by a 'surrogate decision-maker', but this is the exception rather than the norm. Doctors will always talk to relatives and take their opinions into consideration, but ultimately the decision for giving life-saving treatment is made by the medical team.

7. The Shockable Flat-Line Myth

Picture the scene: a patient has been wheeled into the ‘Emergency Room’ from a car accident. Their blood pressure is dropping, they’ve stopped breathing and the heart monitor shows a ‘flat line’. Everyone seems to be panicking! Someone grabs a defibrillator and shouts “Clear!”

The patient jerks and is shocked back to life! Phew!

Dramatic – yes, but utterly wrong.

Firstly, defibrillators send an electric shock to the heart but the shock is nowhere near strong enough to cause the violent body spasm you invariably see on TV!

Secondly, shocking the heart never works when a person is ‘flat-lining’ (a condition called ‘asystole’). Shocking the heart only works in certain conditions – when the heart monitor shows an erratic trace.

Finally, a heart-trace flat line is never completely flat. In reality it never looks like you see it on the TV – a completely flat line means the machine is not connected!

6. The ‘Paranoid’ Schizophrenia Myth

Mental Illness gets a bad press, even in medical dramas. I get on my soapbox when medical dramas don’t take the opportunity to dispel common myths and misconceptions about mental health problems. Schizophrenia is nearly always portrayed very badly: characters either have a ‘split personality’ or are blood-thirsty psychopaths.

In reality, people with schizophrenia are rarely violent, and never have a ‘split personality’.

‘Paranoid’ schizophrenia is the name given for the commonest type of schizophrenia and many psychiatrists prefer not to use the term ‘paranoid’ because of all the negative and inaccurate connotations it has. And unlike what you might have read in tabloid newspapers, people suffering from schizophrenia usually withdraw into themselves rather than go out onto the streets wielding an axe.

‘Multiple personality disorder’ is something altogether different and is highly controversial: popularised by movies like Hitchcock’s ‘Psycho’ and ‘Fight Club’, many professionals think it’s a condition made up by lawyers and impressionable doctors!

5. The Pulling-Out-the-Blade Myth

Having just survived a terrorist explosion, ‘Jack’ lies wounded on the floor. Grimacing through the pain, he realises that a sharp piece of metal has impaled in his side. Being a well-trained action-hero, he knows that the best thing to do is pull it out...

Our action hero obviously never went on a First Aid course. While pulling out an impaled object looks very manly and brave it is probably the worst thing to do. Trying to pull out anything much bigger than a large splinter is

likely to make the bleeding much worse. Don't try to be Rambo: leave it in and let the professionals take it out!

4. The Defibrillator Rub Myth

Go on: give those defibrillator paddles a rub while it charges up! You see it in nearly every medical drama but apart from looking cool, rubbing defibrillator paddles together is completely pointless, and could even wreck the equipment.

Medics used to occasionally rub defibrillator paddles together to spread conductive gel across them. But gel is pretty messy and has been completely superseded by self-adhesive 'gel pads' that are stuck on the chest.

3. Made-up Diseases

Script writing for medical dramas must be great fun. To most of us, medicine is shrouded in exotic-sounding diseases and unintelligible jargon. Granted, the internet means that we are now much more informed about medical matters than ever before; but who really knows the difference between a medullary glioblastoma and a cavernous sinus thrombosis when looking at a brain scan? And would you know if 'uromyositis poisoning' was real or not? Even though all medical dramas have at least one doctor advising the script-writers, they still tend to be pretty liberal with the truth. Let's face it, real life can just be a bit too mundane for TV!

(By the way, 'uromyositis' is completely fictitious and was featured in an episode of 'Seinfeld'...)

In an attempt to put the record straight, one doctor has dedicated a website to cataloging every single medical inaccuracy in the hit American TV show House MD (http://www.politedissent.com/house_pd.html)!

2. The 'Doctors Do Everything' Myth

My favourite hospital drama at the moment is 'House MD', but it happens to be one of the worst culprits for peddling the myth that doctors do everything. If you based your view of a doctor on what you see on TV, you would think they all had IQs off the Richter scale, could always diagnose and treat any condition, operate MRI scanners, analyse blood samples in the lab, and even perform complex surgery! I can only conclude that these academic super-heroes must save the hospital a small fortune! TV hospitals clearly have no need for radiologists, lab technicians, nurses, pharmacists or specialist surgeons.

It might sound strange, but in reality doctors are actually humans...

1. The 'Behind Any Storage Room Door There's a Couple of Doctors Having a Romantic Moment' Myth

Are you lonely and in need of a relationship? Then why not become a medical intern?!

'Grey's Anatomy' did to hospital dramas what 'Sex and the City' did for sit-coms – it brought sexual tension to the hospital corridors. By bringing

the medical drama to new levels (or lows), the hospital has been radically transformed from a bad-smelling institution that no-one wants to visit to a hip and modern Club 18-30!

You may be relieved to learn that most medical professionals are far too busy for a 'quickie' in the sluice cupboard (although that does sound quite romantic). Either that or I always worked in the wrong hospitals...

Dr. Stu

References and Further Readings:

- Treacle AM, Thom KA, Furuno JP, Strauss SM, Harris AD, & Perencevich EN (2009). Bacterial contamination of health care workers' white coats. *American journal of infection control*, 37 (2), 101-5 PMID: 18834751
<http://www.ncbi.nlm.nih.gov/pubmed/18834751>
- Hochberg, MS. The Doctor's White Coat – an Historical Perspective *American Medical Association Journal of Ethics* April 2007, Volume 9, Number 4: 310-314
<http://virtualmentor.ama-assn.org/2007/04/mhst1-0704.html>
- What is a superbug?
<http://ezinearticles.com/?What-is-a-Superbug?&id=883571>
- Get more information on Schizophrenia from NHS Choices (<http://www.nhs.uk/Conditions/Schizophrenia/Pages/Introduction.aspx>) and the excellent website Rethink (<http://www.rethink.org/>)
- Read about real defibrillators here:
http://en.wikibooks.org/wiki/First_Aid/Automated_External_Defibrillation
- A comprehensive list of made up diseases is on Wikipedia!
http://en.wikipedia.org/wiki/List_of_fictional_medicines_and_drugs
- Another article of medical inaccuracies in the Eagle Tribune:
http://holtzreport.com/housemd/As_Seen_on_TV_Kirkwood%20Eagle-Tribune_20070305_HR.htm
- Why you should never do CPR like you see it on TV: an article by Free Radicals.
<http://www.freeradicalsmag.com/2009/12/09/cpr-as-seen-on-tv/>
- Multiple Personality Disorder (a.k.a. 'split personality') is discussed here: <http://www.personalityresearch.org/papers/cherry2.html>

OUT OF THIS WORLD!

The amateur's guide to making your own satellite

What could you do with a spare US\$10,000? Take a trip around the world, perhaps? You probably hadn't thought investing in space technology was an option – but now it is: with a pretty modest budget, you can build and launch your very own satellite!

We all know that technology is smaller and more powerful than ever before. By utilising the sort of gizmos that normally live in your mobile phone, it is possible for amateurs to buy 'DIY satellite kits' and build their very own planetary orbiter.

These tiny spacecraft (called 'nano-satellites') are the size of a bottle of coke and weigh less than a bag of potatoes.

And many garage-built satellites also get to 'hitch a ride' on the next space agency rocket launch for next to nothing!

Amateurs and professionals alike are seeing the potential and are flocking to get a piece of the action: satellite TV, weather monitoring and space telescopes are now within the grasp of mere mortals like you and I.

Satellite Building – The Amateur Way

It's a little known fact that since the 1960s, amateurs have been launching satellites into space. Eager radio enthusiasts have been organising ad-hoc space missions, buying, begging and borrowing military rockets and equipment to launch their projects into orbit. Fascinated by the possibility of sending communications through the stratosphere and bouncing them round the globe, these HAM radio gurus have led the way in low-budget space enterprise. Meanwhile, wealthy TV companies and governments have focused on constructing and launching increasingly huge and sophisticated satellites. Incredibly, many modern TV and communication satellites are the size of a small car. But the NASA space programme has downsized and cash-strapped governments are now looking for a cheaper way to do things. Many an expert has now come to realise that the future of satellite technology may well be smaller, simpler and more value-priced.

Prompted by this emerging grass-roots movement, clever folk at California Polytechnic State University and Stanford University wanted a way to simplify the whole process for a wannabe satellite builder. They developed a design that standardised the whole process. That design was remarkable in its simplicity: all amateur-satellites must be a 10cm cube in size, and weigh no more than 1kg. They called their design the CubeSat and this new specification has become widely accepted. If you want to build your own CubeSat, you can literally buy individual components online and fit them together like a toy model!

Building your own CubeSat

If you have dreams of launching your own Sputnik, there are certain things that you will need to build your own CubeSat. Here's the shopping list of essential parts:

1. *A frame, a computer motherboard, and some basic electronic kit*

First on your shopping list is to get yourself going with a basic CubeSat kit. Bought online, it comes like a Meccano kit; all the basic stuff is included and needs to be assembled to fit snugly inside the 10x10cm metal frame (provided). Just remember that you also need to wire all the electronics onto the motherboard. Oh, and you're going to need to be able to do some basic computer programming to get the thing working...

2. *A battery and some solar panels*

Your CubeSat won't do very much without some power. Batteries are a good idea but they won't last forever, so putting some solar panels on it will give it some longevity (there's no shortage of sunlight in space).

3. *A radio transceiver and antennae*

If you want to be able to communicate with your orbiting satellite, fitting one of these is a must.

4. *Other stuff: Cameras, etc.*

If you want your satellite to take pictures, then you'll need to plug in a camera. If you have other things in mind, then just make sure you've stowed it into your little cube before launch day.

Getting Airborne

It's unlikely that many of us would be able to slap a CubeSat together on a rainy Sunday afternoon. It's going to take some serious time and some skill: you're going to need knowledge of programming, electronics, radio communications and physics. That said, if you are a determined hobbyist and you think kit cars and model trains are too basic, there's plenty of information out there to get you started on your very own CubeSat project.

Presently, CubeSat building is still pretty expensive; most CubeSat projects end up costing more than US\$10,000 (about £6,000) – and software glitches or mechanical problems mean they have a pretty high failure rate. The practicalities of getting your CubeSat into an actual rocket will also need careful negotiation. Commercial or government space agencies are often happy to charge a nominal fee to have a tiny CubeSat onboard. I've also heard that if you ask NASA nicely, they may even do it for free.

The easiest and cheapest way to get involved in a CubeSat project is to join a local group. Check out to see if there are any opportunities at a University in your area or find a local AMSAT group (Amateur Radio Satellite Corporation) and join up (see below for links).

The CubeSat community is 'open-source' so like the free online encyclopaedia Wikipedia – all knowledge and technology is freely shared. It's this growing body of knowledge and experience that makes the CubeSat

so exciting. As more projects are launched, and as technology costs fall, there are going to be more and more opportunities for us all to have a little dabble in space exploration...

Dr. Stu

Links:

- The Official CubeSat Site with upcoming launch dates: <http://cubesat.org>
- List of CubeSats (presently incomplete) at Wikipedia: http://en.wikipedia.org/wiki/List_of_CubeSats
- Find a whole host of other space related projects and competitions you can get involved in at spacehack.org: <http://spacehack.org/>
- Find out more about getting involved in Amateur Radio Satellites at the official AMSAT website: <http://www.amsat.org/amsat-new/index.php>
- Read more about the extraordinary history of amateur radio satellites at <http://www.SpaceToday.com>
- A list of online shops for CubeSat components: <http://cubesat.ifastnet.com/forum/viewtopic.php?f=1&t=65>

Selected Amateur Radio Satellite groups:

- AMSAT-UK: <http://www.uk.amsat.org>
- The Southgate Amateur Radio Club: <http://www.southgatearc.org>
- AMSAT – South Africa: <http://www.amsatsa.org.za>
- AMSAT – Australia: <http://www.amsat-vk.org>

CONFESSIONS OF A SOCIAL MEDIA ADDICT

Admitting you have a problem is the hardest part. Or so they say.

“Hi, my name is Ben, and I am addicted to social networking”. Okay, so I’ve never actually stood up in a room and said that but I often feel that I should. You might say that my ‘problem’ started in 2004, when I became fascinated by social media. First it was myspace, then Facebook, then LinkedIn (strictly for business, of course). Then came Twitter.

Now for me in 2011, a regular day sees me tweet at least five times, have a couple of discussions on LinkedIn, and liaise with friends and family via Facebook. Typically at least two hours of my day is spent doing online ‘social networking’ – that works out at a staggering 832 hours or 35 days a year!

I know I’m not the only one with this problem. I communicate for a living, so I have an excuse for being an early Twitter and Facebook adopter. But whole groups of my friends only ever communicate with one another via social media. We are the social media addicts who, whilst in the pub, at a concert or at a party are thinking about how to describe said event in 140 witty characters. I think the time has come to make a change...

Is there any way back from here?

There are many reasons why social media has become so popular. For me, it provides a way to stay in touch with a variety of people with a minimum amount of effort. In just a few clicks I can post photos of my life or make a quick comment to a friend. It’s much easier than picking up the phone and actually talking! But where social media really comes into its own is that it allows me to keep in contact with people that are spread out all over the world.

Sherry Turkle, Professor of Social Sciences at MIT, recently published a book – ‘Alone Together: Why We Expect More From Technology and Less From Each Other’. Professor Turkle looks at the impact technology has had on our daily lives and how we need to use it to actually empower relationships, rather than harm them. Sherry notes that technology “makes it easy to communicate” but also to “disengage at will”. She cites real examples of mourners sending text messages during a funeral - such was the grasp that technology had on them.

This is where the challenge comes in – to use social media to enhance relationships and not detract from them. I know that I’m guilty of tweeting, posting, or trawling through status updates when I should be engaging with a friend or family member face-to-face. Although I’m there in person, I’m on my Smartphone in my own little ‘social media land’.

With Twitter, things are taken one step further. The sheer speed at which one's Twitter timeline updates itself makes me feel like there's a danger that stepping away from the monitor will mean I miss an all-important piece of information that could transform my life! I know I need to cut down, but going 'cold turkey' simply isn't an option. Working in PR means that social media has become a key part of what I do.

According to Mark Shaw, the UK's Twitter expert, I should try to have clear aims at the outset whenever I use social media. In his recent book, 'Twitter Your Business' he explains that Twitter can be beneficial to business only when used in a clear and disciplined way. I like what he says and so I have set a challenge for myself – 'less is more'.

This is my challenge: I will pledge to limit my time spent online and to be in control of it, rather letting it control me. Taking the lead from Mark, I will clearly determine why I am using social media and not get distracted by all the 'noise'. I'm going to endeavor to use this technology to engage and build relationships with the right people and have the right conversations. I will look for ways to add value to online conversations.

So if you're like me and have been suffering from similar symptoms – why not join me in my challenge? Let's try to use social media to enhance relationships with family, friends and colleagues. That's what it's supposed to be there for, after all.

Ben Veal is the magazine's Media Guru. He's a communications professional based in Wiltshire, UK. You can follow him on Twitter @BenVealPR (of course) and read more of his thoughts on his blog, benvealpr.com

Find out More:

- Find out more about Sherry Turkle:
<http://web.mit.edu/sturkle/www/publications.html>
- Check out Mark Shaw's book, **Twitter Your Business:**
<http://www.markshaw.biz/twitter-your-business-book/>
- Some tips on Managing Your Social Networking Addiction (Lifehack.org): <http://www.lifehack.org/articles/productivity/managing-your-social-network-addiction.html>

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