

Slow Burn

Burn Fat Faster by Exercising Slower
Stu Mittleman with Katherine Callan
2000

Quill - A Harper Resource Book. HarperCollins Publishers

Before you set out -- If you chose so, the rest of your life begins today. This book can help you tap in to your body's innate wisdom. Also, before starting any exercise program get medical clearance

Slow Burn is a book that sets you on a "journey of self discovery". The condition of your body and your feeling of vitality is solely determined by the kinds of decisions you make about what you eat, how you train and what you focus on.

Stu also believes we are born to run – our physiology is designed for walking and running, both structurally and metabolically.

PART ONE: HOW TO **THINK** FOR THE DISTANCE

Believe in yourself: You can do more than you think. Expand the boundaries of what you believe to be possible. This is an essential element to doing the extraordinary.

Treat your body as your partner. The ideal relationship is give and take -- not do as I say. Learn to listen to your body physically and emotionally.

In this age of information overload which expert is right? Who knows – but what is true is that you and you alone are responsible for your life outcomes. The challenge is to be constantly aware of what is going on in your body and being educated in the world of health and fitness.

Ask yourself these questions -- Do I wake up tired? Do my energy levels fluctuate during the day? Do I need to eat (or drink coffee/coke) to get energy? Do I loose energy between meals. Do I have trouble concentrating or thinking clearly? Am I moody, irritable and sometimes depressed? Do you know what foods energise you?

What activities do you enjoy, that make you feel young, vibrant and full of life?

While "experts" can stimulate our thinking – we must have the final say.

Life is a journey, not a destination. Be open to the lessons you might learn along the "journey". Don't rush and don't be totally focused on the end result. "Manage the moment" – the future will take care itself. Here are some exercises on how to get in touch with your body

- Breathing - Imagine a triangle between your hips and your belly button. Inside the triangle is a ball. Fill the ball as you breathe in. FEEL the ball expand. Feel the AIR as you breathe out. Inhale to the count of 4, hold for another 4 and exhale for another 6.
- Assess your relationship to the ground→stand up, arms by your side, weight evenly distributed. Bend your knees a little and shift your weight back so that your entire body is being supported on your heels. Now shift your weight forward and end up on your tip-toes. Notice the difference. In which position did you feel more stable, relaxed, which one were you more tense and unstable?
- Observe your surroundings→ take in all the information of your surroundings. Colors, sounds (near and far), fragrances (what do they remind you of), how do you feel?
- Take mental inventory of your body→ where are you tense. Imagine your breath filling the area and relaxing it. Check the tension of your jaw and hands. Relax.

Many people define their goals by how successfully they perform – but we are not simply what we have accomplished. Focus more on the process than the outcome and realise that true empowerment comes

from waking up every morning knowing that you are thinking, moving and eating in ways that give you energy and generates a passion for a life you love.

Examples of process goals are

- wake up with a smile
- start each day happy to be alive
- plan time for movement every day
- drink lots of water
- eat a balanced healthy diet
- interact and have fun with people

Remember, stay focused on the process. It's not about how much you are doing, but *how well you are experiencing it*.

The key to success is to create a series of little victories, each one empowering the next.

Plan rest, recreation and recovery stages. Build in feedback mechanisms. Each victory builds confidence and brings you closer to your goals, while motivating you each day and providing a positive experience on the journey.

- Have the courage to stick with your plan.
- The only thing we can control is the action we take. Surround yourself with people who will support you on your mission.
- You must have the flexibility to change the plan when it isn't working.
- The sign of greatness can be found in how one deals with the unexpected.
- Everything you do is good. Believe everything that happens is for the good (find the good in what happens☺)

In today's society it is inevitable that things will come up that cause you to alter your plans. This is where we follow the 85% rule. Be flexible enough to allow yourself the occasional "kick-back". If you are able to follow the plan 85% of the time, that is OK.

Boston marathon 1977. Qualified and did major preparation – 10 yards in Stu twists his ankle – finally with ankle the size of a melon he has to sit down. First he thinks what a waste and is disappointed. Suddenly thinks, what if this race is not about how fast, but about participating and the things that happen while I participate? So instead of feeling sorry for himself he creates another option, continue. He finishes in 4 hours 3 minutes. But the journey doesn't end there. Stu must ensure the injury heals – he is able to run a few miles the next day.

Stu is certain that everything that happens is for the better; everything that happens is for the good.

PART TWO: HOW TO **TRAIN** FOR THE DISTANCE

The Slow Burn approach to training for the distance requires a change of mindset regarding several widely held beliefs. A Slow Burn philosophy believes that:

- Slower/gradual change is usually better – old "myth" the method that generates results the fastest is the best
- Comfort is the key to sustained growth – old "myth" No pain, no gain.
- Train you body to burn Fat for energy not carbohydrates/sugar – old 'myth' either you're born to burn fat or you're not.
- You can burn fat from the start of your workout – old "myth" You have to burn up your sugar stores before your body is able to burn fat.
- Fit people are not necessarily healthy
- Movement creates energy rather than taking it away

If you want to enjoy and benefit from your running (training), both physically and emotionally, train based on how you feel. Take note of what feels good, what state you are in when training is fun and energising.

The point is NOT to force your body to do what it does not want. If you are extending yourself your body knows – but by the blurring of the scenery into a 2d "tunnel" and forced expulsions of air as you kick the effort up a level.

Once you learnt to appreciate and master being calm and moving slowly, you will enjoy being forceful and going hard when you choose to.

Discover the appeal of burning fat.

For a long time Stu was convinced it did not matter if the body burnt fat or sugar -- Sugar when immediate energy was needed -- Fat when sugar burnt out or when the task was easy. Now he is convinced that fat is the body's preferred energy source. In today's world many people have become addicted to sugar (and often fear fat) – and this is now more prevalent than in the running/sports arena (e.g. carbo loading before a marathon). Sugar based energy is fast and effective BUT it has long term draw backs, mainly inconsistent energy levels and making the body more acidic, which increases susceptibility to colds, flus and injuries. We should avoid sugar as an energy source. Seek to train your body to become a fat burning machine.

The body has two distinct energy producing systems. Anaerobic based on burning sugar and the aerobic, based on burning fat. The anaerobic system is basically evolved to fuel the fight or flight response – an emergency system. The problem is today we put ourselves in the “flight or fight” state a lot of the time! This instant energy comes at a price. Sugar stores in our body are low – 2,500 calories (23,000 protein and 134,500 fat). It is stressful for the body to produce energy by burning sugar, as the by-products can impair you ability to be strong and optimistic in the long run of life. When you train without a fat burning warm up, you burn sugar, when it runs out you feel weak tired, dizzy etc – which is your body telling you it has run out of fuel for your emergency system. You stop rest and get another load of carbs/sugars (all carbohydrates eventually end up as sugar). You feel better, because the body sugar level has gone up. BUT the massive swings in body sugar levels are bad for you body and your long term health.

Sugar/Carbohydrates encourage the body to burn anaerobically. Therefore the body stores fat. Also, the body is always looking for the next “hit” for energy. Sugar makes the body acidic which is not good for general health. You can be fit but not healthy – many athletes at peak fitness get ill (e.g. glandular fever, Chronic Fatigue, coughs colds, flus, bronchitis and so on).

A diet high in caffeine, sugar, white flour, soft drinks, excessive anaerobic exercise (sugar burning exercise) is one of the main factors that lead to adrenal stress. The Adrenal glands are located above the kidney – they secrete hormones that stabilize blood sugar levels – these hormones also effect the heart, blood vessels, other glands and the nervous system. A hormone called cortisol stimulates the production of blood sugar. Normally cortisol prevents existing blood sugar from being used and encourages the body to burn fat (Cortisol is also an anti-inflammatory agent that inhibits circulation and is an immune system suppressant). Other factors leading to adrenal stress are constant fight or flight; emotional problems, work problems or overload,

Hans Selye (Canadian Scientist, best known for research on how the body copes with stress) suggests the adrenal gland actually enlarges under such stress – if the stress continues the gland becomes “exhausted” and can no longer adapt to stress – and this is where the symptoms like chronic fatigue, pain, allergies, flu like symptoms all intensify.

Applied Kinesiology, developed by Dr George Goodheart in the mid 1960s, is a muscle testing procedure to balance the body and check for ailments. This can be an excellent way to determine if your body is in “balance” and a method of listening to your body. For example muscle stiffness might actually be related to what you just ate or your digestive system. Fatigue may be linked to a stressed organ like the liver, rather than the physical activity you have just completed. Muscle testing is used to determine the most appropriate treatment, nutrition, training and mindset, in a non-invasive holistic methodology – where the muscles are used as the biofeedback metre to the inner sanctums of the body.

A month before La Rochelle, Stu has a large lump on his foot between the little toe and the ankle. He is supposed to complete a triathlon in NY in a couple days. A day before the event he rings the event manager and says he has to pull out. The event manager says OK, but can you see his chiropractor first. Stu agreed even though he had seen many practitioners. Phil looks at the lump and does muscle testing & then suddenly snaps Stu's foot and the lump is gone! Phil says that is just first aid and if Stu really wants to get better Stu needs to change the way he trains and eats. Phil explains about sugar burning and fat burning. Stu agree to commit to this. Stu feels this was actually harder than the 6 day La Rochelle run. Stu changes his eating habits so that he no longer eats sugar. He trains in a more moderate intensity using heart rate zones. Stu finishes second at La Rochelle and from that point on the sugar burning// fat burning distinction became a central feature of Stu's training philosophies.

Now that you know fat burning is the key to effortless endurance, you can start the process of training your body to burn more fat – how? -- just figure out when you are burning fat and design a programme based on heart rate, that will take you there more often (we will address food intake in Part 3).

A target heart-rate zone can guide you to your most effective energy-producing state. Your mostly aerobic pace (MAP) cardio c-quences is the most comfortable zone in which to train and is a fat burning state.

Speedy anaerobic pace (SAP) you feel noticeably challenged, in a state of stress and strain and you enter the sugar burning state

Your most efficient pace (MEP) is the most productive and efficient mixed fuel zone – occupies the space between the fat-burning and sugar-burning extremes.

Stu's Heart rate zone recipe

- 1) 180 minus your age
- 2) Add and subtract 10 for you MEP range
- 3) Adjust the MEP zone:
 - i) Raise by 10 if you are an experienced endurance athlete (3+ hours of aerobic activity per week
 - ii) Raise by 5 if you are currently involved in an exercise program but not at the endurance level
 - iii) Lower by 5 if you are just starting out
 - iv) Lower by 10 if you are on medication or recovering from a recent illness

MEP Upper Limit = _____ MEP Lower Limit = _____

4) Calculate the lower limit of your MAP by subtracting 20 from your MEP lower limit → _____. Your MAP upper limit is the same as your MEP lower limit

5) Calculate the upper limit of your SAP by adding 20 from your MEP upper limit → _____. Your MEP upper limit is the same as your SAP lower limit

6) Write your final cardio c-quences below:

MAP _____ to _____

MEP _____ to _____

SAP _____ to _____

A Heart Rate Monitor is an excellent tool to help you accurately monitor the state you are training in. They cost between \$200 and \$2,000 with all doing the necessary job, and the difference being “bells & whistles” including memory, multi-functions and the ability (including software & cables) to connect to a computer. Some additional features worth considering are alarms for upper and lower Heart Rate limits and a timer with an alarm.

Always buy from a well known manufacturer such as Polar Electro, Acumen or Cardiowatch. Read all the instructions to ensure that the monitor is giving accurate readings. Many things can effect the reading such as fit (continual contact with the skin is required), perspiration, humid/dry conditions, heat and dehydration.

Specifically in regard to hydration you should sip continually on water rather than drinking large amounts quickly. Drink at least 1 litre for every 30 kilograms of body weight, per day.

Remember the Heart Rate monitor is just a tool. Be open to the total experience and ensure all sensory anchors form part of your monitoring process.

Focus your form on a series of metaphors. The following instructions can improve your “form” during your training.

Breathing - Imagine a triangle between your hips and your belly button. Imagine a ball encased in this triangle. Fill the ball as you breathe in – as you breathe out the ball “deflates”. Notice how this begins to envelope you. Nostril breathing creates a sense of energy being released and cleansing. Mouth breathing, air travels directly to the “ball” and delivers greater volume of air in a shorter amount of time, than nose breathing.

Foot position - Lift your feet just enough to let the earth pass beneath you. Imagine you are standing on top of the world as it is rotating. Each step you lift your foot just enough to let the “earth” pass beneath you – flowing continuous movement.

Change your perception from pushing down to lifting your feet off the ground – all you are doing is lifting your feet up enough to let the “rotating earth” pass beneath.

Upper Body Position – Press your arms ever so slightly against your body (as if you were gently holding a newspaper under your arm), bent at the elbows, wrists above your elbows, hands “holding butterflies”, palms of each hand facing each other.

Head Position - Hold your head straight and imagine you have rose petals in the corner of your mouth (exert just enough pressure to keep the rose petals in your mouth, but not enough to crush them).

Eye position – Sometimes a shift from Hard eyes to Soft eyes can create an empowering state change. Hard eyes is when you focus clearly on a single point (like a laser beam). To move to soft eyes allow everything to move slightly out of focus and notice what is around as if you are seeing everything at once.

State Maintenance - Run as though you are on a roller coaster – slower up hills and faster down hills, based on keeping yourself in the target heart rate zone and maintaining the state you are running in – this challenges you to be in touch with your body.

Imagine yourself as the captain of a ship.

Make adjustments to your recommended training zone like a captain of a ship rather than the driver of a car. That is, make subtle changes (if you accelerate or decelerate too quickly you will lose control of the ship). Unlike a car driver (who can accelerate quickly and stop suddenly) the ship's captain must anticipate changes and implement them in a controlled manner.

Create a customised training plan.

Stick to a program for at least 8-12 weeks. Track your heart rate zones as you move through levels of intensity. To do this – start each workout walking – note your visual, auditory and kinesthetic anchors, breathing and energy – determine your RPE (rate of perceived exertion) score (range 1 to 10). Focus on lifting your feet just enough to let the earth pass beneath, head and arms in position.

When you feel comfortable, lift the intensity and check all these things again. Do this for a second level of increased intensity. Note all the changes in your heart rate and how you see, hear, feel, breath and your RPE score. This experience helps you determine what it feels like to exercise in the different zones.

The body takes 7-15 minutes to start the fat metabolism process. – so the first 7-15 minutes of your training should always be slow, comfortable, without exertion. Cool down should be the same to allow the muscles to return to normal and the veins to remove “spent” blood (which has CO₂ and lactic acid) – the more of this spent blood that is removed from the veins the better you will feel/recover. Most people find allocating time to warm-up and cool down a real mental challenge -- it is worth the effort.

There are three profiles Stu talks about in terms of planning training programmes. He calls them Level 1, 2 & 3 although there is no need to ever move from level 1. The levels actually refer to the amount of intensity involved in a work-out.

Level 1 (MOST PEOPLE) -- those just starting consistent exercise or those re-starting after some break, people with a hectic lifestyle, retired athlete.

This is where you get to know your body and train it to burn fat. It is based on training in the MAP cardio sequence. This is where you can exercise and just enjoy the experience. Best to do early in the day as it encourages the body to burn fat (during the training and for the rest of the day) and it increases energy levels.

Sample program - minimum 3-5 sessions per week

Start-Up – 15 min warm-up, 15 min jog/run/walk in MAP zone, 15 min cool down = 45 mins

If desired can increase the MAP to 30 mins, then 45 mins, always ensuring that your “state” and heart rate remain in the MAP zone.

If training for a marathon (after at least 6-8 weeks of start-up) – 15 mins warm-up, 15 min walk, 45 MEP run, 15 min walk, 30 min MAP run, 15 min walk, 30 min MEP run, 15 minute cool-down.

Level 2 (regular trainers, experienced athletes, preparation for an event,)

This is where you increase your efficiency and can push in to different experiences to really understand your body. Most training is in the MEP zone. You will learn to go faster and be more productive without working harder.

Level 3 is for those who want to have a wide variety of experiences and want to include excitement, exhilaration and challenge in to their training programs. These programmes include SAP based interval

training – while ALWAYS working within the zones in a given routine and is NEVER based on a gut-wrenching painful experience.

Examples of Level 2 & 3 can be found in the book or at www.worldultrafit.com

Set your own goals – break them down in to weekly and daily tasks. Make it fun and interesting. Acknowledge the “victory” every time you get out and move.

Always buy a shoe fit not a shoe size.

Ensure that the shoe fits rather than believe you are a particular size. Always try the shoe on. Most people buy shoes that are far too SMALL. The foot needs to slide forward and the toes need to be able to spread out. Running shoes should be worn loose enough to slide your foot in and out of like a pair of slippers

How to choose the right shoe:

1. Shop towards the end of the day when your foot may be slightly bigger and always err on the side of being too big than to small
2. If possible get your feet measured (e.g. using a Brannock device)
3. Always buy shoes with removable insoles. When trying them, take them out and ensure that the insoles completely surround your foot
4. Have a thumbs distance (width-wise) between your toes and the front of the shoes
5. Ensure sufficient width in the toe-box
6. Ensure the structure of the shoe fits your arch type, tilt pattern and foot strike

ARCH TYPE →to determine your arch type (low, average, high) by placing absorbent paper in front of you, wet one foot at a time, step on the paper (as naturally as possible). Two distinct marks (heel & forefoot) = high arch. Completely filled in = flat foot or low arch. A medium arch is somewhere in-between. Stu recommends everyone consider a medical grade arch support regardless of your arch type (the ones that come with the shoes are more cosmetic than useful!)

THE TILT PATTERN→ to determine your tilt pattern you need a partner. From behind, get your partner to watch as you walk – look for whether your ankle seems to tilt inwards (pronating) or outward (supernating) or is even. Pronators benefit from straight lasted shoes (the sole construction is basically straight). Supernators can benefit from a curved last shoe (the sole construction has a bend in it)

THE FOOT STRIKE →refers to the degree to which the foot rotates left-to-right as it makes contact with the ground (e.g. duck foot or pigeon toed). To determine your foot strike (if it is not obvious), stand comfortably, close your eyes, arms by your side, jump about 15cms off the ground 3 times, hold your position – what position are you feet in (you can open your eyes now☺)

To get an idea of what running shoe might be appropriate for your foot go to Roadrunner Sports www.roadrunnersports.com. They have what is called a “shoe dog”, which takes information you enter about yourself and your training and provides some shoes recommendations.

Stu does not place much emphasis on shoe wear – he believes examination of arch, tilt and strike pattern (as above) is more important. He also feels too much emphasis is placed on the weight of a shoe. If it fits wear it and don't worry about the weight according to Stu's personal opinion.

Avoid shoes that are significantly elevated off the ground – this increases the potential for lateral instability. Use lace locks instead of tying your shoes. Lace locks never come undone.

PART THREE: HOW TO **EAT** FOR THE DISTANCE

Nutrition is controversial.

Food is social, it is a statement, it is an event, it is business.

Most of us are busy and our diets end up consisting of food that tastes good, is easy to find and prepare, which usually = sugar, sugar and more carbohydrates (that break down to become sugar).

To eat for the distance we need to remove sugar from our diets and train our body's to burn fat. We need to increase the amount of vegetables, oils and (good) fats we eat and significantly increase our consumption of water.

This is a challenge to most people as it was to Stu. It is very hard to “throw away” what you have believed in and lived for many years. Try it and your body will tell you this is right.

Stu changed and was able to set a new world record in 1986 for 1000 miles – 11 days and 20 hours!

The concept of food had totally changed for him. Food was no longer the reward or the instant energy source. It was now the means to be able to move continuously. The value of a meal comes later when you experience how sustainable and everlasting energy it has provided you with.

Eating for the distance becomes an attitude commitment integrated to your day to day lifestyle. Eventually you have to decide on your level of commitment and what is right for you.

Since being introduced to the fat burning concept Stu has researched it, lived and now he feels ready to share it. Physiologically having a high carbohydrate diet requires increased insulin secretion to enable the carbohydrates to be broken down in to sugar for energy and in promoting fat storage. Dr Barry Sears refers to Carbohydrate Intolerance in his book, "The Zone", which is when the digestive system of some individuals struggles to convert carbohydrates to sugar, so even more insulin is secreted. The increased level of insulin sweeps out the sugar causing a lowering of blood sugar levels, creating a craving for more sugar or carbohydrates (ever noticed that after a high carbohydrate breakfast – cereal & toast for example – you are hungry again a few hours later?). Worse still insulin grabs all the sugar that is not being burnt immediately for energy and stores it as fat deposits on the body. Some symptoms of Carbohydrate Intolerance include creeping fat around the waist, gradual rises in blood pressure, serum cholesterol and triglycerides and, after hi-carbohydrate meals, drowsiness, poor concentration and a heavy bloated feeling.

There is no conclusive evidence of a cause for Carbohydrate Intolerance. In the book The Carbohydrate Addicts Diet Drs Keller suggest that insulin levels rise dramatically and serotonin levels (natural appetite suppressant) lags behind. This means that "Carbohydrate Addicts are always feeling hungry because their body's mechanism for telling when they have eaten enough, is working slowly.

If you can relate to any of these symptoms the alternative is to avoid high glycemic foods (foods that produce a rapid increase in insulin) or at least mix them with medium to low glycemic foods. High glycemic foods are -- anything with sugar, most low fat items, ice-cream, white bread, most cereals, rice cakes, carrots, bananas, red and yellow vegetables.

Low glycemic foods are green leafy vegetables, apples, plums and whole grain rye bread.

Combining any of these foods with healthy oil such as cold pressed flaxseed oil, healthy fat or protein reduces the insulin secretion (e.g. have almond butter on a rice cake).

The ideal ratio for food group intake is 40:30:30 – carbohydrates to fat to protein. Meals should be built around vegetables and then add protein. Salads should be drizzled with olive oil.

A way to measure your dependence on carbohydrates is your waist to hip ratio. For women the ratio should be .8 or greater and for men .9 or greater. To get this measure, use a cloth tape to measure your waist 2.5 cm above your belly button, then do then same around your hips and buttocks (around the widest point). Divide the waist by the hips – e.g. 97 waist divided by 120 hips = .81

Make friends with fat.

Fat has had bad PR in terms that most people believe that if they eat fat they will get "fat". The perception is that you can eat more if there is less fat (calorie counting). Ironically when you include "good" fat in your diet, food tastes better and is more filling. Including fat in meals and snacks means that the digestive process takes longer, which is good, as it gives the body a greater chance to absorb the nutrients from the foods we eat. "Good" Fats also slow the rate at which sugar is absorbed, keeping insulin levels low thus providing the opportunity to burn fat.

Fats are required to enable the body to absorb vitamins A, D, E and K, carry calcium to the bones, produces anti-inflammatory responses and aid digestion.

There are 2 main types of fat -- saturated and unsaturated. There are 2 types of unsaturated fats monounsaturated (sources are olive oil, fish oil, flaxseed oil) and polyunsaturated fats (sources are onions, green leafy vegetables, broccoli, carrots and vegetable oil). All types of fat are necessary for the body to function optimally. Saturated fats are required for the creation of inflammatory agents, which are essential in healing. Most of us get plenty of saturated fats. Also, saturated fats have omega6 fatty acid which has been linked with heart disease and cancer. Unsaturated fats are better for us. Poly unsaturated fats are less stable than monounsaturated fats and therefore are more likely to oxidise producing free radicals.

Food producers often chemically change unsaturated fats to saturated or partially saturated fats. These should be avoided.

The key to a balanced diet is to think “Mediterranean”. That is follow the diet of those who live in the Mediterranean. Lots of green leafy veges, fresh fish (salmon, tuna, sardines, mackerel, halibut, cod) and have olive oil with most meals. For many of us that means reducing our intake of sugar (sweets, cakes, biscuits) take away food, condiments (e.g. tomatoes sauce, chutney, salad dressings), carbohydrates (bread, pasta, rice, grains), red meat, poultry, dairy (cream, cheese and ice-cream). We should replace butter and margarine with olive oil (extra virgin is the best and “pure” is the worst).

The ideal is to have twice as much unsaturated fat as saturated (today most people have at least 10 times more saturated fat than unsaturated).

Remember fats are essential for a healthy body. Eating “good” fats PROMOTES fat burning (reducing fat storage) and increases energy. Focus on consuming Omega3 and Omega9 fatty acids from fish, olive oil, flaxseed oil and nuts.

Next time you are confronted with the decision about eating something with “fat” the question should be what type of fat?

Banish sugar from your diet

If sugar were invented today it would probably be banned by the US Food and Drug Administration because of the drain on our energy levels and the detrimental effect on our health.

Burning sugar for energy can induce the flight or fight reaction causing the body to store fat. It depletes the body of B complex vitamins, magnesium and chromium. Burning sugar causes blood sugar levels to vary which reduces energy levels, reduces concentration, and weakens the immune system.

Lots of marketing says that brand X sports drink or food bar gives you energy – and they do if you burn sugar for energy. This does NOT mean they are healthy!

Theresa is middle aged overweight, finds exercise hard and has a pain in the leg. She has high cholesterol and high blood pressure. After several years working with the doctor she tried the fat burning diet and exercise programme for 10 days. She excluded sugar, (including carbohydrates, wheat, bread etc..) built meals around green leafy vegetables then added some fresh fish, had olive oil with salad and a tea spoon of flaxseed oil with each meal. She snacked on celery with almond butter, sesame seeds, sunflower seeds and almonds. In 10 days she lost 12 pounds, 1 inch off the waist, cholesterol came down from 6:1 ratio to 4:1 and BP came down. Exercise for Theresa is now easier and more enjoyable.

Dr Richard Young says constant sugar-burning causes the body to be acidic. When the body is acidic you experience low energy levels, poor digestion, diarrhoea or constipation, weight gain and often feel bloated. An acidic body slows the natural cleansing process and creates a breeding ground for bacteria, viruses, fungi and yeast. Signs of acidic system are pale and lustreless skin tonality and/or deep dark bags under the eyes.

The liver can produce 3,000 – 5,000 mg of cholesterol in response to an acid toxic blood system (compare this to 300mg in an egg).

The human body is designed to intake 70-80% alkaline foods – today most people eat 80-90% acidic foods.

Alkaline foods are green leafy vegetables (cucumber, spinach, lemons, limes, tomatoes avocado, cold water fish, almonds, sunflower & sesame seeds, water.)

Protein is an essential part of our diet. It is the building block for all cells. In excess it causes a condition called ketosis, where the body is highly acidic and increased insulin is required to remove amino acids and store them as fat. The recommended daily allowance (RDA) of protein is controversial (as are most RDA) and is currently related to total weight (not lean body mass) but is NOT related to activity level. Stu categorises the sources of protein into 4 groups.

Beef and Dairy, which are highly acidic and so should be minimised in our diet. Buy the highest quality, organic, free range and kosher if possible. Avoid ground meat as it is difficult to determine its quality. Less acidic items are lamb and chicken eggs.

Fish, which is probably the best source of protein. Fish should always be fresh (no fishy smell). Salmon, tuna, mackerel, cod, trout and halibut are good. Bottom dwellers such as crab, sole and catfish should be avoided. Fish should be eaten immediately or covered in foil (rinse first) and frozen. Only expose fish to air when you are going to cook it.

Eggs, which are often needed for vitamin and proteins. They are best poached and cooked so the yolk is solid. If pan fried use butter on high heat or oil only on low heat. Dr Young suggest eggs should be avoided because they are acidic and full of bacteria, yeast and fungus. Stu feels they are a good source of essential proteins for some people. It is up to you to make the choice. Eggs shells are full of bacteria so always ensure you wash your hands well after handling.

Nuts and Seeds are an excellent source of protein, especially pumpkins, poppy, sesame and squash seeds, chestnuts, lentils and almonds. Soak in water for up to 24 hours before eating (never longer and throw away any that float).

Meals and snacks should be 75% vegetables such as cucumber, romaine lettuce, broccoli, red, green, yellow peppers, spinach and radicchio. The protein portion should be about 25%. It is a personal choice to be vegetarian, and if that is your choice you need to ensure you have an appropriate protein intake from nuts, seeds or supplements (listen to your body).

How supplements can boost your body's natural power

Stu was a naturalist, but he now believes that we need to use supplements to maintain our health and well being. The reasons are associated with the pollution in the air & the water and the decrease in the nutrients in the soil where our food is grown or our animals feed.

The conventional approach to taking supplements is to focus on the recommended daily intake (rdi) and use the supplements to ensure that these are met.

An alternative approach is Dr Young's philosophy which relates to cleaning our system and ensuring that we Alkalize our body, then we start taking the supplements. This ensures that your body can get the maximum benefit from the supplements.

Stu recommends you consider a cleaning supplement (such as the Super Greens mix from Innerlife products), a Multi-Vitamin Supplement and a B Complex Supplement.

There are many other supplements that can be considered such as:

Creatine → This is a widely "discussed" supplement in the fitness world. It helps muscle strength and bulk, but it's long term effects are not known and could include kidney problems, nausea and diarrhea. Natural Sources include cold water fish and meat.

Q10 → which helps maintain a healthy heart. Natural Sources are whole grains and cold water fish.

L-Carnitine → which is required to take fat from the fat stores to the fat burning mitochondria. The more L-Carnitine there is the more fat can be burnt. Natural sources include lamb, beef, salmon and sardines.

Choline → part of the B complex group and is a fat emulsifier. It works with the other B vitamins to utilise fats and cholesterol. Natural sources are soy beans, wheat germ, fish and leafy green vegetables.

Chromium → this mineral effects fat burining through increasing the body's sensitivity to insulin. Natural sources are whole grains, wheat germ and nuts.

Marine Lipids, Fish Oils and Borage Oil → improve energy, brain function, promote healthy skin, muscle growth and fat usage, and reduce risk of cardiovascular disease. Natural sources are cold pressed flaxseed oil and cold water fish.

Magnesium → is required for protein & fat synthesis relating to nervous system function and muscle contraction, and for the breakdown of glucose, fatty acids and amino acids. Natural sources include whole seeds, nuts, legumes and soy beans, green vegetables and unmilled grains.

Glucosamine Sulphate and Chondroitin Sulphate → are involved in maintaining the elasticity and integrity of many of our connective tissue, arterial walls, nails, skin, bones, ligaments, and heart valve. It can be hard to get enough of these in our diet as there are no significant sources in foods we regularly eat.

There is no doubt that what works for one person doesn't necessarily work for others. You need to monitor your body and how it reacts to food. Use how you feel as well as hip to waist ratio, technical analyses (such as the carbon-dioxide to oxygen ratio and the pH indicator) and also the productivity during MEP exercise.

A theory first espoused about 20 years ago by nutritionalist James D'Adamo suggested that foods have a beneficial or negative effect based on blood types. His son Peter continued the research and wrote the book "Eat Right 4 Your Type". The concept is based around the fact that the blood types are different as they have a unique biochemical marker called an antigen. If you mix blood types (there are some exceptions) the recipient body's immune system treats the foreign blood type as an invader and seeks to "immobilise and destroy".

Food has its own antigen-like markers called lectins. D'Adamo's theory says that when a food with a lectin that doesn't suit a blood type enters the body a minor form of "rejection" occurs. This can be the reason why some foods have specific effects on people, such as oranges making you dizzy or octopus giving you stomach upset or...

Type O is the most common blood type (about 62% of the population). Type Os historically were the hunter gatherers. Their diet was based on vegetables, fruit, meat and fish. Type As (about 25% of the population) were the cultivators or farmers and their diet was mainly vegetables and less meat. Type Bs (9%) were the nomads who moved in colder regions. Domesticated animals brought dairy into the diet and they seem to be the only type that benefits from dairy. Type AB is the modern group (4%) and seem to benefit from a mixed diet.

Stu tested the concept on himself and found positive results. He used muscle testing on his clients and found very similar results to Peter D'Adamo. Some of his client have followed the eat for your type diet and also found benefits.

Type O benefit from fish, red meat and most vegetables. They should avoid dairy products, grains (like wheat & corn), and limit the intake of beans.

Type As have a sensitive digestive tract. They benefit from vegetables, grains, beans, legumes, soy products, fruit and seafood. Type As are not good at processing meats, dairy and most forms of wheat.

Type Bs are more versatile and adaptive. They benefit from a balanced diet including meat, dairy, grains, beans, vegetables and fish – foods to be avoided are chicken and tomatoes.

Type ABs have a mix of tendencies and therefore do best on a mixed diet and benefit from eating a range of foods in all categories.

Taken further the Blood Type Theory can be related to your personality and your exercise type. Os are more likely to be involved in strenuous activity (running, aerobics), As and ABs relaxed activity (yoga, Tai Chi) and Bs some of both

In the end it is up to YOU. Try, test, "listen" to your body. Nothing is 100% right – which is good – because it means that we should always be monitoring how we are treating our body and thinking of Continuous and Never-ending Improvement (CANI – as Tony Robbins calls it).