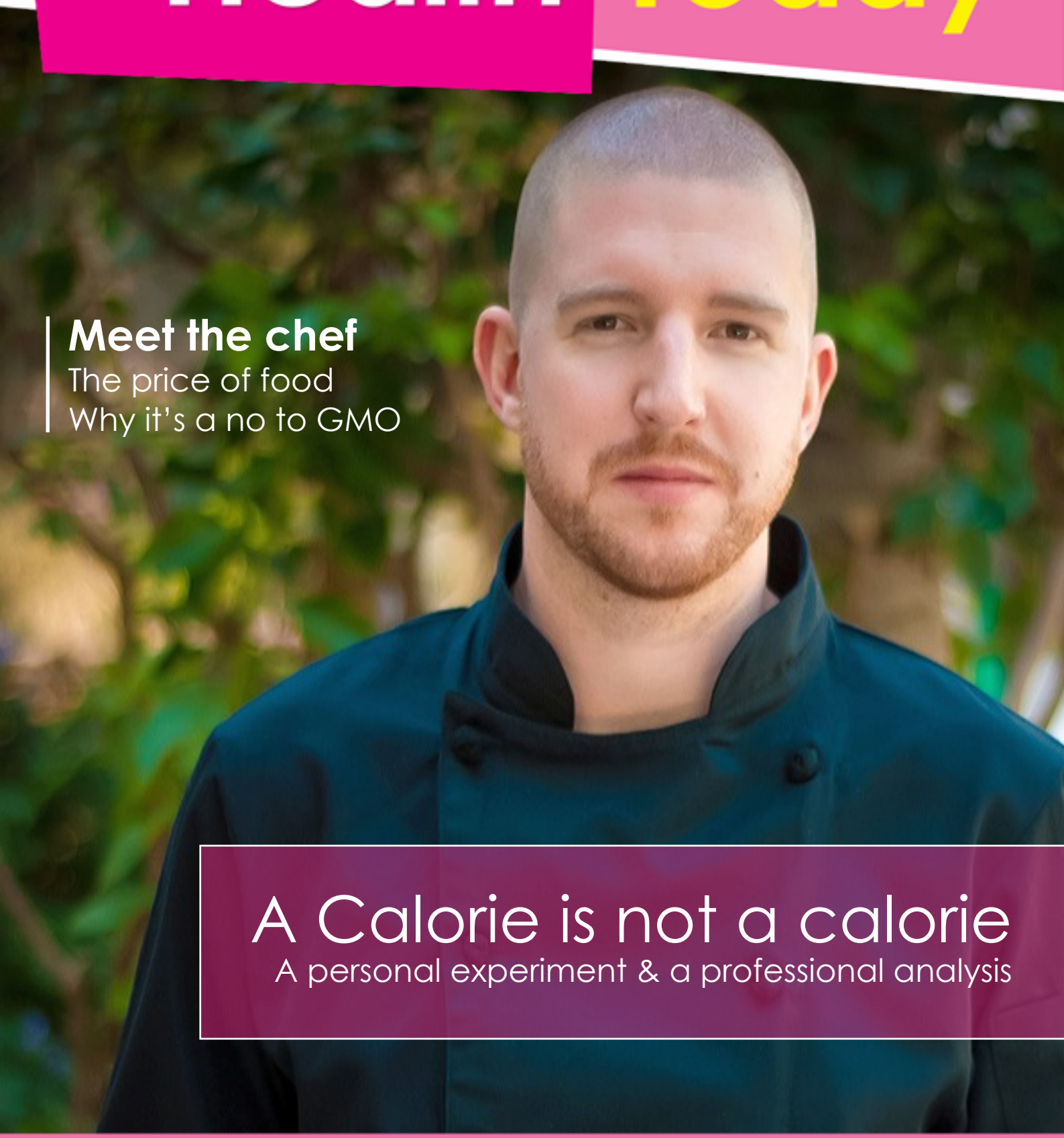
Diet & Health Today

January 2014



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Thank you for sharing and supporting the the work of the contributors of this magazine.

We're back!

We published the first edition of Diet & Health Today back in May 2010 when it was an online magazine for members of The Harcombe Diet Club. It became a monthly publication in January 2012 - until we paused its publishing in March 2013.

In nearly 60 publications, we tackled 'The Big Issues' - the big questions that were being asked in the world of diet and health, covering such fascinating topics as 'Where do all the calories go?', 'Dieting mind games and how we win at them', 'Cholesterol and heart disease - there is a relationship, but it's not what you think' and 'Is your medication making you fat?'

It was always our intention to restart publishing the magazine but we wanted a way to grow and develop it. And this is the result - a full colour, digital magazine that's absolutely free for readers. It's free of any cost and free from advertising and this is the way that we intend to keep it.

We can only make it free through the generous work of the contributors, all of whom are listed at the end of the magazine. We're very grateful for their contribution and we do invite you to find out more about their work by visiting their websites and reading their books.

All of our contributors have a few things in common - they are certainly not followers of conventional wisdom when it comes to diet, health and exercise and they strongly support the view that we should just eat real food in preference to mass produced, highly processed, fake food.

You're not likely to hear much conventional wisdom in this publication - you can get plenty of that in the general and specialist newspapers and magazines. What you will get is plenty of evidence based nutrition, fantastic recipes and challenging articles on a range of health and food topics.

Diet & Health Today was never for the faint hearted and we intend to continue that tradition forward with this current version. We state in the contents page that '*The content of this magazine is intended to inform, entertain and provoke your thinking. It is not intended as medical advice. It may, however, make you question current medical and nutritional advice. That's your choice. It's your life and health in your hands*'. With more and more people becoming dissatisfied with the health advice and the prescription drugs dished out by the medical profession, we hope that the articles in Diet & Health Today will encourage you to seek further evidence and give you the confidence to challenge your medical practitioner.

If you'd like to contribute to this magazine with an article, recipe or a real-life health story, please send in your submissions to editor@dietandhealthtoday.com.

We hope you enjoy this first edition and do feel free to share it with whomever you wish.

Very best wishes

Andy & Zoë Harcombe
www.theharcombedietclub.com

A calorie is not a calorie

Zoë Harcombe

We have two calorie articles in this edition of Diet & Health Today and we make no apologies for this. It is the single most important belief, which people need to stop holding true, if they want to achieve long term weight loss. Sam Feltham 'took one for the team' doing his fascinating 'same number of calories/different type of calories' experiment to show that a calorie is not a calorie. Here's why...

Introduction

"A calorie is a calorie" is considered one of the founding truths of dieting. It doesn't matter what you eat - the only thing that counts is calories. Consume less, expend more and thou shall lose weight. It all sounds quite sensible; sadly, it is anything but.

We know that calories are not equal nutritionally. 100 calories of table sugar has no essential fats, no protein, no vitamins and no minerals. 100 calories of liver (I know - me neither) provides virtually every nutrient that a human needs. Cutting nutrient rich foods (meat, fish, eggs, dairy, nuts, seeds) for nutritionally poor foods (cereals, dry toast, pasta salad, fruit) is bad for our health, but we have made these low-fat/high-carb choices because we thought they were good for our weight. I hope to show you how wrong this belief is...

Two vital truths about calories

Truth 1 – a calorie is not a calorie

A calorie as a unit of energy is a calorie as a unit of energy, just as an inch as a unit of length is an inch as a unit of length. However, that's as far as this statement (a tautology to be precise) goes. A calorie is not a calorie the minute it enters the human body.

We are indebted to three scientists for our knowledge in this area. Eric Jequier, who works at the University of Lausanne, Switzerland, calculated the thermic effect of macro nutrients. That means he worked out the number of calories that are used up in making energy available to the body for the three different macro nutrients: carbohydrate, fat and protein. He found that approximately 6-8% of carbohydrate calories consumed are used up in converting that carbohydrate into energy; the number is only 2-3% for fat, but that 25-30% of protein calories are used up by the body in breaking down protein into amino acids – the component parts of protein needed by the body.[1]

This means that if we ate 100 calories of pure carbohydrate (sugar), approximately 93 calories would be available to the body as energy. If we ate 100 calories of protein (egg white, as an example), perhaps as few as 70 calories would be available to the body for fuel.

Richard Feinman and Eugene Fine, a biochemist and a nuclear physicist respectively, published a paper in 2004 building on Jequier's work.[2] They took Jequier's mid points (7% for carbohydrate, 2.5% for fat and 27.5% for protein) and worked out how many calories would be available to the body if someone consumed 2,000 calories in the proportions 55:30:15 carbohydrate:fat:protein. These are the proportions that the UK and USA governments advise us to eat. If anything, our governments would be happy if carbohydrate intake increased to 60% at the expense of fat and the February 2013 Australian Dietary Guidelines have suggested 65% would be a good target (http://www.zoeharcombe.com/2013/02/australian-dietary-guidelines-feb-2013/).

The answer is that 2,000 calories consumed in the 55:30:15 proportions ends up as 1,826 calories available for energy. If the same 2,000 calories were consumed in a 15:30:55 high protein diet, (keeping fat the same and swapping carbs out and protein in), the calories available to the body drops to 1,662.

Truth 2 – some calories have a job to do

You'll be familiar with the term Basal Metabolic Rate (BMR). The BMR calories are the fuel needed by the body just to do all the things that the body does, even if we're ill in bed all day – cell

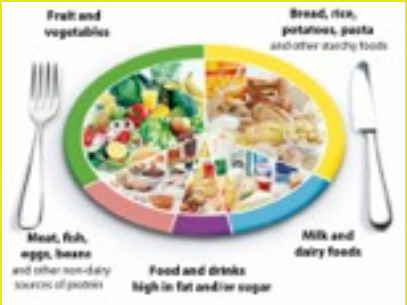
repair, pumping blood, fighting infection, running the reproductive system and more.

There is an equation, which has been used since 1919, to work out how much energy above the BMR is needed for different levels of activity. It is called the Harris Benedict Equation.[3] An average woman needs approximately 1,500 BMR calories and, if moderately active (exercise one to three days per week) she will need approximately 500 calories in addition to her BMR calories.

So, our average woman needs approximately 2,000 calories and three quarters of these are for BMR activities. To all intents and purposes, only protein, fat, vitamins and minerals can help with the BMR list of activities. Carbohydrate is purely for energy. Hence any carbs that you eat are useless, as far as the BMR list is concerned.

Visualise an operations manager sitting within your body with a check list of things to do every day: pump the heart; liver – 500 jobs; kidneys – manage waste and much more; cells need to be repaired and so on. Every time fat, protein, vitamins and minerals come in – the ops manager can direct those nutrients to things on the "To Do" list. Every time carbs come in – nothing gets crossed off the list.

We are now going to apply these two truths to possibly change the way you view food for ever.



The UK Government's 'Eat Badly' Plate

A tale of two women

Let us take two women and let's call them Ms. Real Food and Ms. Government Advice. Ms. Real Food only eats the food that the planet provides - meat, eggs and dairy from pasture living animals; fish; nuts, seeds, vegetables, and fruits in season. Ms. Government Advice follows the public health dietary advice. She "bases her meals on starchy foods".

Ms. Real Food has a diet naturally high in fat and protein and naturally low in carbohydrate. Interestingly the planet does not provide foods rich in carbohydrate and the carbohydrates that are provided are not available all year round. Only factories make carbohydrates available 365 days a year. Ms. Government Advice consumes her macronutrients in the recommended proportions: 55% carbohydrate, 30% fat and 15% protein.

In the following table, Ms. Real Food consumes 15% carbohydrate; 30% fat and 55% protein. We have kept her fat intake the same as Ms Government Advice, but substantially increased protein intake at the expense of carbohydrate. Please note that this is *not* a recommended food intake – this is just to illustrate the difference in diets based on fat/protein rather than carbohydrate/protein. We should just eat real food and stop fearing fat, and the actual proportions of fat and protein will be what they will be. Trying to eat an unnaturally high intake of protein is no more healthy than trying to eat an unnaturally high intake of carbohydrate - but this will make a memorable point.

	Ms Real Food	Ms Government Advice
Calories consumed	2,000	2,000
Ratio of Carb/ Fat/Protein calories	15/30/55	55/30/15
Calories available to the body	1,662 (279/585/798)	1,826 (1,023/585/218)
1,500 calories are needed for BMR	1,383 fat/ protein	803 fat/protein
500 calories are needed for energy	279 carb calories (rest comes from body fat)	1,023 carb calories (excess stored as body fat)
Outcome	Slim & Healthy	Fat & Sick

In the table above, our two women both eat 2,000 calories.

1) The first truth about calories tells us that, from the same 2,000 starting calories, Ms Government Advice has 1,826 calories available to the body and Ms Real Food has 1,662. This is a substantial difference. This means that two people can both eat 2,000 calories a day and the high carbohydrate person is effectively getting nearly 200 calories more than the high protein person. Anyone still wonder why low-carbohydrate diets have a built in advantage?

2) The second truth about calories tells us that Ms. Real Food doesn't quite have enough fat and protein calories (585 + 798 = 1,383) to do her BMR work. Ms. Government Advice has consumed barely half of the fat and protein calories that she needs (803 vs. the 1,500 needed). Hence Ms. Government Advice could have consumed another 700 fat/protein calories and the body had a use/need for them straight away – a missed opportunity and the fast track to disease.

Both women needed approximately 500 calories for energy. Energy can come from carbohydrate or fat (this is often forgotten or not known - it is usually assumed that activity must be fuelled by carbs). Fat is actually the most versatile macronutrient. Ms. Real Food didn't consume enough carbohydrate calories to fuel her energy needs and she had no excess fat calories to provide energy. Her body will have to break down triglyceride i.e. burn body fat, to meet her energy requirements. This is exactly what a slimmer wants to happen.

Ms Government Advice, on the other hand, has twice as many energy calories as she needs, so she stores fat rather than burns fat.

People eating real food get slim and healthy. People eating the way the government advises get fat and sick. This is why we have seen an epidemic of both obesity and ill health since the USA 1977[4] and the UK 1984[5] changes in dietary advice. These were the catastrophic dates, when we first started telling people to avoid fat and eat carbs instead and the obesity graphs took off like airplanes in the years that followed.

Had we realised that a calorie is *not* a calorie and that some calories have jobs to do, we could have avoided making two thirds of our fellow citizens overweight and sick. This will surely go down in history as one of the gravest errors ever made.

References:

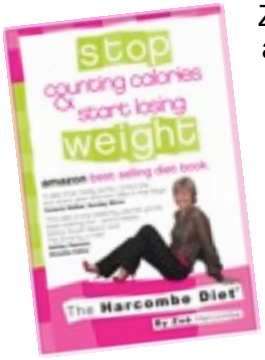
[1] Eric Jequier, "Pathways to Obesity", *International Journal of Obesity*, (2002).

[2] Richard Feinman and Eugene Fine, "A calorie is a calorie violates the second law of thermodynamics", *Nutritional Journal*, (2004).

[3] Harris J.A., Benedict F.G., "A biometric study of basal metabolism in man", Carnegie Institute of Washington, Publication no 279, (1919).

[4] *Dietary Goals for the United States* announced by Senator George S. McGovern, chair of the Senate Nutrition Committee. (1977)

[5] Committee on Medical Aspects of Food Policy, "Diet and Cardiovascular Disease: Report of the Panel on Diet in Relation to Cardiovascular Disease", (1984).



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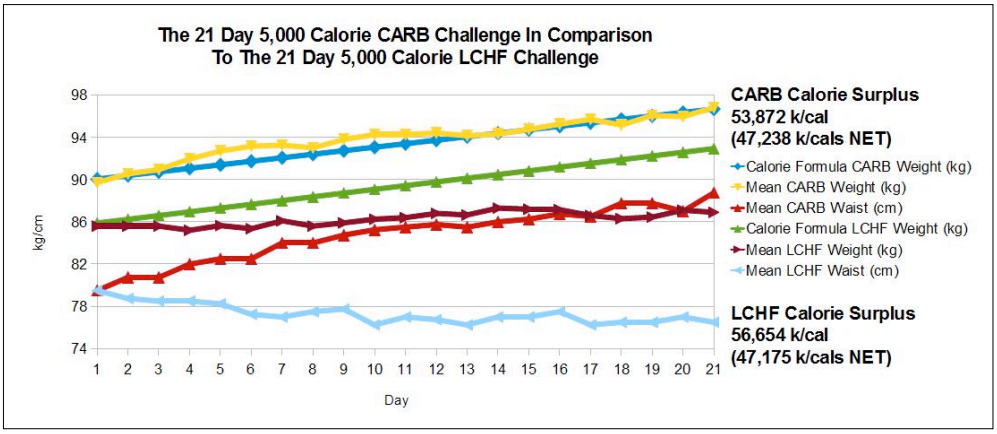
My 5,000 calories a day experiment

Sam Feltham

At the moment conventional thinking is that the human body regulates weight purely by the amount of energy we eat and the amount of energy we expend, and although the human body is of course subject to the laws of physics it's not entirely evident how our bodies interact with these laws when it comes to the loss and gain of body fat. It might sound crazy but I can say this with a straight face because recently over 21 days I was eating 5,793 k/cals a day of a high carb low fat diet of fake foods, mostly sugar and refined carbohydrates. The calorie formula predicted that I would put on 7kg during this experiment and surely enough I put on 7.1kg along with my waist growing +9.25cm, no surprise there you might be thinking. Well this would be of no surprise if it weren't for a previous self-experiment that I conducted back in June 2013 where I ate exactly the same number of calories but with a high fat low carb diet of real foods and only gained +1.3kg and actually lost -3cm from my waist. Quite a difference between the 2 experiments despite being the same number of total calories.



I'm sure many of you out there might be shouting at me "what about dietary fibre and the thermic effect of protein?" and "what about exercise?". As I was doing exactly the same amount of exercise during both experiments that's not relevant to the different results but when the dietary fibre and thermic effect of protein are accounted for there is a difference of 63 calories between the 2 diets. On the low carb high fat diet of real foods I was in a 47,175 k/cal net surplus, and on the high carb low fat diet of fake foods I was in a 47,238 k/cal net surplus. Which actually incriminates the calories in calories out model even further because, if I were actually in a 47,238 k/cal net surplus, then I should have only put on +6.1kg, meaning that I put on +1kg more than I should have. It's quite a step for some to move away from just using the energy balance theory for weight loss, but for me believing a calorie is just a calorie when it comes to how our bodies react to different foods is just like saying it doesn't matter whether you take an aspirin or a cyanide pill for a headache. The source of the calories you consume is vitally important to how your body functions.

During these self-experiments I filmed a video diary every day and posted it to YouTube and my blog to prove that I was measuring myself properly, but also to record how I was feeling and to get feedback from the public. Watching back the 2 sets of video diaries it's quite incredible how different the 2 experiments were in terms of my presenting ability as well as how I was actually feeling inside and when I was exercising. After a few days of the low carb high fat diet of real foods I found it rather difficult to eat everything. I would get to the end of the day and it'd be a struggle to eat the steak and almonds but I always persevered however late it got. Not only did I feel exceedingly full on the low carb high fat diet, my energy levels went through the roof. You can see in the video diaries that, as the experiment goes on, I become more and more energetic. During the high carb low fat diet of fake foods it was quite a different experience. I admit that the first few days were enjoyable to eat rubbish every day, but

after those first few days I started to get headaches and feel my energy levels decreasing. Again you can see in the video diaries as the experiment goes on that my presenting ability went downhill with a lot more umm's, err's and nonsensical sentences, so much so that I decided to put out takes at the end of each video diary.

Nice Abs

Nice Belly

Halfway I decided to interview my girlfriend for the video diary about whether I had changed at all and she noted my breathing was heavier and that I was snoring loudly at night, one night was so bad that she recorded me snoring which I thought was rather hilarious but also a serious aspect of the side effects from fake foods. Although I felt absolutely terrible throughout the fake food experiment I never had problems eating the 5,793 k/cals and even noticed that from mid-experiment I could definitely have eaten more at the end of the day.

As I previously mentioned I did exercise during these experiments using interval training and my usual cycling commute. I did 3 Tabata training sessions a week, where you perform 20 seconds of intense exercise with 10 seconds rest repeated 8 times totalling 4 minutes, a quick and easy way to get in some decent exercise when the majority of your day is spent eating and editing videos. My cycling commute equated to 2 hours of moderately paced cycling a week. Again during each of the experiments I had 2 very different experiences. On the low carb high fat diet of real foods I felt no difference in my level of fitness during the Tabata sessions but did notice that with my cycling commute I couldn't wait to get on the bike to burn off my plentiful energy. On the high carb low fat diet of fake foods I noted from the first week that I was finding it harder to breathe during the Tabata sessions as well as on my cycling commute, which I felt slowing down through the experiment. I even felt as though my asthma was coming back, which disappeared about 4 years ago when I gave up alcohol and wheat.

These self-experiments have been a very enlightening experience for me, I hope for you too, and have helped me to understand how my body reacts to different foods and not to the total number of calories I ingest. Although this is not a randomised controlled trial, it is quite a powerful demonstration that more rigorous research needs to be done into what causes us to gain or lose weight, as for me at least it isn't about the quantity of calories but about the quality of those calories that make the difference between a healthy body and an unhealthy body.

From Monday 20th January I will be conducting a third self-experiment where I'll be eating 5,793 k/cals a day for 21 days again of a high carb low fat diet but of real foods instead of fake foods. As per the previous experiments I will be doing video diaries every day on my YouTube channel and posting them to my blog, www.SmashTheFat.com/blog , where you can find all of my previous experiment videos and plenty of other useful information.

Website: www.SmashTheFat.com
YouTube: www.YouTube.com/SmashTheFat
Twitter: www.twitter.com/SamFeltham
Facebook: www.facebook.com/SmashTheFat

Age shall not wither us

Kate Jones

Age cannot wither her, nor custom stale her infinite variety.

Anthony and Cleopatra Act 2, scene 2

Some neuroscientists believe that we are at a new frontier in the evolution of human consciousness. Harvard developmental psychologist, Robert Keegan, believes that, in addition to the four stages of development that have already been established, our increased longevity means that there is now the possibility of a fifth stage. But what is even more interesting is his hypothesis that what we are witnessing is a further stage in the evolution of humanity. He posits the idea that we are living longer for a reason - to preserve the species. The fifth stage of development involves, amongst other things, the capacity to increase our ability to think in more complex ways: less 'either/or' thinking and more 'both/and' ways of looking at the world. This leads to not just increased empathy but an increase in our problem solving skills. The poet John Keats appears to have been even more precocious than we thought since he was only in his twenties when he wrote about the concept of 'negative capability', the possibility of holding opposing concepts in the mind simultaneously, an idea that fits with Keegan's description of the fifth stage. I think Keegan's idea adds a whole new, and extremely exciting, spin on the subject of ageing; one that goes beyond anxiety about pensions and health care and offers an empowering sense of optimism for those of us hoping to progress to this fifth stage.

First of all, let's examine those current anxieties about increased longevity. At a TED X Women conference in 2011, Stanford psychologist, Laura Carstensen, told her audience that, “More years were added to average life expectancy in the C20th than all years added across all prior millennia of human evolution combined.”

That is a staggering statistic and it has been assumed that an ageing population will mean huge costs to health care systems and social security. But does it have to be that way? There are challenges ahead, it would be simple-minded not to acknowledge that, but there are also opportunities to make some dramatic changes in our attitudes to ageing and to the very organisation of our Western societies, and maybe even beyond that to the fast developing countries elsewhere in the world.

We are all more than familiar with the argument that people who are now over fifty will have to work for longer and delay retirement; otherwise we face the prospect of the younger generation having to work harder and pay more taxes in order to be able to support us. But, given this vastly increased longevity, surely it’s a no brainer that we should continue working for much longer if our average lifespan is likely to be nearer to ninety than sixty to seventy, as it was in 1940 when pensionable retirement age was set at sixty for women and sixty five for men? Why is this prospect of a longer working life so often perceived as a negative?

Is it because we are worried about the cognitive decline in older workers? Should we be? Up to date research in neuroscience and psychology suggests we need a rethink on this too. While it’s true that you might find yourself unable to remember the name of a colleague you were introduced to yesterday, the good news is that you will be able to think of ways round this embarrassing predicament more easily than your younger self. A study in the Journal of Gerontology 2007 found that older adults get better at solving interpersonal dilemmas. In the above case you could try, “You know, I didn’t catch your second name yesterday” - sometimes the second name will trigger the first name; or you could just smile charmingly and 'fess up that you’re hopeless with names, always have been…" ; or “I was too busy concentrating on the

fabulous scarf/tie/suit that you were wearing, I didn't actually get your name". But there is a more serious side to this improvement: research at the Stanford Center on Longevity has found that older workers are happier and more stable than younger ones. Not only that, but they are also more knowledgeable.

Why does this surprise us? If I think back to my mid-thirties when I was juggling a new baby and trying to hold down a part-time lecturing post, emotional stability was not where I was at. I was sleep-deprived; anxious (not least about the juggling act I was attempting); feeling as though I simply had too many plates spinning at the same time. Today, at 54, my son is off on his Gap Year travels and life is infinitely more stable. When the Head of my sixth form college, where I currently work, asked me if I would consider working outside the term-time framework to run an enrichment programme for our students, I jumped at the chance. Term-time working was a godsend when my son was still at school but there is absolutely no reason why I have to work conventional school hours today. Last week my husband and I went to Paris for a week in term-time. It was bliss. As anyone who has to travel during school holidays knows, the glamour of air travel has long since disappeared in a misery of crowds and queues. But, if you can travel outside of these times, then the journey is an infinitely more pleasant affair. If I need to stay late to meet with a student or a colleague then I can do so in a completely relaxed frame of mind – there is no child to rush back for. Who would you rather employ? Thirty-something me, or fifty-something me?

And did I say knowledge increased in older workers? Yes, I did. As we get older, we get better at using the two hemispheres of our brains. This is important because it is the interaction between the two hemispheres which allows us to make deeper connections between the things that we know. So not only does knowledge itself increase in a numerical sense, but that knowledge acquires more depth as we are able to use experience to make new connections between what we already know and the new things we are learning. And, yes, we are still capable of learning new things. The idea that the brain and our intelligence are fixed and unalterable is now completely old hat. Modern neuroscience is teaching us that the brain is much more plastic (in the sense of open to change and growth) than we used to think. Our brains continue to grow and develop as long as we keep using them. A study published in The Journal of Neuroscience by Swiss neuroscientist Lutz Jancke found that when people learn to play a musical instrument significant changes occur in regions of the brain that control hearing, memory and hand movement after only five months of practice; these changes were noted in all ages, including participants who were 65 or older.

Well, this is all very positive, and that attitude is probably to do with being in my fifties too, because as we get older we get happier, at least according to Laura Carstensen we do. Her research over a ten year period found that happiness increased with age. She suggests that the reason for this might be that, "When we recognise that we don't have all the time in the world, we see our priorities most clearly". This leads to a focus on the glass being half-full rather than half-empty. However, this upward happiness curve does begin to decrease again in extreme old age when the physical limitations begin to impinge on our lives and loss begins to dominate, not least the loss of friends and loved ones. But even here there is an upside, as research also shows that older people are more accepting of sadness than younger people because our ability to regulate our emotions improves with age.

Most of us appreciate the patina of age on a piece of well-made furniture but have you noticed that

your particle board IKEA wardrobe tends to age less well? I think there are lessons we can take from this: when something is well made from authentic sustainable materials it really can become more beautiful with age. Yes, we simply have to accept that our physical attractiveness is different as we get older. From our teens to our forties we have evolved to be driven by the instinct to reproduce, whether it is conscious or not. Youthful faces and bodies can be heart-wrenchingly beautiful and they inspire sexual desire. I'm afraid there is no getting away from that. A recent article by Andrew O'Hagan in The New York Times T Magazine in praise of older women's beauty was hilariously undermined by the accompanying photographs of actresses Marine Vacth (23); Lea Seydoux (28) and the positively ancient Berenice Bejo at 37. The visual accompaniment arguably suggested the polar opposite of the content of O'Hagan's piece, that the beauty of older women has greater depth than that of younger ones. But if you look at the captions to the photographs we see that they helpfully provide a shopping list for the clothes and jewellery being worn by these undeniably beautiful young women. Beauty and sexual desire sell consumer goods. Older people are not only much harder to sell with but to sell to. We've been there and done that and now we want value for money. Using sex to sell to the boomer generation just doesn't work so well because, if we're going to part with our hard-earned money, the product will have to have something more to recommend it. Oh and the ability to connect what the advertisers are promising with real life experience helps us to make more discerning judgements too.

So, to get back to my furniture analogy, how do we make a life that is authentic and sustainable? What can we do to make our later stages of life meaningful and pleasurable? Again, we have never been privy to so much information that we can use to create a road map for our later years. Research into what have been called Blue Zones, areas of the world where people enjoy not just longevity but extremely high quality of life, might help us here. There was no consensus about one particular diet – high carb, low carb etc. but there was one common dietary factor – they ate real food. Now where have we heard that before? The other common factors were that they moved naturally - no gym just lots of walking, gardening etc.; they built in downtime to their lives, often through some form of prayer or meditation; they had a sense of purpose in life and, perhaps most importantly of all, a sense of connection with their community.

Some of you might be irritated by now by the Pollyanna-ish slant of this article (can't help it; it's my age) and I don't want you to think I'm just in denial. There are challenges to our ageing population in the West and one of those challenges is how we alleviate the loneliness and poverty suffered by so many people in old age. This is where we really need to start using those two hemispheres. We don't have to keep doing what we've been doing. As Einstein said, "We will never solve the problems of tomorrow using the same order of consciousness we use today". We can use our collective wisdom to learn the lesson from those Blue Zones that it isn't the number of years that we survive but the quality of those years that matters. What really gives meaning to our lives is our human need for connection, for a sense of place and belonging.

If, as Keegan argues, fifth brain development offers huge potential to address the problems we face in an increasingly complex world, then we need people in the fifth stage to keep working and to keep engaged in decision-making at all levels. Imagine a future where the current generation of over fifties keep working into their sixties, seventies and beyond (why not?). Older architects, developers and town planners can start to address the way we design housing and our cities. Let's stop designing for the car and start to design for human beings.

> "***Old age is like everything else. To make a success of it, you've got to start young.***"
> Theodore Roosevelt

A recent Guardian article by Chris Montgomery reported on a Swedish study that found that, "People who live in mono functional, car-dependent neighbourhoods outside urban centres are much less trusting of other people than people who live in walkable neighbourhoods where housing is mixed with shops, services and places to work." So let's have mixed developments with apartments for single people of all ages and larger houses with gardens for families. We could create shared spaces, indoors and out, where people can sit and chat. Effective sound-proofing could allow people to have quiet when they want it but shared communal spaces could help mitigate the corrosive effects of loneliness, which is not just the preserve of the old. By designing real communities we could create synergies between the generations: an older couple living nearby might be very happy to be adoptive grand-parents and do some babysitting for hard-pressed working families. Living frenzied busy lives, living for the one or two holidays we work so hard to afford in the year is no way to live. If we made our communities more organic, more trusting and human in scale then perhaps we could create more everyday happiness for more people of all ages.

Many years ago I visited the cave paintings at Lascaux in France. I was surprised at just how moved I was by the sheer beauty of the works of art, and how haunted I remain by these thousands of years' old images. In these paintings we are witnessing the dawn of our consciousness as a species. These are people who have moved beyond the instinct to merely survive long enough to pass on their genes. Those cave dwellers were among the first human beings to be aware of the fact of their existence and the realisation that it would end; that they were alive and that they would die. It's thought that the development of the pre frontal cortex in the brain was what allowed this consciousness to develop. This change explains why human beings create art, religion, cities, technologies and culture. But as those early humans developed the capacities that have resulted in the exponential progress of our species, they also created the potential for our extinction.

Robert Keegan is suggesting that many many more of us will now live long enough to reach the fifth stage of development of consciousness, and that we will do so for sound evolutionary reasons: to save Homo sapiens from extinction. If he's right, then older people will need to be much more involved in conflict resolution at all levels - inter-personal relationships, politics (national and international), justice etc. Even if he's wrong, keeping learning and innovating throughout our lives will create positive role models of ageing for the generations coming after us. Surely that is one of the most important ways to keep our own individual lives meaningful and happy while making a powerful contribution to the common good?

It's not a no-brainer idea; it's a two (hemisphere) brainer idea.

Planning the year ahead? What do you see when you look back?

Dr Nina Burrowes

A new year. A fresh start. A time to make plans for the year ahead. An important part of planning ahead is taking stock of the year that has passed. You need to know where you've been in order to plan your next steps. Reflection is an important piece of internal feedback – a way of learning and growing from my mistakes, noticing and celebrating my successes, and spotting whether I've wandered off my chosen path.

But reflection is more art than science. When I look in the mirror I can't assume that what I see is an accurate representation of reality. My visual system is inaccurate and incomplete. My range of vision is limited to a narrow spectrum of visible light, my human eyes can only see less than one percent of the entire electromagnetic spectrum. And I take the information that is in front of my eyes and I mould it. I don't see, I perceive. I make the information meet my expectations. I fill in the gaps. I can be blind to the things I don't want to see. I create the image just as much as I see it.

The openness to bias and interpretation is even greater when I'm doing something as abstract as reflecting on myself. When I reflect on myself I won't be able to see everything – there will be things that are simply beyond my vision. And the things that I am able to see will be moulded by my expectations. I don't see my reflection - I create it. And what do I create? Well just as beauty is in the eye of the beholder so is ugliness and unworthiness. If I focus on all the things I haven't done over the last year, all of my failings, all of the many ways in which I am not good enough – then that's what I'll see staring back at me. If I only focus on my successes, on my strengths, and remain blind to areas of improvement then that's what I'll see staring back at me. Neither image will be accurate. Both will be of my own creation.

Given that reflection is an important skill how can I reflect in a way that is useful and helps me grow? One of the first things I can do is to notice how I approach the task. A key question isn't What do I see? but What do I look for? When I look back on my year what do I naturally focus on? Do I immediately focus on what I achieved rather than what I experienced? Do I immediately focus on 'areas for improvement' and forget to celebrate or even notice the successes? Does the experience of reflecting feel like getting a report card from a particularly strict school teacher or a glowing song of praise from a close friend? Knowing the answer to this helps me be aware of my own bias.

Having noticed how I automatically reflect, the next useful thing I can ask myself is 'How do I want to reflect?' Whatever my natural default reflection process is – it doesn't have to be that way. I can consciously choose to treat myself like a parent who can never be pleased or a supportive friend who wants the best for me. I can choose what questions I ask when I look in the mirror.

If I want the ultimate lesson in reflection I can turn to the ultimate moment of reflection. One day I may be looking back at myself and reflecting on my life in the knowledge that I am near the end of it. In that moment how do I hope I approach the mirror? Will I have learned to reflect with awareness and self-compassion? Or will I still focus on the many things I have failed to do? The many ways in which I am not good enough? My hope is that I'll focus on the questions that are truly important to me. Did I live my life in accordance with my values? Did I live my life as if I were the person I aspire to be? It's the answers to these questions that help me grow and plan the path ahead.

Dr Nina Burrowes is a psychologist who helps people understand people using illustrated books and talks.
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The price of food

Clare Hargreaves

Did you eat a ham sandwich for lunch today?

If so, was it one you made yourself from traditionally cured, free-range British ham, and bread crafted by your local artisan baker? Or was it a wrapped supermarket sarnie filled with reconstituted Danish ham at a third of the cost?

We make such choices every day. If we want it, there's food to be had at some incredibly low prices. Since food production was industrialised after World War II, cheap food has become an unalienable right, fuelled by the tooth-and-nail rivalry between the supermarkets.

As a proportion of our income, we've never spent less. Less than 10% of the average UK household spend goes on food, compared to 25% just after the war. That leaves a lot more to spend on cars, flat-screen TVs and smartphones. Oddly, when buying electronic gadgetry quality is paramount, but when it comes to the food we put in our mouths, it often isn't. We just want it cheap.

So should we be paying more for our food? Phrased thus, debate can quickly degenerate into pointless class warfare. At a time when prices of some foods are rocketing, how many of us would ask to – or feel able to – pay more? We're only human.

The real issue is that most of the cheap food we buy actually has a very high price. There's no cheap lunch, in other words. The bargain pineapple you just bought in the supermarket for a quid probably earned the Central American worker who picked it a measly 4p. They may also have incurred health problems as a result of spraying the fruit with up to 16 different chemicals to ensure long shelf life.

It's not just other people who pay the price of our cheap food, but animals, wildlife, landscapes – and our own health and quality of life. It's the chicken that cannot walk because it is forced to grow at record speed to keep its retail price under a fiver. It's the fields of plastic that disfigure swathes of our countryside to produce fruit cheaply virtually all year. It's the thousand-cow, zero-grazing factory farms that are in danger of becoming the only way to survive as a dairy farm. It's the artisan Somerset Cheddar-maker struggling in the face of imports of bland, factory-made Canadian 'cheddar'. It's our health – and our hospitals – as cheap processed foods tend to be packed with refined carbohydrates and fats that make us obese. It's the corn buntings and grey partridges flushed off intensive farms using agrichemicals that destroy the birds' foods.

Going back to your ham sandwich, if you bought the Danish ham one, then it's British pig farmers (and the factory-farmed Danish pigs) who'll pay the price. Welfare standards are higher in the UK than anywhere else; the sow stalls used in factory farm-style piggeries, for example, are banned here. But higher welfare costs money, so if you bought the UK-ham sandwich, it'll be considerably more expensive, especially if it was also hand cured. Even then, you probably won't be paying the true cost, as pig farmers are now being hit by soaring feed prices so are losing £10 on every pig they sell. Many are quitting, and who can blame them?

As part of a food supply system that's global, we're also buffeted by fluctuating commodity prices. Decimated cereal harvests in the US, for instance, are sending the price of meat rocketing as grain is used to feed our animals. Only if we start producing more of our own food – we currently produce less than two-thirds of what we eat – will we become less vulnerable.

If you shop in a supermarket, paying more will not in itself help producers or animal welfare. The key is how our money is shared out between retailers, processors and producers. What many found shocking about the dairy crisis this summer was that, when some farmers were having to produce milk at a loss, the margin creamed off by some supermarkets actually rose.

But there are ways of paying a price for our food that's fair and doesn't abuse producers or the planet. We're buying increasing quantities of fair trade products. We've also shown we're willing to pay more for our eggs so chickens don't endure atrocious conditions. A decade ago only a fifth of the eggs we bought were free range. Now the figure is half.

Part of the reason we've lost sight of the true cost of food is that its pricing has been skewed by all-powerful supermarkets where we buy around 80% of our food. Air-freighting asparagus from Peru guzzles vast amounts of fossil fuels, but we consumers don't pay the environmental cost. If 'Buy One, Get One Free' offers seem too good to be true, they are; such promotions are usually funded not by supermarkets, but by their suppliers, who may be placed under huge pressure as a result.

Another way is to buy local, which, as CPRE's recent From Field to Fork report on www.cpre.org.uk highlighted, helps ensure that the food we eat is fresh, healthy and seasonal and connects us with the people and landscapes producing our food. Buying food at local butchers and greengrocers means vibrant pastures, we can support their farmers by buying milk and meat direct from them at farmers' markets or farm shops, or through box schemes. If shopping at supermarkets, it's worth asking questions about where and how foods have been produced.

By readjusting some of our habits, by perhaps no longer expecting to eat meat every day, by wasting less food, or by redistributing our household spending, it may not actually cost more overall to pay a price for our food that's just, sustainable and doesn't clock up debts that will have to be settled by our grandchildren. Maybe it's time to behave not just as consumers, but as citizens, too. We have the power to vote with our purse strings for the sort of world we want to live in. The choice is ours.

This article first appeared in Countryside Voice, the magazine of CPRE, the Campaign to Protect Rural England (www.cpre.co.uk)

Food and farming writer Clare Hargreaves is the author of four books and writes for the national press, including BBC Good Food magazine and The Independent.

Feast with a Chef

Drawing on her contacts with many of the country's top chefs, Clare's most recent venture is running Feast with a Chef, offering fine dining in village halls. She calls it 'Fine dining without the starch.' To find out more about Clare, her writing, and Feast with a Chef visit www.clarehargreaves.co.uk or www.feastwithachef.co.uk

The Chef's Corner

Ryan Turner

Meet the Chef

Ryan Turner, who is originally from England, is based in Houston, Texas where he runs his own company, Naturally Good LLC, and where he also acts as a consultant chef. He is a chef with a difference because he exclusively cooks low carbohydrate and sugar free meals. Ryan has many years' experience as a chef, in various positions from working in the French alps, to private country clubs in New England, working for a Michelin star chef and having owned his own high class catering business based in Wales. Ryan has spent time in Europe and India, so his style of food reflects a truly international theme with a huge amount of variety.

"I wasn't always a low carb chef and, to be honest, I never set out to be", explains Ryan "However, after meeting some interesting people when I was looking for a job in the South of France I was made aware of the Atkins diet and its health benefits and, needless to say, I became very interested in it. It was then that I decided to start specialising in creating and perfecting great recipes for a low carb lifestyle."

"Being a fully trained and experienced chef has really allowed me to look at diet from a different angle than just the nutritional side of things. I'm looking for flavor, fresh ingredients and delicious foods for entertaining. Chefs love to use natural fresh produce and I'm no different, so when I started coming across all of the different artificial additives, flavors and sweeteners often associated with many of the Atkins diet recipes I was shocked. I realized I needed to write my recipes from scratch so I began the long and exhaustive process of testing various ingredients. Finally, after months of experimenting with different ingredients I was happy with a good range of natural sweeteners, flour substitutes and flavorings. I then began creating recipes and cooking dishes using the freshest produce and all natural ingredients.

"I was also unhappy with the stereotype of the diet and that it is often thought that you can only eat bacon and eggs for breakfast and steak and vegetables for dinner. This is something I was really not happy with. What about vegetarians? Why can't they eat low-carb? What if you don't like to eat bacon and eggs for breakfast every day? What if you don't have time to cook in the mornings? Well the truth is you don't need to restrict your diet to these items, I've developed some great breakfast alternatives and great vegetarian alternatives, which really open up low-carb eating to people who don't just eat meat or those who just want a little more variation in their lives.

Ryan has also developed some great recipes for snacks, and sweet treats that really fool the senses and help curb the cravings, and they're all natural.

We're delighted to have Ryan as a regular contributor to Diet & Health Today and we hope that you enjoy testing and eating his delicious creations.

Curried celeriac soup with parsnip chips and crème fraiche

Ingredients - 6 servings
2 medium sized celeriac (celery root)
½ a white or yellow onion (diced)
2 sticks of celery (diced)
1 clove garlic (minced)
50 g unsalted butter
1 litre vegetable stock
250 ml double cream
1 tsp medium curry powder
Pinch of smoked paprika
Sea salt and freshly ground black pepper to taste

1 small parsnip
6 tbsp crème fraiche

Method:

1. Use a sharp knife to remove the rough outer skin of the celeriac and then wash to remove any dirt.
2. Cut the celeriac into 1 inch cubes and place into a large heavy bottomed saucepan along with the diced onion and celery and cook on a medium heat with the butter for approximately 5 minutes without allowing it to color. This helps to release the flavors of the vegetables.
3. Next add the vegetable stock and bring to the boil, then reduce the heat and continue to simmer for approximately 20 minutes until all of the vegetables are tender.
4. While the soup is cooking add the curry powder and paprika.
5. Once the vegetables are fully cooked remove the pan from the heat and use a stick blender to puree the soup until thick and creamy. At this point stir in the cream and taste the soup for seasoning, make sure you add the right amount of salt and pepper to help bring out the flavors of the soup.
6. If you like your soup a little spicier, then add some more curry powder.
7. To make the parsnip chips peel the parsnip and then use a vegetable peeler to slice the parsnip into thin long strips, deep fry in hot vegetable oil for 2 minutes until crispy and then drain onto paper towels and season with a little sea salt.
8. Place the soup back on the stove for a couple of minutes to make sure it's piping hot.
9. To serve spoon the soup into bowls and then drizzle with a generous spoonful of crème fraiche and top with a sprinkling of parsnips crisps and freshly chopped parsley or micro shoots.

Roasted Acorn Squash

This is a really simple recipe which looks fantastic on a platter in the middle of the table; it's a very rustic dish which is full of flavour.

Ingredients - 4 servings

1 large acorn squash
½ tsp smoked paprika
2 cloves garlic (minced)
Sea salt and freshly ground black pepper
½ tsp mustard powder
¼ tsp onion powder
2 tbsp extra virgin olive oil
2 tbsp unsalted butter

½ red onion
1 tbsp olive oil
2 oz (60 g) soft goats cheese
Small handful fresh mint
Sea salt and freshly ground black pepper

Method:

1. Preheat the oven to 400F/200c

2. Cut the squash into 6 wedges leaving the skin on. Remove the seeds and place onto a baking sheet skin side down with the flesh facing up. Drizzle the wedges with olive oil and add the butter then sprinkle over the paprika, garlic, mustard and onion powder and season well.

3. Cover the tray with foil and make sure that it is pressed down well so that the wedges are sealed in. Place the tray into the oven to bake for 45 minutes; they will actually be steaming in their own juices at this point.

4. Meanwhile slice the onion and place into a frying pan with the olive oil, gently sauté the onion slices on a medium low heat until they are caramelized, set to one side.

5. After 45 minutes of cooking remove the squash from the oven and remove the foil cover, place back into the oven for 10 minutes to roast, after ten minutes top each wedge with caramelized onions and some crumbled goats cheese and place back into the oven for a further 5 to 10 minutes until golden brown.

6. Remove from the oven and transfer to a serving plate, sprinkle with freshly chopped mint and serve.

Mustard & cheddar broccoli bake

This is similar to the classic cauliflower cheese but has the added kick of wholegrain mustard which pairs really well with the mature cheddar cheese. The recipe uses a small amount of corn starch/corn flour to thicken the sauce rather than using a traditional roux, this reduces the carbohydrate levels while still making a smooth creamy sauce.

Ingredients - Serves 4
1 large head of broccoli
½ cup (120ml) heavy cream (double cream)
3 oz (85 g) mature cheddar cheese (extra sharp cheddar cheese)
3 tbsp parmesan cheese (shredded)
1 tsp wholegrain mustard
1 tsp corn starch (corn flour) dissolved in 1 tbsp water
Sea salt and freshly ground black pepper to taste

Method:
1. Pre heat the oven to 400F/200

2. First prepare the broccoli by cutting it into even sized florets. Bring a large pan of salted water to the boil and add the broccoli. Cook for approximately 3 minutes to slightly soften the broccoli, but not cook it through. Drain and rinse under cold running water to cool. Set to one side while you make the cheese sauce.

3. To make the sauce, place the cream and mustard into a saucepan on a medium low heat, heat the mixture and once it comes to a simmer add the cheddar cheese and stir through until melted. While stirring add the corn starch mixture and continue to cook for a further minute or so until the sauce thickens, add salt and pepper to taste.

4. Make sure that the broccoli is well drained - pat the broccoli dry with paper towels to remove any excess water. Place the broccoli into a baking dish and spoon over the cheese sauce; make sure the broccoli is well covered.

5. Sprinkle over the parmesan cheese and a pinch of paprika if you wish. Place into the oven and bake for approximately 20 minutes until golden brown and bubbling.

Pecan crusted chicken

breast stuffed with roasted butternut squash and goats cheese served with a white wine and pancetta cream sauce

This is a great recipe for autumn and winter, I love the combination of butternut squash, pecans and creamy goats cheese - the rich creamy sauce is perfect for warming up a cold night. The recipe uses chopped pecans rather than breadcrumbs for the coating which creates a great flavor while also dramatically reducing the amount of carbohydrate in the recipe.

Ingredients - serves 4:

For the stuffed chicken

4 chicken breasts
170g butternut squash (peeled and diced)
1 tbsp freshly chopped thyme
100g soft goats cheese
Sea salt and freshly ground black pepper
250g toasted pecans, finely chopped
3 free range eggs, beaten
50ml olive oil

For the sauce

¼ white onion (finely diced)
4 slices of pancetta or smoked streaky bacon, chopped
1 tsp freshly chopped thyme
1 clove garlic, crushed
180 ml double cream
120 ml dry white wine
4 tbsp parmesan cheese, grated

Method:

1. Pre heat the oven to 380F/180c.

2. Place the butternut squash onto a baking sheet, drizzle with olive oil and season with salt and pepper. Place into the oven to bake until cooked through and starting to turn golden brown; this should take approximately 15 to 20 minutes.

3. Using a small knife, make an incision into the side of each chicken breast. Move the knife around horizontally inside the breast to create a pocket for the filling. Try to keep the incision no wider than an inch in length to keep the filling from spilling out when cooking.

4. Fill each breast with equal amounts of goats cheese and butternut squash by pushing them through the incision. Close the incision with a cocktail skewer. Save some roasted butternut squash to garnish the tops of the chicken breasts when they are cooked.

5. Sprinkle each filled breast with the chopped thyme and season generously with sea salt and black pepper.

6. To prepare the pecans take whole pecans and pulse them in a food processor until they resemble course breadcrumbs.

7. Beat the eggs with ¼ tsp of salt (which helps to break down the egg making it easier to dip the chicken in) and place the chopped pecans into a bowl. Then dip each cutlet into the egg mixture and then the pecans and make sure they are well coated.

8. Place the chicken breasts onto a tray drizzled with olive oil and then drizzle each breast generously with more olive oil and season once more. Place into the oven and bake for 25 to 30 minutes until golden brown.

9. To make the sauce start by sautéing the pancetta or bacon until crispy and then add the onions and cook through until softened. At this point add the garlic and thyme and continue to cook for another minute to release the flavors.

10. Add the white wine and cook for 3 to 5 minutes until almost all of the wine has evaporated. Then add the cream, parmesan and seasoning. Continue to simmer gently for 5 to 10 minutes until the sauce has thickened.

11. To serve, place each chicken breast onto a serving plate (don't forget to remove the cocktail skewer) and spoon over the sauce. Top with some of the remaining butternut squash and some roughly chopped pecans and a sprinkle of parsley.

Brown butter and beer braised kale with cranberries and pecans

I absolutely love kale. It's packed with flavor and nutrients and it's incredibly quick and easy to cook. Braising kale in beer and brown butter gives the finished dish a really nice nutty flavor and the quick method of cooking ensures that the kale retains its vibrant green colour.

Ingredients - Serves 4

2 bunches kale
2 tbsp unsalted butter
120 ml beer of your choice
60 ml chicken stock
1 tbsp reduced sugar dried cranberries (optional)
3 tbsp toasted chopped pecans
Sea salt and freshly ground black pepper to taste

Method:

1. First prepare the kale by washing it and then cutting out the stem. It is important to cut out the center stem because it can be tough and chewy. Once you have removed the stems, quickly shred the kale by rolling up the leaves into a cylinder and roughly slicing them. Set to one side.

2. In a large frying pan or sauté pan place two tablespoons of butter and cook on a medium heat until starting to turn a light brown colour. At this stage quickly add the beer and chicken stock and turn up the heat to high. Bring to the boil and then add the kale.

3. Cook the kale for approximately 3 minutes until most of the moisture has evaporated and the kale is nicely glazed. Add the chopped pecans and seasoning to taste. Transfer to a serving platter and sprinkle with the dried cranberries.

Chef's tip:

Make sure that the liquid is boiling and the heat is on high before adding the kale, you don't want to slow cook it because it can lose its vibrant green color if it is stewed for too long.

Apricot and passion fruit 'flan de Queso' with spiced roasted pears

This is a take on a Mexican dessert called "Flan de Queso", which is a cross between a crème Brule and a crème caramel. With the addition of cream cheese and whole eggs rather than egg yolks alone, it is a little lighter in texture. This version uses dried apricots and a little honey for the sweetness instead of sugar and the flans are served in the ramekins instead of turning them out onto a plate.

Ingredients - 4-6 servings

For the flan
120ml full fat milk
240ml double cream
100g full fat cream cheese
2 free range eggs
8 large moist dried apricots
1 tbsp honey
One passion fruit
2 tbsp lemon juice

For the roasted pears
2 pears
Pinch ground cinnamon
Pinch ground ginger
1 tbsp unsalted butter

Method:

1. Preheat the oven to 300F/150c.

2. Place the milk and dried apricots into a small saucepan and bring to the boil. Then remove from the heat and leave to rest for 20 minutes to let the apricots soak up some moisture and become plump.

3. Prepare the passion fruit by scraping out the seeds into a sieve above a bowl, use a ,metal spoon to scrape the seeds against the sieve to remove as much of the juice as possible, discard the seeds and add the juice to the mixture.

4. Place all of the ingredients for the flan into a blender and blitz on full speed for 2 minutes until all of the ingredients are well combined and smooth, pass this mixture through a sieve into a jug and then use this to fill 4 ramekins (or 6 ramekins if you want smaller portions).

5. Place the ramekins into a large roasting tray and pour in enough hot, but not boiling, water to come halfway up their outsides. (This is called a bain-marie or water bath).

6. Place the bain-marie onto the center shelf of the oven being careful not to spill any water into the ramekins which will ruin the flans. (A tip to make life easier is to place the baking dish with the ramekins halfway into the oven before adding the water to the dish).

7. Bake for 20-30 minutes or until the custards are just set but still a bit wobbly in the middle. Remove the ramekins from the water and set aside to cool to room temperature. Chill until needed for at least 3 hours but preferably overnight.

8. When you are ready to serve the flans, prepare the roasted pears. Peel, core and slice the pears and place onto a baking sheet. Sprinkle the pears with the ground ginger and cinnamon and add the butter. Place into a preheated oven at 350F/180c for approximately 20 minutes until the pears are soft and the edges are turning golden brown and caramelized.

9. Spoon the roasted pears on top of the flans and serve.

John's Piece

John Nicholson

Controversially, I celebrate New Year and Christmas on 21st December, the winter solstice. The days start to get longer, we begin the long trek back to the sun of summer. This new year is part of the cosmic fulcrum of existence....err...like...man. Being more connected to waxing and waning of the cycles of nature is not the worst thing we could strive to achieve, especially in our world of processed information and processed food.

The more calendar-orientated amongst us more traditionally use January 1st as inspiration to change life. Top of many people's list is to do something about their diet. This is usually as a consequence of eating their body weight in Terry's All Gold chocolates over the holidays and having found themselves drinking rum at 11am once too often.

That sense that we need a new start, a reboot, or a change of routine is a universal one and that's why a lot of people make a lot of money one way or another from this innate human desire. Top of the money tree is, of course, the weight loss industry for whom New Year is time to start broadcasting ads of people (usually women) standing joyfully in their old massive trousers; holding them out to show just how much blubber they have lost on the diet being pushed. What a hero.

They tend not to show the people crouched in the corner of their bedroom weeping tears of self-loathing and suffering from a chronic sense of worthlessness because they're still overweight despite dieting. They're not a hero. Nor do we see those who feel nothing but despair because they can't stick to the prescribed diet. Yet this is a much more common outcome.

I call these 'big pants diets' and they perpetrate a vicious and cruel trick. In fact, I'll go further, they push a form of slow torture. They sell you weight loss heroes but push a diet that doesn't work. Or rather, they only work long term for a tiny minority of those who start them. It doesn't matter if they're telling you to live off bananas, cabbage and deep-fried socks, or that you need to drink 10 pints of water and hop everywhere on one foot, whatever the regime, eventually most people end up back where they started or worse. Yet weirdly, sickeningly, everyone knows these diets don't work for most people - there are stats to prove it - but the industry continues to thrive because they know everyone hopes they will be the one upon whom the magic diet trick will be bestowed.

In some senses, the proof of the redundancy of the big pants diets lies in the fact that they exist at all. If they were so magical, their wisdom would have been passed on by now and the obesity crisis disappeared. The reverse is true.

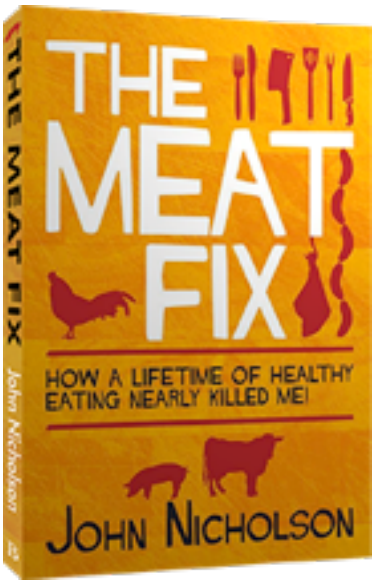
In the New Year of 2008 I was a nearly 15 stone, low fat, healthy-eating vegetarian, well done me, huh! On a medium build this was a lot of fat and I couldn't walk without losing my breath. I even had breasts – that's 26 years of daily oestrogen-rich soya consumption for you. So I decided to lose weight. And I did. I lost over four stone within nine months. I stood there in my old pants and held them out, just like in the ads. I felt brilliant. How did I do it? Easy. I bloody well starved myself living off pitifully small amount of food, avoiding almost any fat and eating a lot of rice cakes (don't try this at home, kids).

Starving yourself can become quite compulsive. You feel virtuous and the scales keep going down and down and this is A Very Good Thing. Less weight is always better; a lower number always superior. You know where this is going, right? By the time I was 10 stone 10, I had become gaunt and exhausted and was more ill than I realised. I had to start eating again.

But when you're fat and want to not be fat, no-one likes to think about what you'll do when you reach your so-called ideal weight – it always seem so distant – but the answer is simple; you go back to how you used to eat. And so that's what I did, and like every other New Year dieter, soon put on 24 lbs. My body was a mess. Had I not changed my

diet from 'healthy' vegetarian to fatty and meaty and low carb, I would have ended up back where I started just like almost every other dieter. But I did change and this change is what I wrote The Meat Fix about.

I only tell you this because when I switched from a low fat, high carb vegetarian diet to a higher fat, low carb, meat and fish based diet, a weird thing happened; the very thing that every big trouser diet, every doctor and NHS advisor wants to happen but can't deliver – permanent weight loss.



My weight stabilised but better still, my body changed. I put on a lot of muscle (I had been as weak as a kitten) and I lost a lot of body fat (even when I was skinny I still had a high body fat %) I went from being an apple shape to being triangular. That was getting on for four years ago now. Today, my weight doesn't go up or down, its been within a pound of 11st 12lbs ever since. This is because a diet based on animal fat and protein feeds my body and makes it work properly. You can read up on the biological reasons why this happens - Zoe's web site is full of info - but reducing your carbs and increasing your good fat intake stops all those food cravings and you get off the weight gain and weight loss roundabout forever.

So why isn't it common knowledge? The dirty secret is that there isn't much money in it. Once you change you get well and you get on with your life without spending any more money on diets or on drugs.

What we have here is a big conflict of advice. The official healthy eating info tells you that 'fad' diets don't work and they don't, but I would include the NHS 'Eatwell' plate in that fad definition, not my old school, Paleo-style way of life.

They will tell you that the only way to permanently lose weight is to 'eat less and move more' which is just utter rubbish and is helping make people miserable, overweight and ill. Just eating a bit less of the same old crud is pointless. But because the official advice is obsessed with basing your diet on carbs and not on fat - god forbid you eat any fat let alone the dreaded evil saturated fat - their advice is fundamentally flawed and helping no-one.

Consequently, they're driving people in to the arms of the big pants diet people. It still doesn't work but all sides continue to pretend it does and that if it's not worked for you it's your own fault and not theirs. This leads inexorably to being rolled up in ball in the corner of the room weeping and feeling like your body and your life is out of control. That's why I say it is a form of torture.

So why can't the truth be told? Why can't we stop this yearly headlong rush into food failure?

I'm not prone to conspiracy theories but try this one on for size. It doesn't happen because thousands of people's jobs, incomes and careers are set up to deal with the illnesses eating badly causes. All those diet companies, NHS employees, all those dieticians and doctors, all the pharmaceutical companies producing drugs to lower high blood pressure, cholesterol, indigestion and everything else that being overweight causes. They all become redundant if we all just stop eating carbs and sugar in huge quantities and eat real food instead. Add to that the destruction to the grain production and food processing industries and you have a massive lobby group that likes the status quo and don't want change. They want us sick. They can't say this but it makes sense.

The last thing anyone involved in making a living from this status quo is for a few low carb weirdos to being taken seriously. So yeah, call us fad diet people. Call us irresponsible. Raise the spectre of Atkins and create all manner of scare stories to undermine people's confidence in what we say. Yeah, of course that's what happens because its better that everyone stays hooked on yo-yo dieting and despair. Better that the overweight individual takes the burden of the guilt and all the attendant psychological damage because, after all, that'll just create more work and more profits for everyone. The sicker you are, the better they

like it, baby. Feeling at a low ebb? Have some anti-depressants, luv. They've got a pill to sell you for everything. Illness = money and they've got us all hooked on it.

I only know the truth because I've lived it. Had I listened to all the doctors and dieticians and kept believing the NHS advice, I would still be fat and ill. Everything they told me was wrong. Everything. That makes me righteously angry and I don't want anyone else to suffer like I did. Why the hell should you?

So please, ignore the big pants ads, ignore the NHS web site, ignore your doctor, what have they done for you lately? A better and healthier body is right next door to where you are - it walks alongside you now, just as it walked alongside me for years. It just takes a small but profound change to be that leaner, fitter person.

The only reason New Year diets don't work is because, for most people, they are inappropriate or downright wrong. It’s nothing more complicated than that. In any other walk of life, this would be self-evident to all concerned. If builders kept putting up houses that fell down within months, they'd stop, but not in the diet industry and not in the healthy eating orthodoxy which only continue to exist precisely because they don't work.

It's the New Year. Better days, better health and smaller trousers lie ahead if we can ignore an industry which claims to have our best interests at heart but which only seeks to line its pockets with our misery and failure. Or as someone once said, 'don't waste time with the idiots that think that they're heroes – they will betray you. Stick with us weirdos.'

John Nicholson.
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Why it's a no to GMO

Joanna Blythman

The biotech lobby makes swaggering claims, presenting genetic modification (GM) as a magic bullet that will feed the world, without any downside whatsoever. It assures us that GM is entirely safe, for both humans and animals. It promises that it will increase crop yields and reduce pesticide use. What's not to like?

Fairy stories can be entrancing, but never confuse them with the truth. It has long been clear that GM is substantively and radically different from traditional methods of improving plants and breeds. GM is a relatively crude technique - think of cut and paste - that moves genetic material across species barriers. As such, it is unprecedented, capable of triggering unpredictable, and irreversible, changes in the DNA, proteins and biochemical composition of food.

And the case against GM has only become more persuasive and authoritative since the 1990s when informed consumers first fought to keep food with GM ingredients off shelves in Europe. Mounting evidence shows that GM has not delivered on its bragging promises.

I remain implacably opposed to the genetic modification of our food, and here, in the simplest, briefest terms, is why.

1. GM doesn't increase crop yields

Instead, the pattern is initially good harvests that decline dramatically thereafter. Even the US department of Agriculture admits "GM crops do not increase yield potential".

2. GM impoverishes farmers

In India for example, many states are cancelling licences for GM crops because they have proved a dismal failure, aggravating rural poverty and spurring suicides among farmers. Last month, Indian MPs visited so-called Monsanto model villages to meet the farmers' widows and see for themselves the grim truth behind the big biotech companies' marketing spin.

3. GM means more pesticide, not less

In the US, for instance, herbicide-tolerant GM cotton, soy and maize have encouraged growers to spray an estimated 174 million more kilos of herbicides. In 2007-08 alone, herbicide use on GM crops there rose by 31.4 per cent.

4. GM crops cause the emergence of devastating super-weeds

Over-use of glyphosate (Roundup), the herbicide used on GM crops, has caused the rapid spread of resistant weeds, such as pigweed, rye grass and mares tail. GM canola has been shown to pass on its herbicide tolerance genes to some wild plants, turning them into uncontrollable super-weeds.

5. GM crops kill off pollinating insects and encourage secondary pests

Swiss researchers have confirmed earlier findings that the Bt toxin used in GM maize increases mortality in ladybird larvae, a non-target species that was not supposed to be harmed by the GM maize.

In China, Bt toxin in GM cotton initially suppressed the target pest, boll weevil, but several secondary pests that are resistant to it soon took its place.

6. GM food may not be safe to eat

GM food has not been properly tested for safety because the big biotech companies lobbied regulators into accepting that it was "substantially equivalent' to conventional food. But feeding studies on laboratory animals show that GM food can cause allergies and be toxic. For instance, rats fed GM tomatoes have developed stomach lesions. Research from New Zealand has found that one GM wheat variety has the potential to cause liver disease. Most recently, research on rats, carried out by researchers (above) at the University of Caen – the most thorough research yet published on the health effects of GM crops – found that a GM maize sprayed with the herbicide Roundup and Roundup itself, showed an unprecedented number of tumours developing.

7. Americans only eat GM foods because they are unlabelled

In Europe, we're told that Americans have been eating GM foods with relish. In fact, they only do so because GM foods do not need to be labelled there, and so are indistinguishable from conventional food. Californian consumers are currently demanding labelling of GM food, and predictably, the GM companies are fighting this tooth and nail. Why? If foods were labelled GM, most people wouldn't want to buy them.

8. GM won't feed the world

The most comprehensive report to date looking at feeding the world, involving 400 international scientific experts (the International Assessment of Agricultural Science and Technology for Development) warned that continued reliance on simplistic technological fixes, such as GM, is an approach unlikely to address persistent hunger and poverty.

It said that there was little evidence to support the notion that GM is well suited to meeting the needs of small-scale and subsistence farmers.

9. We are improving crops without GM

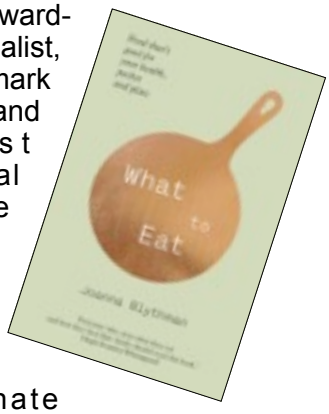
Scientists are developing effective, cutting edge ways of improving crops, using marker assisted selection, gene mapping, and molecular markers, that don't bring the same risks as GM.

In Wales, for instance, the Sarvari Trust has bred organic potato varieties, Sarpo Miro, with better blight resistance than any conventional potato. Using non-GM crop improvement methods, Italian scientists have bred a tomato with higher than usual levels of lycopene, a beneficial micronutrient.

10. GM crops contaminate conventional and organic crops

Experience shows, and scientific studies confirm, that GM crops inevitably cross-pollinate with non-GM crops, and contaminate them. In Canada, for example, contamination from GM oilseed rape has made it almost impossible for farmers to grow organic oilseed rape.

The bottom line is that GM increasingly looks like an old hat, bankrupt technology. The sooner we stop fixating on it, and start taking seriously alternative approaches that will actually take us forward, the better.



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If you go down to the woods today...

Olly Selway

I like to exercise in the woods. There! I've said it. I've said it aloud too - so there's no going back. Truth be told, I'm much happier here amongst the trees than squeezing between the pec-decks and stationary bikes at my local globo gym. I even prefer it to pounding the streets or hiking through the fields. In fact I prefer it to pretty much everything.

There's something primal about the woods. It's not just the smells, the sounds of the whispering trees, the presence of birds and other wildlife, or the dappled sunlight effect that the forest canopy casts on the ground. I think it goes further than that.

It's a place where human beings seem to instantly feel at home; an environment that at once welcomes and intrigues. For me, being in the woods puts humans back where they belong, back where we started before the first of our species walked out of the forest on two legs and into the African savannah.

Of course you could argue that other environments could be thought of as just as natural for humans - the desert or the mountains, for example. What's different about the forest though is that you can't see it all at once. Upon a mountain top, you can gaze out over acres of terrain at one glance. In the Sahara you can cast an eye over mile-upon-mile of undulating dunes if you stand on top of a high one. In a forest however, only as you walk through it are its secrets revealed to you. You stumble from one little discovery to the next with a surprise around every corner.

I don't just walk in the forest though. That's enjoyable enough but there's so much more fun to be had. No, I use the forest as my gym. There's far more to do there than there is at your local LA Fitness centre. You just need to know how to use it!

There's no end of challenges when you learn how to spot them. Can I jump that log? Can I vault that broken stump? Can I balance on this branch – or hang underneath that one – or move hand-over-hand along it?

The challenge of moving well only becomes real when we are asked to engage in real, complex and unique movement patterns. The woods provides plenty of these.

Kids love forest time too!

The test is to use your sense of balance, posture and grace in an increasing number of more challenging ways. And, to my mind, there's nothing outside of the woods to beat this.

When I take new clients into the forest to train I find there are two things that make them feel pretty darn stiff the next day, even if to my conventional gym goers it appears that they've only done a light workout.

First their bodies go into positions that they would otherwise never find themselves in. Joints will go through a much wider range of motion than they are used to, making this excellent mobility work. (If you've tried taking a huge first step to get off the ground and onto the first branch of a tree, you'll know what I mean.)

Secondly, every movement is unique. Because each inch of a wood is different, individuals must adapt their movement in complex and subtle ways each time. Every muscle and every joint has a part to play. There is no machine isolating muscle groups as there will be in your local gym centre. Movement faults or postural issues have nowhere to hide.

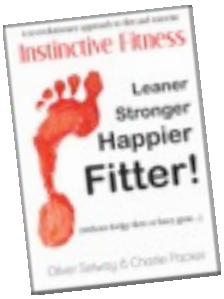
Only one in three children are physically active every day (National Association for Sport and Physical Education. The Fitness Equation: Physical Activity + Balanced Diet = Fit Kids. Reston, VA: National Association for Sport and Physical Education, 1999.)

The mind-body link has a large role to play here too. To respond to this environment fully, you must be highly alert: alert to the branch you might walk into; alert to the shifting terrain under your feet; alert to the position of your body in space; and alert to how you're controlling your body in this ever changing landscape.

The overall benefits of a workout like this are entirely holistic. Because we never use sets and reps, improvements are harder to measure yet easier to feel. We're simultaneously addressing mobility, strength, speed, stamina, balance and movement skills.

Twenty minutes on a stationary bike while staring at a LCD screen just doesn't compare!

My hope is that one day we will all return to moving, standing and sitting as humans have for thousands of years (and as some indigenous people still do.) I hope also that we will reject the artificiality of gym exercise and get back to performing authentic human movement in the sort of environment in which our bodies and minds have evolved to thrive.



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DID YOU KNOW....

Less than 5% of adults participate in 30 minutes of physical activity each day (U.S. Department of Agriculture. Dietary Guidelines for Americans, 2010)

Children now spend more than seven and a half hours a day in front of a screen (e.g., TV, videogames, computer). (Rideout, Victoria J., Foehr, Ulla G., and Roberts, Donald F. Generation M2: Media in the Lives of 8- to 18-Year-Olds. Rep. Menlo Park: Henry J. Kaiser Family Foundation, 2010.)

27% of young Americans are too overweight to serve in our military. Approximately 15,000 potential recruits fail their physicals every year because they are unfit. (American Heart Association. Teaching America's Kids About A Healthy Lifestyle. 2010.)

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