# Patrick Holford & Susannah Lawson

### patrick HOLFORD & Susannah Lawson

## The STRESS CURE

HOW TO RESOLVE STRESS, BUILD RESILIENCE AND BOOST YOUR ENERGY

### BRAIN BIO CENTRE

We specialise in depression, anxiety, schizophrenia, ADHD, autism, dementia or Alzheimer's and addiction recovery

The Brain Bio Centre offers:

- State of the art treatment of mental health problems using the optimum nutrition approach
- Full biochemical and psychometric testing before and after
- Professional nutritional and psychiatric support in consultation and by phone.
- A Stress Clinic to help clients build greater resilience using nutritional therapy and scientifically validated HeartMath techniques



The Brain Bio Centre is at the Putneymead Medical Centre, Putney, London SW15

#### www.brainbiocentre.com

The Brain Bio Centre is a wholly owned subsidiary of the Food for the Brain Foundation www.foodforthebrain.org

### Stress - why you need to crack this nut

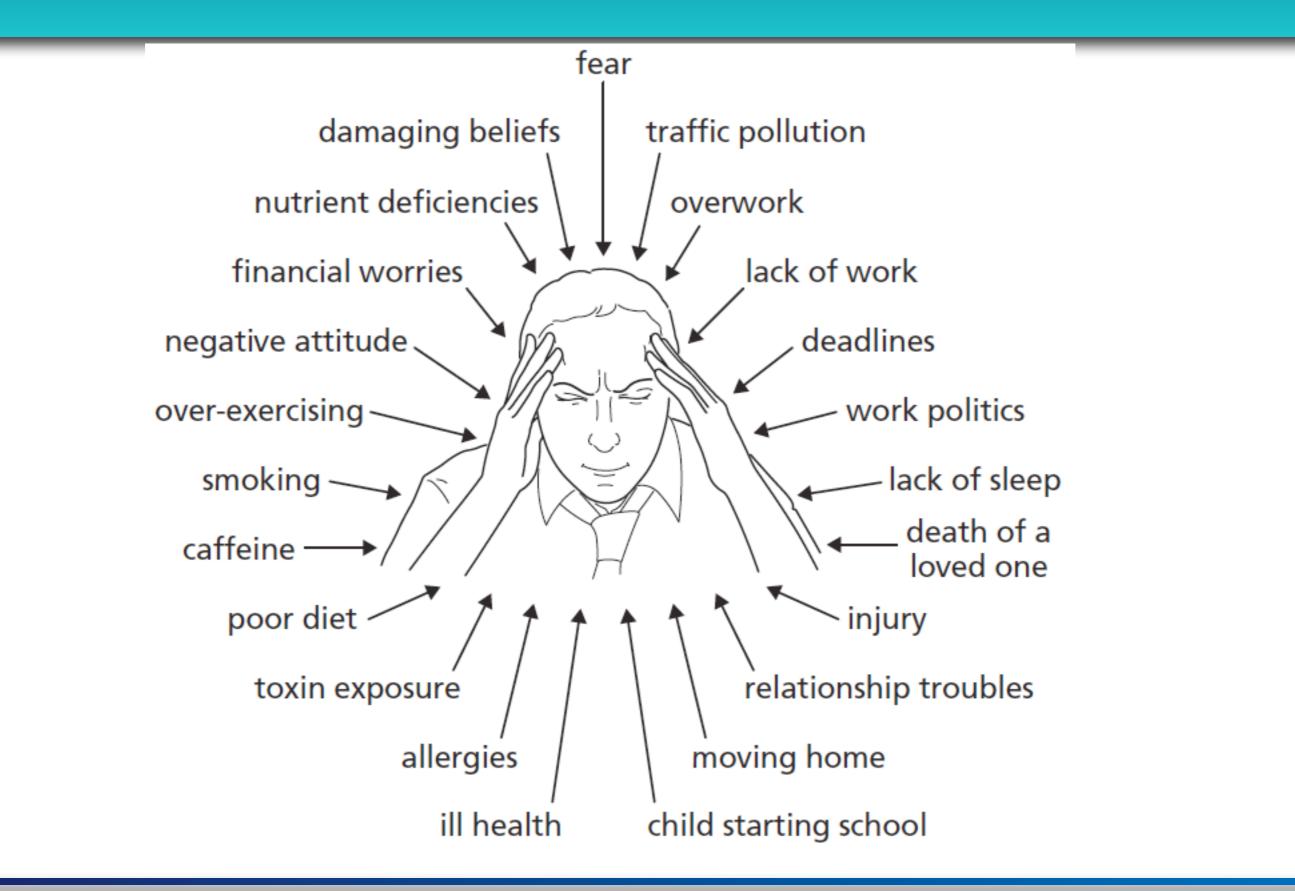
- One in five people take time off because of it
- 59% say life is more stressful than 5 years ago
- Heart disease risk goes up five-fold
- Diabetes, obesity and dementia risk more than doubles
- It's as bad for you as smoking or having a high cholesterol

"There is nothing either good or

bad but thinking that makes it so."

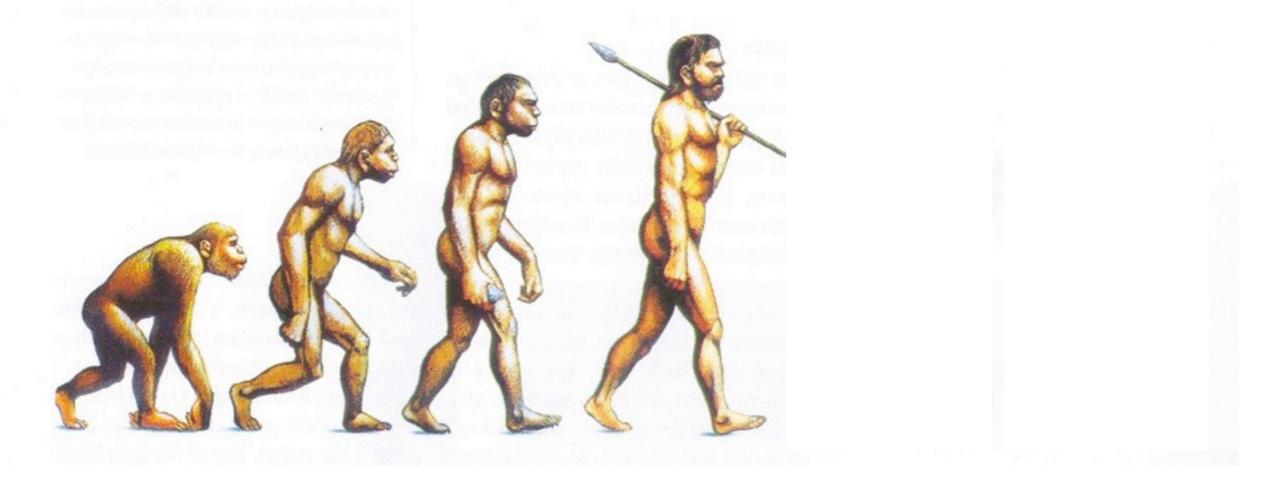


### What makes you stressed?



### **Adrenal triggers**

Fight, flight - hunting, survival, one wife, one job



Stressful thoughts, blood sugar dips, caffeine, failing relationships, job changes, non-stop mental activity

### 21st century living is a source of stress

- 42% of marriages end in divorce
- Most people change jobs every 4 years
- Most people check emails on holiday
- One in five young Americans admit to checking their smartphones during sex
- Sugar consumption has increased from zero to 50kg per person per year
- Caffeine consumption averages 3 cups per person per day
- Post-menopausal progesterone deficiency promotes adrenal hormones

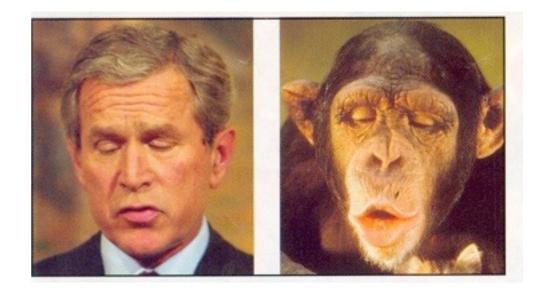
### Shocking but true

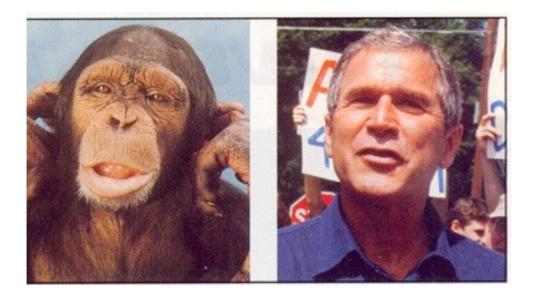
#### Wilson T et al, 2014, Science, 345, p.75-77

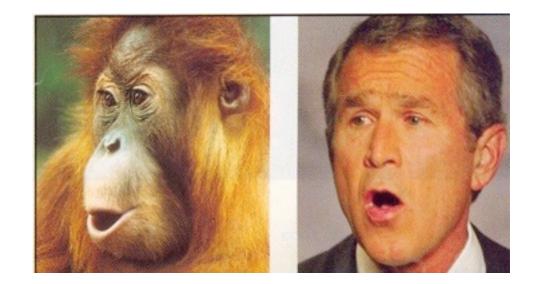
- Volunteers were exposed to an unpleasant electric shock, which they said they would pay for to avoid.
- Then, they were left alone with their thoughts for 15 minutes. Twelve out of 18 men, and 6 out of 24 women, gave themselves up to four electric shocks. Two thirds of men pressed the button. One man gave himself 190 shocks to relieve the boredom!
- What is striking is that simply being alone with their thoughts was apparently so aversive that it drove many participants to self-administer an electric shock that they had earlier said they would pay to avoid," the scientists write in Science.

### Genes haven't - 1.2% different from an ape







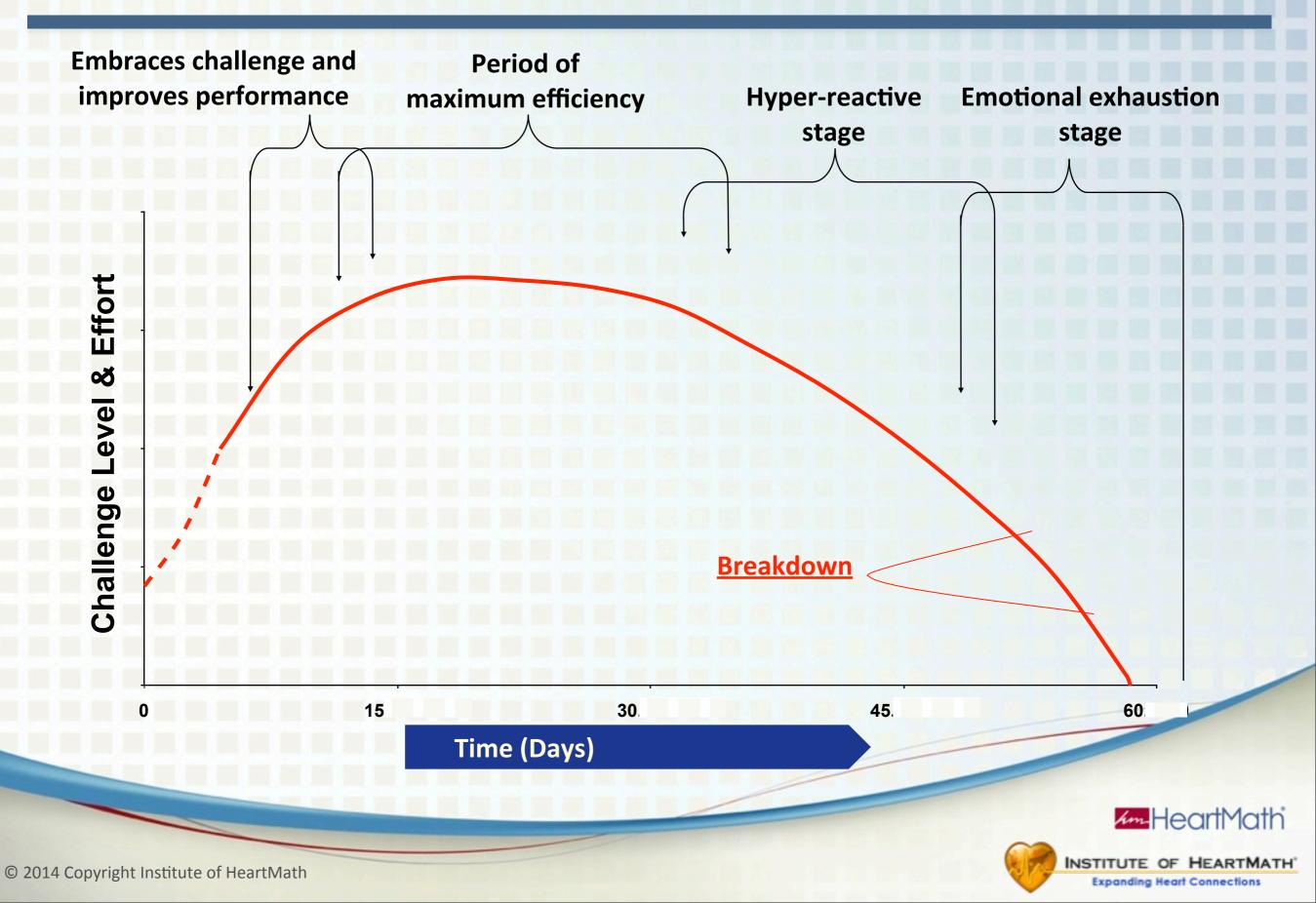


### Four ways to raise adrenal hormones

- A stressful thought
- A blood sugar dip
- Caffeine (and other stimulant drugs)
- Progesterone deficiency



### Stress, Resilience and Performance



### Which stage are you?

|          | Stage 0<br>No stress  | Stage I<br>Normal stress | <b>Stage 2</b><br>Prolonged stress | Stage 3<br>Chronic stress |
|----------|-----------------------|--------------------------|------------------------------------|---------------------------|
|          | Stress free           | Stressed                 | Stressed out                       | Can't cope                |
|          | Even energy           | Energy OK                | Always tired                       | Chronic fatigue           |
|          | Good<br>concentration | <b>Concentration OK</b>  | Poor<br>concentration              | Unclear thinking          |
|          | Mood good             | Sometimes<br>irritable   | Anxious and<br>depressed           | Depressed                 |
|          | Sleep good            | Sleep OK                 | Disturbed sleep                    | Always tired              |
| DHEA     | Normal                | High                     | Low                                | Low                       |
| CORTISOL | Normal                | High                     | High                               | Low                       |

|       | Depleting Emotions   |   |    |
|-------|--|---|----|
| tisol | angry frustrated<br>anxious alarmed<br>panic insecure                  | good enthusiastic<br>excited passionate<br>confident optimistic | PH |
| Cor   | Hormonal<br>depressed apathetic<br>tired uninspired<br>empty burnt out | System<br>content serene<br>calm peaceful<br>fulfilled at ease  | EA |

Parasympathetic – Low Heart Rate Relaxation

## stress triggers

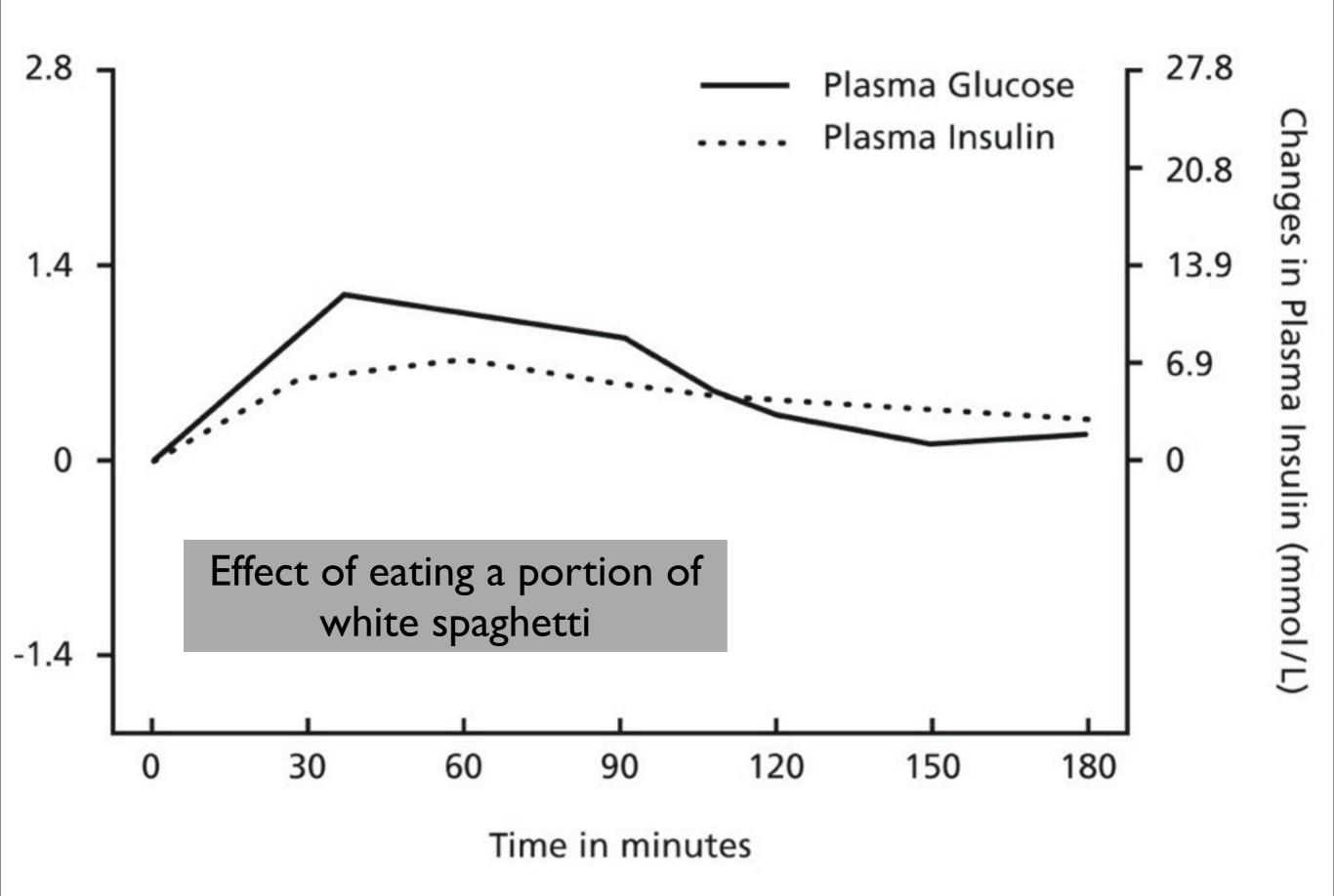
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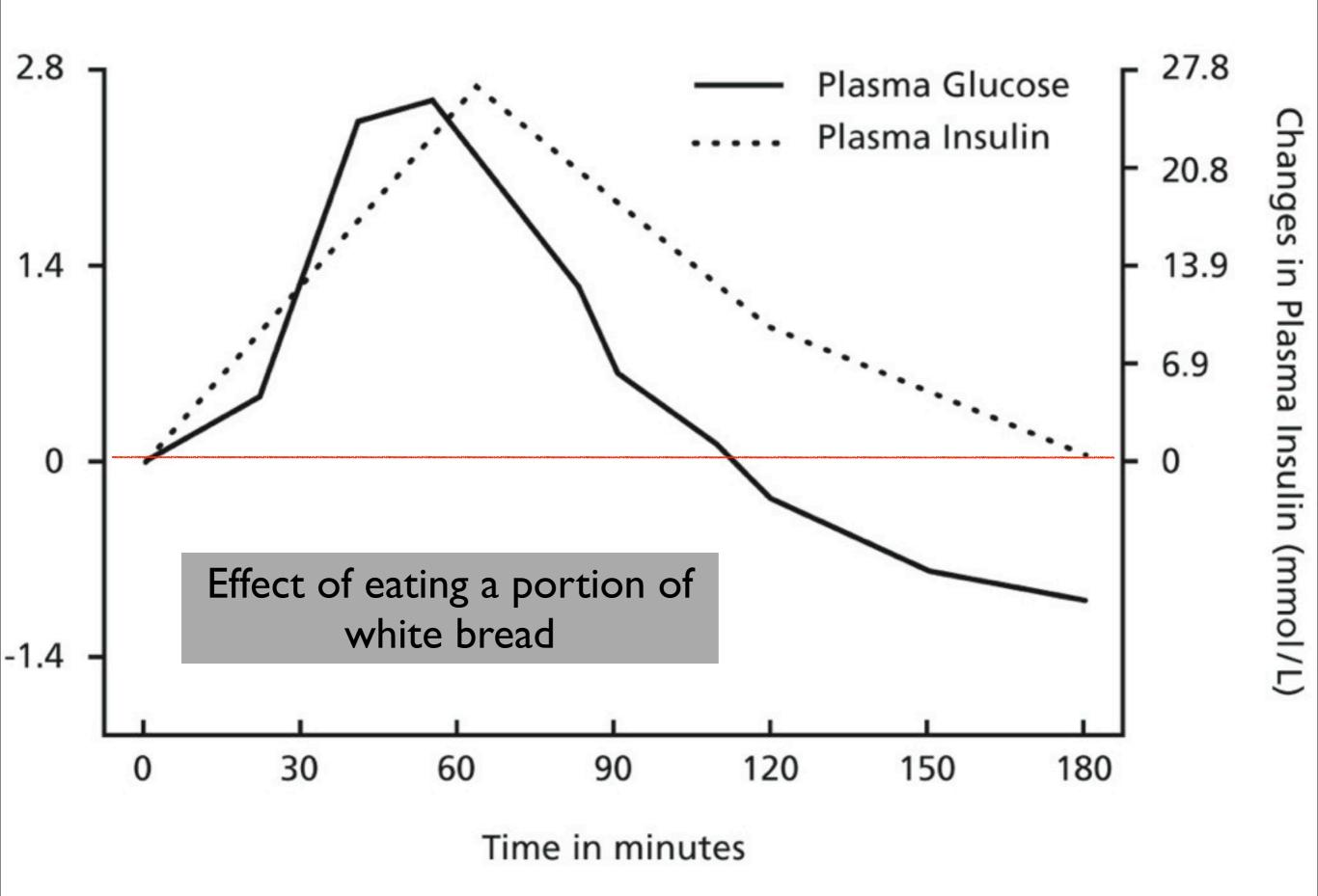
### **Reprogramming stress reactions**

- When a perception is attached to a negative emotion we accumulate emotional charge = stress
- The brain's circuitry increasingly 'hardwires' this such that similar perception evoke stress response.
- We can break this hardwiring by evoking a positive emotion at times previously considered stressful - this is the key of the HeartMath exercise we will do in the second half.
- We can also reframe stress triggers we'll do this in second half too with the Stress Log.

## stress triggers

## 2. DIET





### Blood sugar dips produce adrenalin

#### Jones T et al, 1995, J Pediatr, 126(2), pp 171-7

- Researchers at Yale University gave 25 healthy children a drink containing the equivalent amount of glucose found in a can of Fanta.
- The rebound blood sugar drop boosted their adrenalin to over 5 times their normal level for up to 5 hours after ingesting the sugar. Most of these children had difficulty concentrating and were irritable and anxious, which are normal reactions to too much adrenalin in the bloodstream.

### The Glycemic Load of a food is derived from knowing both the QUALITY of the carbohydrate (its GI - fast or slow.) and the QUANTITY of the food that is carbohydrate

### Three simple rules to lower GL

#### Eat no more than 40/60 GLs a day.

#### Eat protein with carbohydrate.

Graze rather than gorge.

patrick HOLFORD Optimum Living Made Easy

THE **LOW-GL DIET** BIBLE

THE PERFECT WAY TO LOSE FAT FAST, GAIN ENERGY AND IMPROVE YOUR HEALTH patrick HOLFORD with Fione McDoneld Joyce

THE LOW-GLDIET COOKBOOK

EASY RECIPES FOR WEIGHT LOSS, HEALTH AND ENERGY patrick HOLFORD & Kate Staples Optimum Living Made Easy



THE ALTERNATE-DAY LOW-GL DIET PLAN

WEIGHT

### Breakfast

| Carbohydrates |   | Protein            |
|---------------|---|--------------------|
| Cereal/Fruit  | + | Seeds/Yoghurt/Milk |
| Fruit         | + | Yoghurt/Seeds      |
| Bread/Toast   | + | Egg                |
| Bread/Toast   | + | Fish (eg Kippers)  |

| CEREAL            | 5 GLs           |  |
|-------------------|-----------------|--|
| Oat flakes        | 2 servings      |  |
| All Bran          | 1 serving       |  |
| Muesli (no sugar) | 1 small serving |  |
| Alpen             | Half a serving  |  |
| Raisin Bran       | Half a serving  |  |
| Weetabix          | 1 biscuit       |  |
| Cornflakes        | Half a serving  |  |

| FRUIT      | 5GLs           |
|------------|----------------|
| Berries    | 1 large punnet |
| Pear       | 1              |
| Grapefruit | 1              |
| Apple      | 1 small        |
| Peach      | 1 small        |
| Banana     | third          |
| Raisins    | 10             |

#### Q. What does a 5 GL portion of fruit look like?



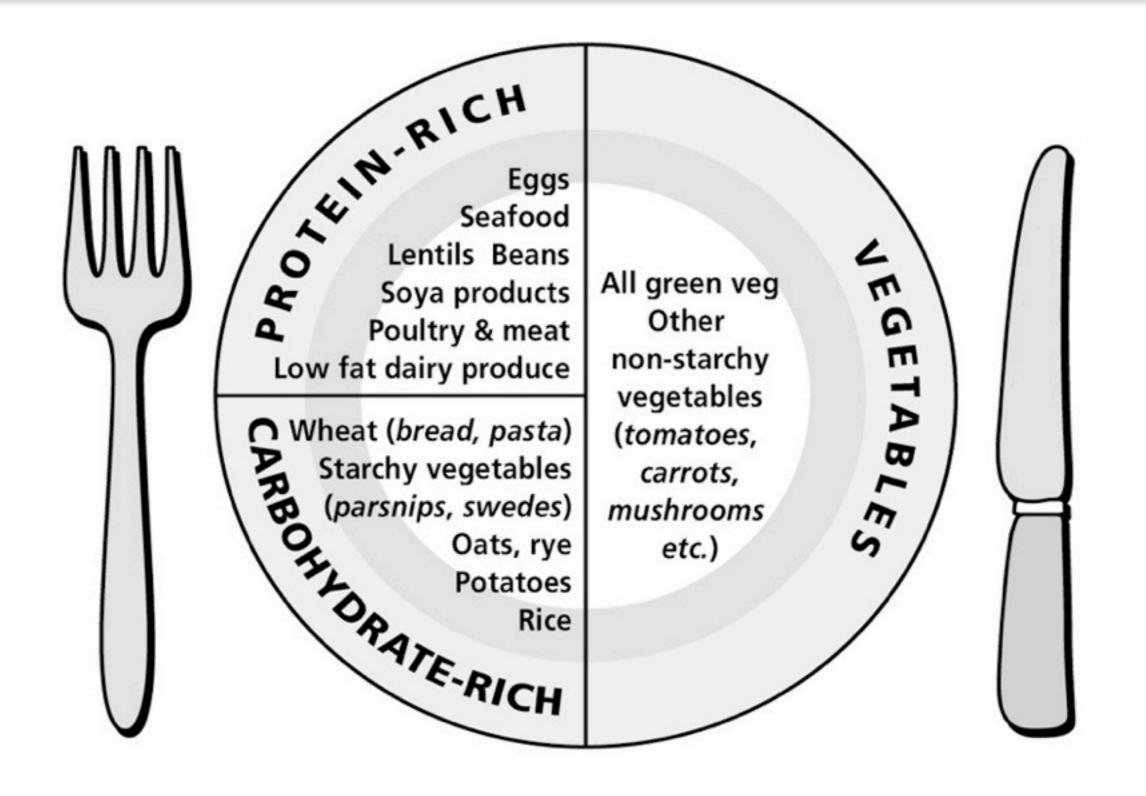
### Breakfast

| BREADS                            | 10 GLs        |  |
|-----------------------------------|---------------|--|
| Nairns rough oatcakes             | 5/6 biscuits  |  |
| Rye 'Pumpernickel' style          | 2 thin slices |  |
| Sourdough rye bread               | 2 thin slices |  |
| Rye wholemeal bread (yeasted)     | 1 slice       |  |
| Wheat wholemeal bread (yeasted)   | 1 slice       |  |
| White, high fibre bread (yeasted) | <1 slice      |  |



- A piece of fruit, plus five almonds or a dessertspoon of pumpkin seeds
- A piece of bread or two oat cakes and half a small tub of cottage cheese (150g)
- A piece of bread/two oat cakes and half a small tub of hummus (150g)
- A piece of bread/two oat cakes and peanut butter
- Crudités (carrot, pepper, cucumber or celery) and hummus
- Crudités and cottage cheese
- A small yoghurt (150g), no sugar, plus berries
- Cottage cheese plus berries

### Main Meals



### Starchy veg/grains - 7GLs

| Pumpkin/squash  | Big serving (186g)  | Brown rice    | Small serving (70g) |
|-----------------|---------------------|---------------|---------------------|
| Carrot          | One large (158g)    | White rice    | Third serving (46g) |
| Swede           | Big serving (150g)  | Couscous      | Third serving (46g) |
| Quinoa          | Big serving (120g)  | Broad beans   | A serving (31g)     |
| Beetroot        | Big serving (112g)  | Sweetcorn     | Half a cob (60g)    |
| Cornmeal        | A serving (116g)    | Boiled potato | Three small (74g)   |
| Pearl barley    | Small serving (95g) | Baked potato  | Half (59g)          |
| Wholemeal pasta | Half serving (85g)  | French fries  | Tiny portion (47g)  |
| White pasta     | Third serving (66g) | Sweet potato  | Half (61g)          |



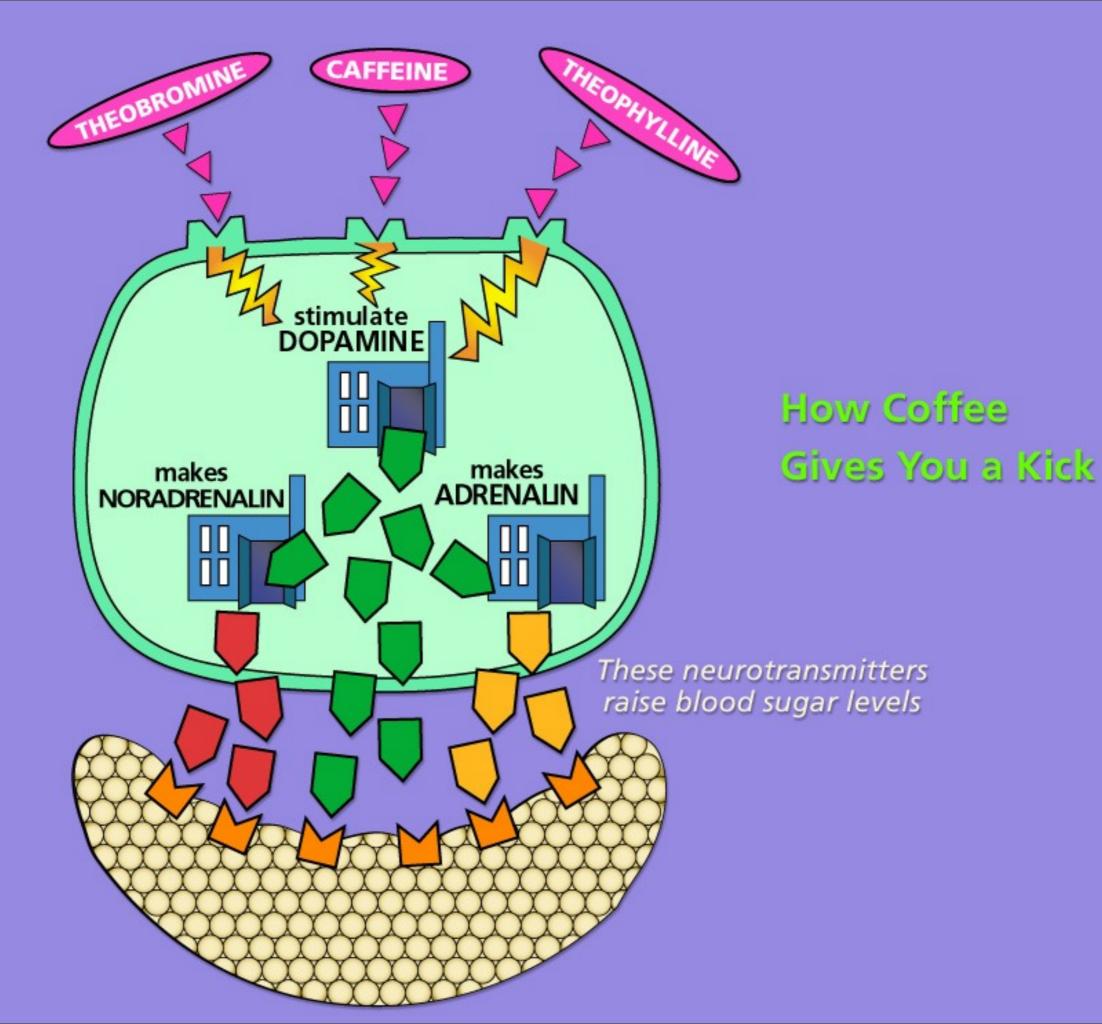
#### patrick HOLFORD & Fiona McDonald Joyce

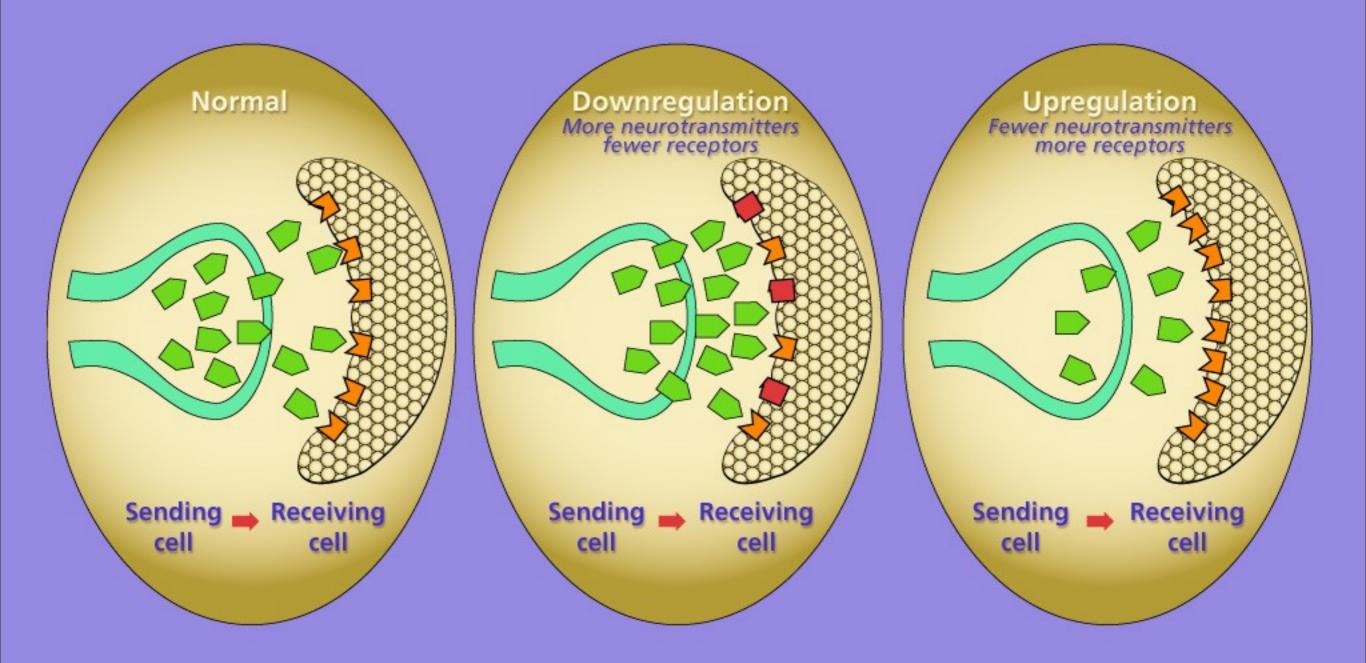
## THE LOW-GLDIET COOKBOOK

EASY RECIPES FOR WEIGHT LOSS, HEALTH AND ENERGY

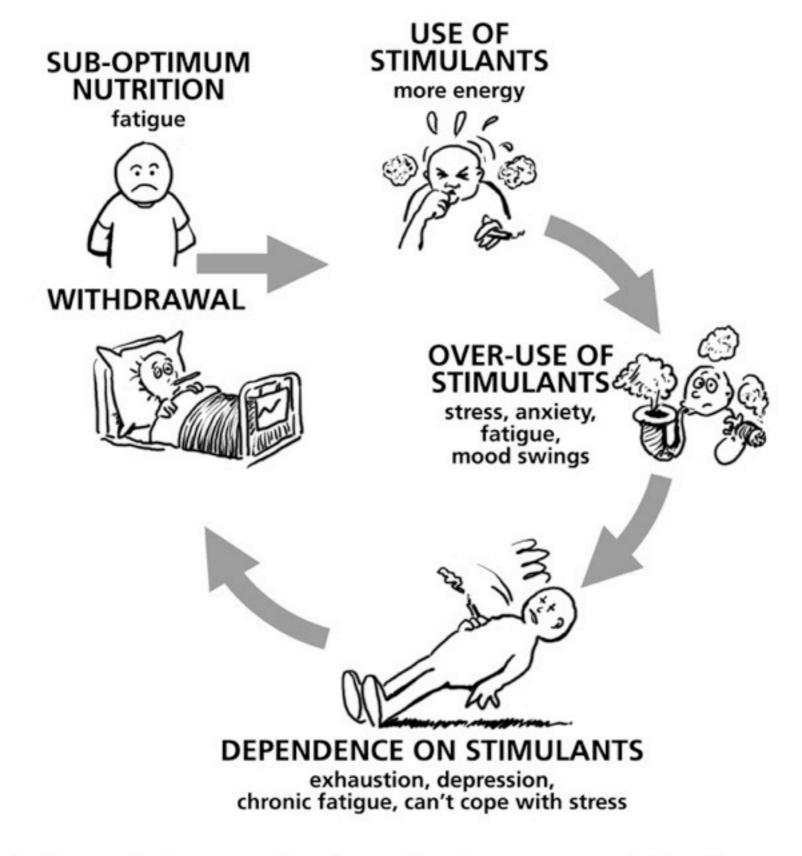
## stress triggers

## 3. STIMULANTS





Downregulation and Upregulation



#### The vicious circle of stress and fatigue

#### **Caffeine buzzometer**

#### Here are the caffeine levels in the following products:

| Coca-Cola Classic (12 oz)   | 46mg        |
|-----------------------------|-------------|
| Diet Coke (12 oz)           | 46mg        |
| Red Bull                    | 90mg        |
| Hot cocoa (5oz)             | 10mg        |
| Coffee, instant (5oz)       | 40-105mg    |
| Coffee, percolated (5oz)    | 60-125mg    |
| Coffee, filtered (5oz)      | 110-150mg   |
| Coffee, Starbucks (grande)  | up to 500mg |
| Tea (5oz)                   | 20-100mg    |
| Green tea (5oz)             | 20-30mg     |
| Chocolate cake (1 slice)    | 20-30mg     |
| Bittersweet chocolate (1oz) | 5-35mg      |

2 billion cups of coffee are drunk every day worldwide

70 million cups of coffee are drunk every day in the UK



The average person has 3 cups of coffee or 6 cups of tea a day

I in 5 visit a coffee shop every day

#### Coffee & croissant - a deadly duo?

Moisey L, Am J Clin Nutr, 2008;87:1254-61.

Britain's most popular pick-me-up, a coffee and a croissant, may be fueling an epidemic of weight gain and diabetes, according to research at Canada's University of Guelph. Participants were given a carbohydrate snack, such as a croissant, muffin or toast, together with either a decaf or coffee. Those having the coffee/carb combo had triple the increase in blood sugar levels and insulin sensitivity, the hormone that controls blood sugar levels, was almost halved.

# stress triggers

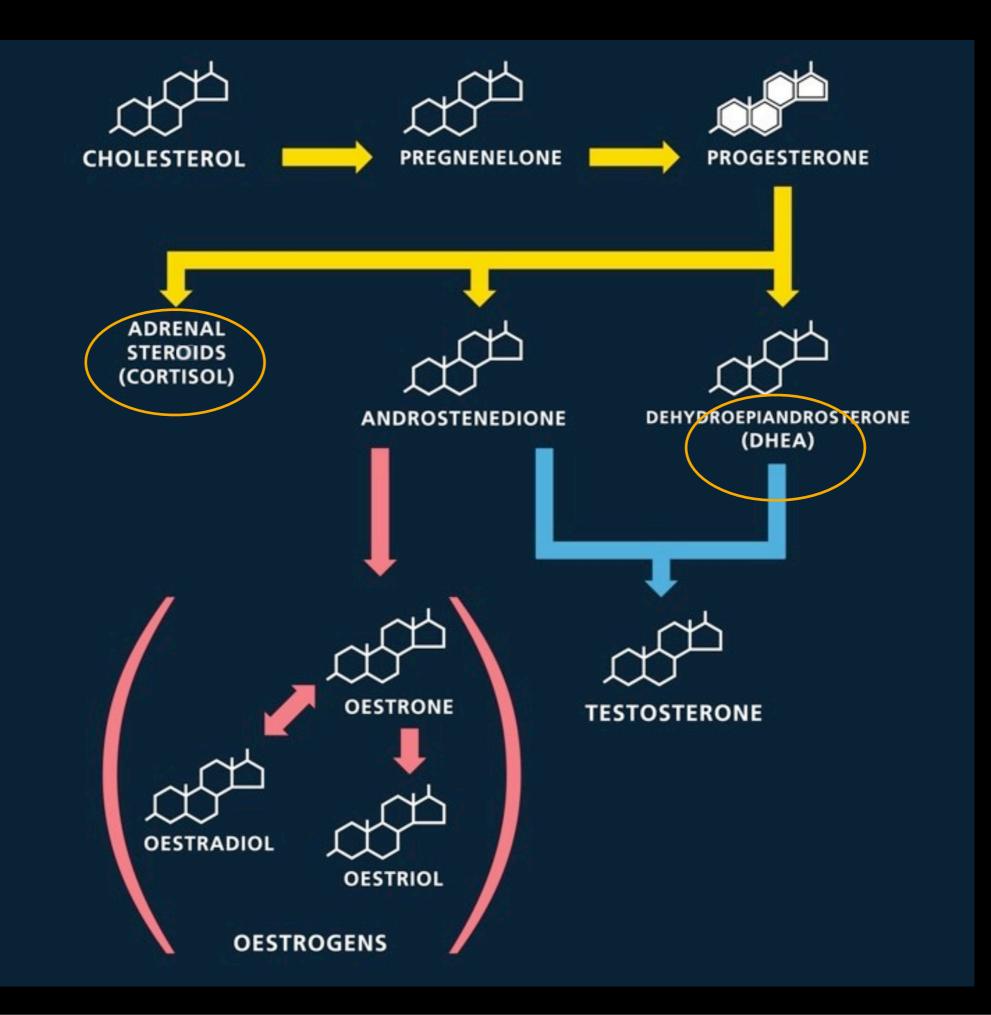
# 4. HORMONES

#### Meet the stress hormones

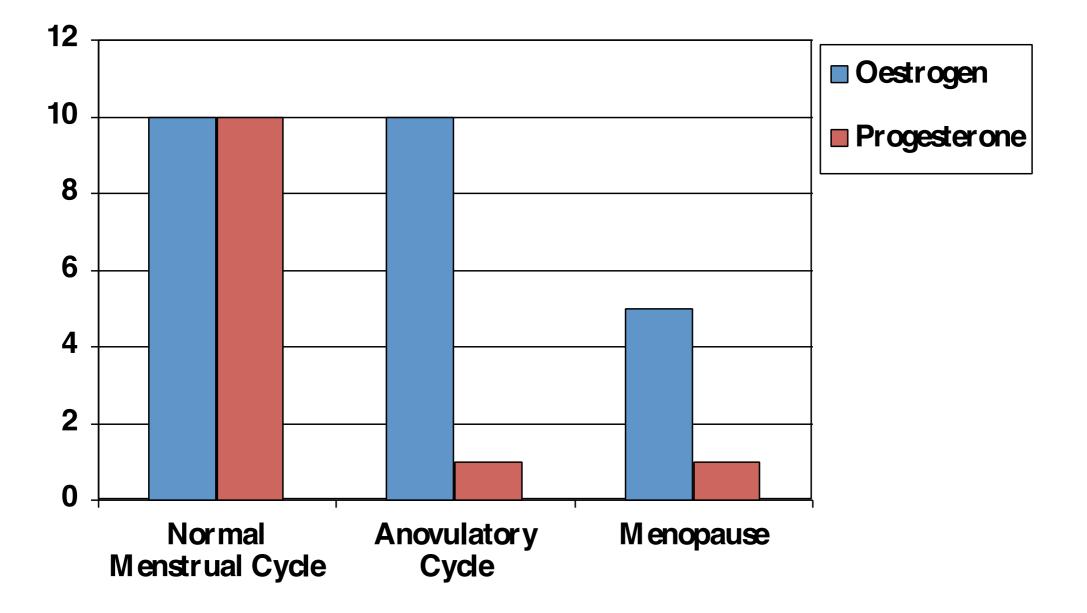
- Adrenalin triggers 'fight flight' response and raises blood sugar by breaking down 'glycogen' stores. It is short-acting (up to one hour).
- Cortisol is the long-acting stress hormone that also raises glucose by converting protein into glucose in the liver. It promotes ageing.
- DHEA is the 'good' anti-ageing stress hormone that gives you stress resilience. It is depleted by too much stress.
- Insulin is the sugar hormone that gets too much glucose out of the blood into cells, and the excess to the liver, where it is converted into glycogen and fat.

#### High cortisol and low DHEA is bad

- Accelerated ageing (Kerr et al., 1991; Namiki, 1994)
- Brain cell death (Kerr et al., 1991; Sapolsky, 1992)
- Impaired memory and learning (Kerr et al., 1991; Sapolsky, 1992)
- Decreased bone density; increased osteoporosis (Manolagas, 1979)
- Reduced muscle mass (Beme, 1993)
- Reduced skin growth and regeneration (Beme, 1993)
- Impaired immune function (Hiemke, 1994)
- Increased blood sugar (DeFeo, 1989)
- Increased fat accumulation around waist and hips (Marin, 1992)



#### **Oestrogen & progesterone ratios**

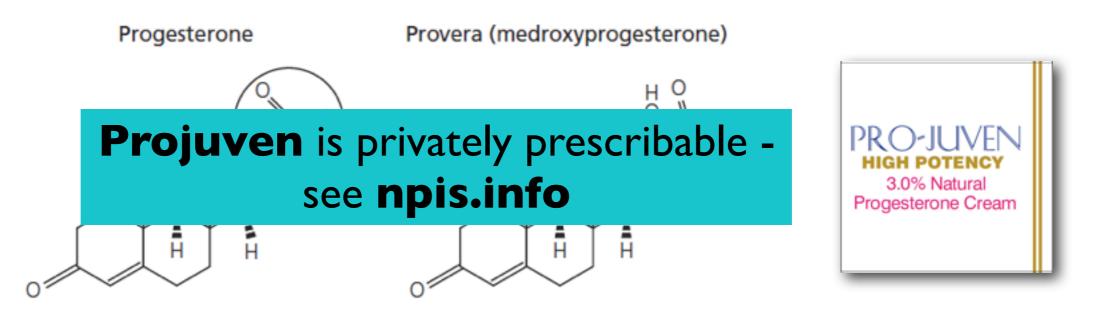


### Symptoms of progesterone deficiency

- anxiety
- panic attacks
- ADHD & poor concentration
- insomnia
- muscle aches, cramps, restless legs
- hot flushes
- high blood pressure
- feeling cold, having cold hands and feet
- excessive peeing (?interstitial cystitis)
- Iack of sex drive and sensation

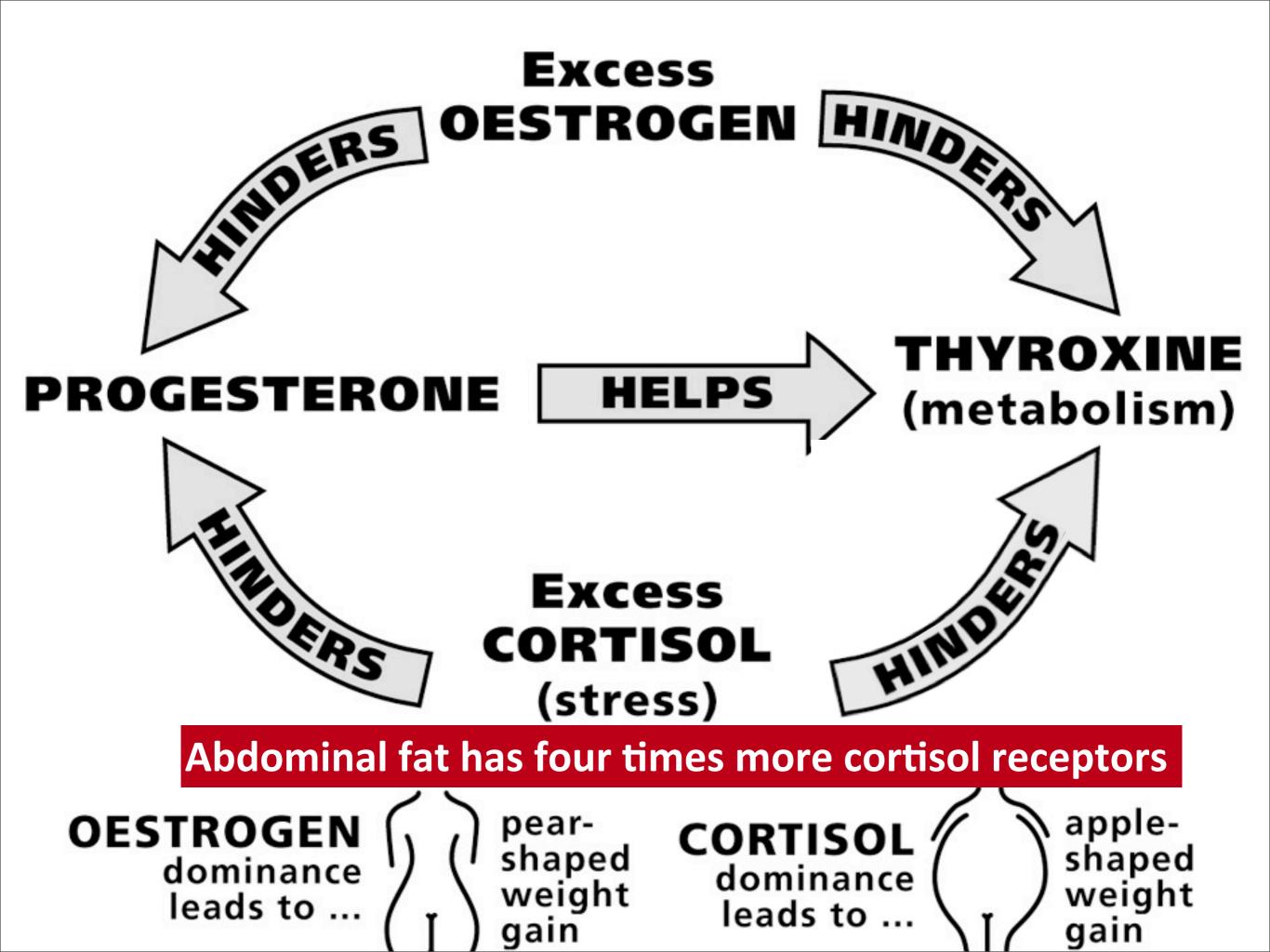
#### HRT is not natural hormone replacement

- A review of over 200 studies on bio-identical hormones in the Postgraduate Medical Journal concluded that they were more effective and had greater health benefits than regular HRT.
- Researchers followed over 80,000 women taking bio-identical progesterone versus progestins with or without oestrogens. Progesterone caused no increase in cancer. Those getting the progestin / oestrogen combination, had their risk raised by 69 per cent. Taking oestrogen alone raised the risk by 29 per cent.



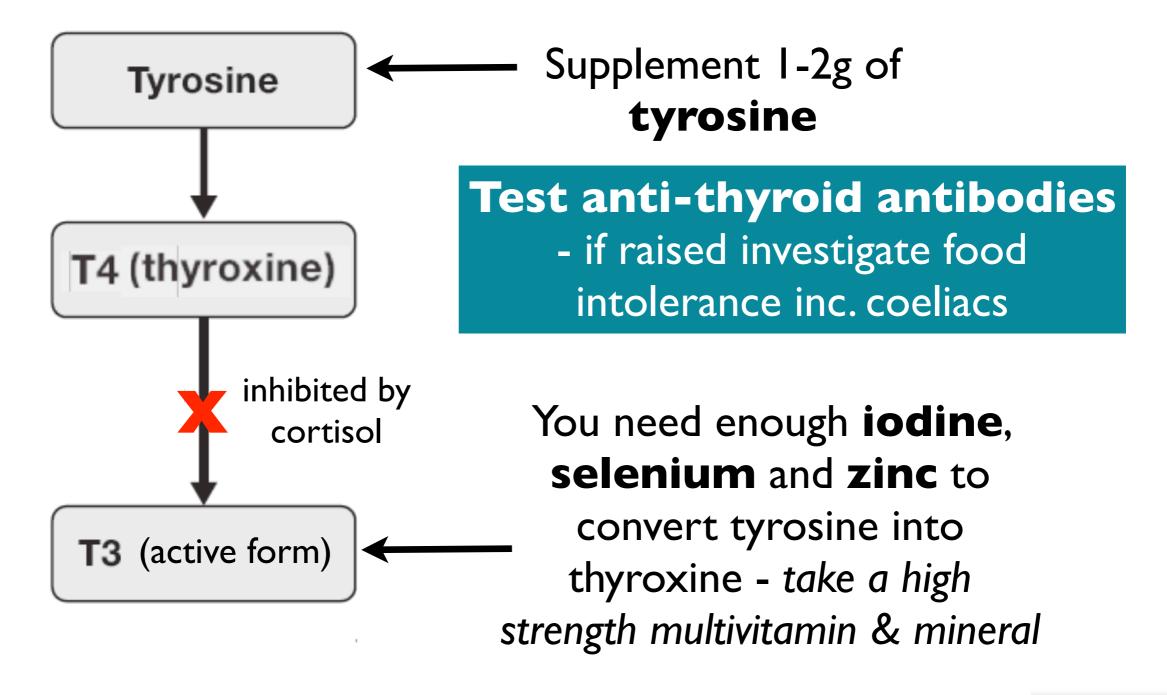
#### Men can be testosterone deficient

- Reg was in his mid-forties when he first started feeling irritable much of the time. Over the next few years things got worse – he began having night sweats, his memory became poorer, he had outbursts of irrational anger and his libido plummeted.
- I no longer felt like myself,' he said. 'I went right off sex, I had no energy whatsoever and my memory was so bad I had to write simple instructions on my hand, such as "lock office door".
- Blood tests revealed his testosterone level was less than 10 pg/ ml of 'free' testosterone – half the normal level for a 70-year-old.
- He was prescribed testosterone capsules. 'Within two days my memory returned, my depression had lifted and my libido had returned. I felt sharp, bright and full of energy.' His other symptoms eventually all disappeared.



#### **Underactive thyroid**

Symptoms: depression, lethargy, poor concentration, panic attacks, poor temperature tolerance, weight gain, indigestion, constipation



## BUILDING RESILIENCE

- Low GL diet
- Minimise use of stimulants
- Energising and calming nutrients and herbs
- Get a good quality and quantity of sleep
- Generate vital energy eg yoga, t'ai chi, psychocals, fuller breathing, meditation
- Build in relaxation time
- Reset your Mindset HeartMath® exercise
- Unravel the causes of stress and your stressful reactions
- Manage your time well

# NUTRIENTS & HERBS

### **Energy nutrients**

- Vitamin C a study at the University of Alabama found that people who consumed under 100mg of vitamin C had twice the tiredness of those consuming 400mg or more.
- Vitamin B An RCT gave 198 men either a supplement containing vitamin C, B complex and minerals or a placebo. After 14 days those on the supplement were found to have greater physical and mental stamina, concentration and alertness vs placebo.
- CoQ10 Exercisers supplementing 300mg of Co-Q10 for eight days had more energy and improved physical performance during fatigue-inducing workload trials.
- Chromium supplementing chromium reduces appetite and promotes weight loss, reduces PMS related mood dips and depression, and reduces fatigue in diabetics.
- Zinc is needed for the production of the hormone insulin, which is what transports glucose into your cells to make energy. Stress depletes it.
- Tyrosine Ten cadets were given a drink containing 2g of tyrosine a day, while the remaining 11 were given an identical drink without the tyrosine. Those on tyrosine consistently performed better, both in memorising the task at hand and in tracking the tasks they had performed. Another study found that the normal decline in thinking straight when very cold is mitigated by taking tyrosine.

### **Energising (adaptogenic) herbs**

#### Siberian ginseng

#### Korean and American ginseng

- Reishi (Ganodermum lucidum) mushroom, also known as lingzhi in China, has been revered for 5000 years is used to modify or enhance the effects of other stress-fighting herbs. It also helps to lower insulin levels.
- Rhodiola rosea has been found to alleviate fatigue and other symptoms of stress.
- Licorice prolongs cortisol function useful early in the day if in 'stage 3' but use with caution otherwise.

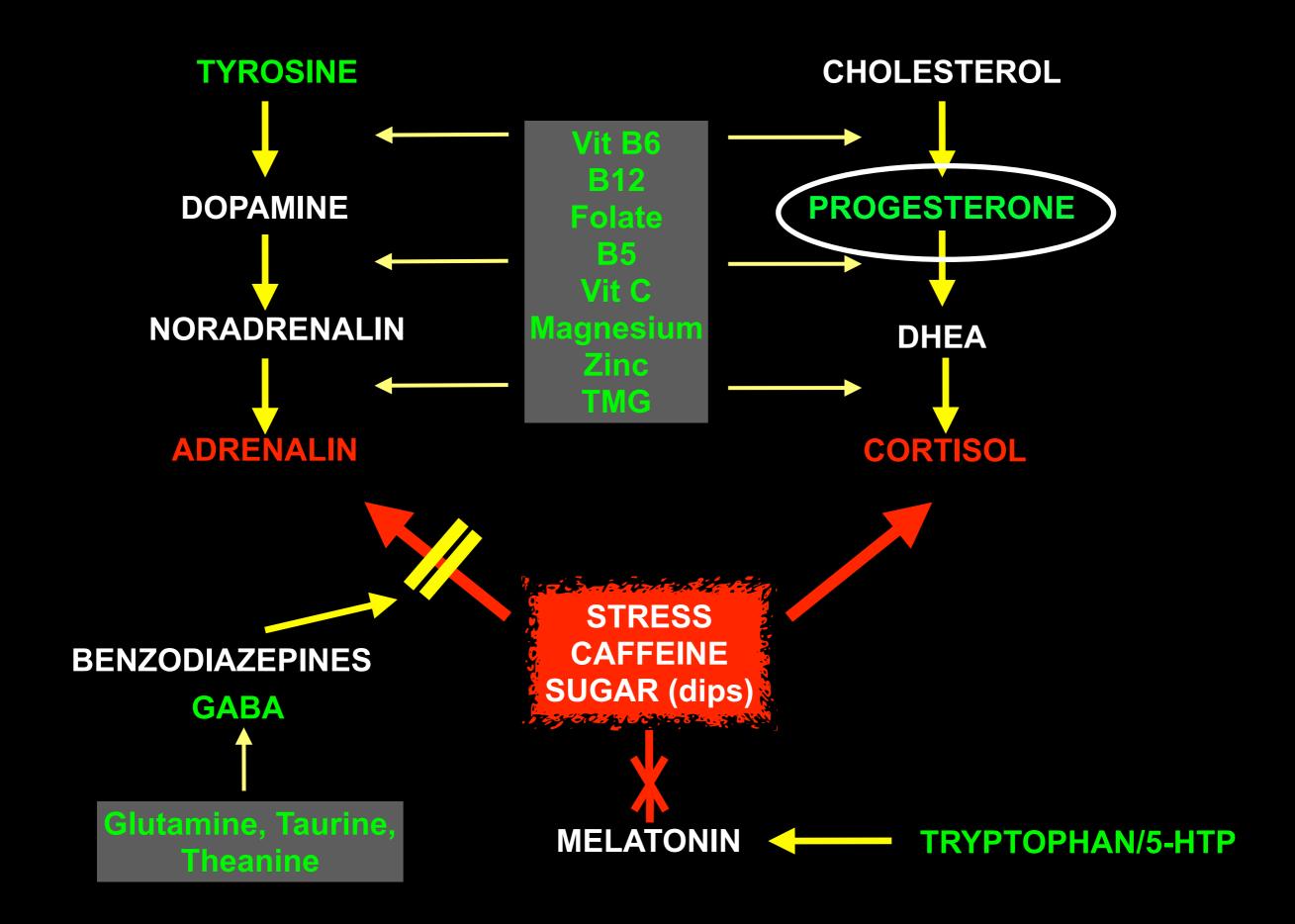
Beware of 'energy' tablets or teas that contain caffeine or guarana, a natural form of caffeine.

#### **Relaxing nutrients and herbs**

- GABA is a neurotransmitter and amino acid that switches off adrenalin
- Taurine and glutamine these amino acids are the building blocks of GABA.
- Tryptophan is used to produce serotonin (for mood) and melatonin (for sleep)
- **Theanine** an amino acid in tea, has an anti-stress effect.
- Magnesium supplementation reduces anxiety, hyperactivity, depression, confusion, blood pressure, irregular heartbeat, muscle tension and improves sleep.

#### **Relaxing herbs**

- Passion Flower a favourite of the Aztecs, who used it to make relaxing drinks. It has a mild sedative effect and promotes sleep, much like hops, with no known side-effects at normal doses - 100–200mg a day.
- Hops are an ancient remedy for a good night's sleep and included in beer for precisely that reason. They help to calm by acting directly on the central nervous system, rather than affecting the brain's GABA receptors. Take about 200mg per day works best in combination with valerian and/or other herbs, such as passion flower.
- Valerian good for restlessness, anxiety and insomnia. It enhances the activity GABA receptors in a process that is similar to the tranquillising action of benzodiazepines, but without the unwelcome side-effects or addiction. Between 50 and 100mg twice a day is an effective relaxant, while twice as much 45 minutes before retiring helps to promote a good night's sleep. Since valerian potentiates sedative drugs, including muscle relaxants and antihistamines, don't take it if you are on prescribed medication without your doctor's consent. Valerian can also interact with alcohol as well as certain psychotropic drugs and narcotics.



# SLEEPING WELL

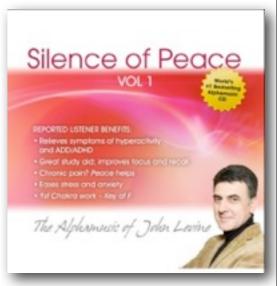
### GABA plus 5-HTP - winning formula

W. Shell et al, American Journal of Therapeutics, 2009

- In a placebo controlled trial the combination of GABA and 5-HTP reduced time taken to fall asleep from 32 minutes to 19 minutes and extended sleep from five to almost seven hours. Taking 1,000mg of GABA, plus 100mg of 5-HTP is a recipe for a good night's sleep.
- Supplementing 100 to 200mg of 5-HTP half an hour before you go to bed helps you get a good night's sleep.
- Magnesium and GABA help you to relax. Take a supplement containing all these, or GABA precursors taurine & glutamine.
- Melatonin is a bit less effective than the drugs, but has a fraction of the side effects. Try between 3mg/6mg before bed.

#### Silence of Peace - CD

- Sue suffered from PTSD. "I used to sleep about 3 hours and woke every 45 mins. The improvement happened from night one, now just one week later I am sleeping 6 to 7 hours. If I wake - which is becoming rare I simply tune in again! I haven't heard the end of the CD yet."
- Peter was too stressed to meditate and uses the CD to calm down. "I couldn't believe it. In seconds I felt my heart slowing down and my whole body tingling."
- Olga had chronic insomnia. "It was a miracle. After 15 minutes I experienced a miracle! I received the rest that I was desperate for!"
- Also practice HeartMath or Meditation and complete your Stress Log



## RELAXATION

#### **Relaxation time**

- Build 30 minutes into every day to chill out read a book, go for a walk, watch a film, or do a relaxation exercise
- Relaxation time <u>download</u> our 'progressive relaxation' mp3
- Try 'yoga nidra' for a deep relaxation (buy a CD)

# ENERGY GENERATING BREATHNG & EXERCISES

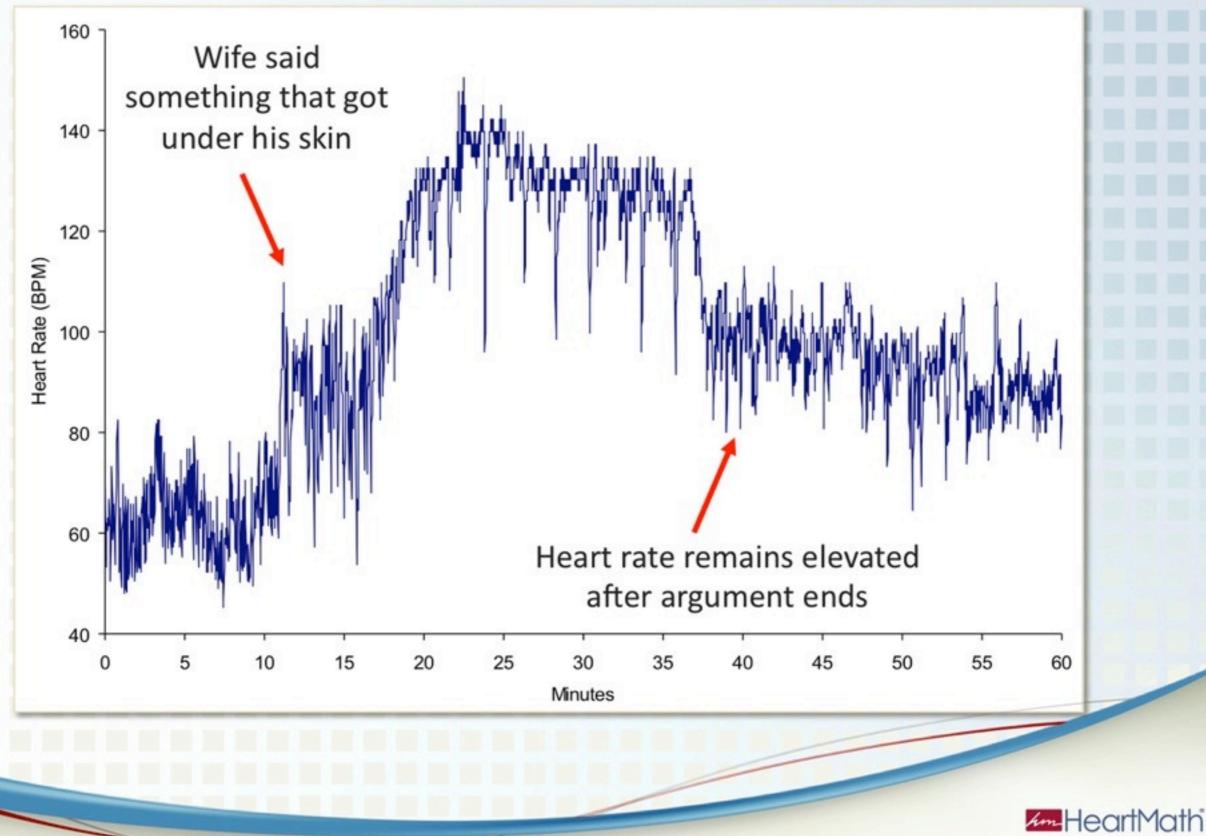
### Tai Chi, ChiGung, Yoga, Psychocals

- Generates *chi* or *prana*
- Unblocks flow of vital energy through the body
- All help develop fuller breathing and relaxation

- <u>download</u> our 'boost your oxygen intake' mp3 at <u>www.patrickholford.com/stresscure</u>
- Check out pcals.com for next training (15 minute workout)

# RESETYOUR MINDSET

#### **Husband and Wife Arguing**



INSTITUTE OF HEARTMATH

**Expanding Heart Connections** 

Basically, we are "energy systems" that expend and renew energy.







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INSTITUTE OF HEARTMATH **Expanding Heart Connections** 

### Quick Coherence<sup>®</sup> Technique An Intelligent Energy Self-Regulation Technique





INSTITUTE OF HEARTMATH<sup>®</sup> Expanding Heart Connections

### emWave<sup>®</sup> Demo





INSTITUTE OF HEARTMATH' Expanding Heart Connections

#### **Quick Coherence® Technique**

#### Step 1:

Focus your attention in the area of the heart. Imagine your breath is flowing in and out of your heart or chest area, breathing a little slower and deeper than usual.

Suggestion: Inhale 5 seconds, exhale 5 seconds (or whatever rhythm is comfortable).



Am-HeartMath

**Expanding Heart Connections** 

OF HEARTMATH



#### **Quick Coherence Technique**

#### Step 2:

Make a sincere attempt to experience a regenerative feeling such as appreciation or care for someone or something in your life.

Suggestion: Try to re-experience the feeling you have for someone you love, a pet, a special place, an accomplishment, etc., or focus on a feeling of calm or ease.



Am-HeartMath

**Expanding Heart Connections** 

#### **Quick Coherence® Quick Steps**

- 1. Heart-Focused Breathing
- 2. Activate a positive or renewing feeling





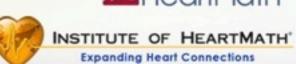
Expanding Heart Connections

#### Inner Balance<sup>™</sup> for iDevices

Inner Balance<sup>™</sup> For Apple iOS Lightning devices. RRP £128 Your price £114 - SAVE £14! Plus free Brain Fitness eBook!



#### Use code stresscure online at www.heartmath.co.uk/shop



Am-HeartMath

#### **Reset your mindset**

- Understand what is causing you stress
- Reset your mindset
- Build positivity

#### The A to E of understanding stress

- A Activating Event: something happens in the environment around you.
- **B Beliefs**: you hold a belief about that event or situation.
- C Consequence: you have an emotional and/or psychological response to your belief and you compensate
- D Disputation: dissecting those beliefs to see if they are rational
- E Effective new approach: identifying a more supportive way to proceed.

#### Stress log

| Activating<br>event or<br>situation | Stress-inducing<br>thoughts/<br>beliefs | Consequences<br>(how you feel) | Compensation<br>(what you do)                      | Reality check<br>(stress-alleviating<br>thoughts) | Effective new<br>approach                           |
|-------------------------------------|---|--------------------------------|--|---|---|
| Stuck in traffic                    | I let people<br>down                    | Frustrated                     | Swear at other<br>drivers & cut<br>them up-cruelty | Some things are<br>beyond my control              | Allow more time<br>Do HeartMath ex<br>Calming music |
|                                     |   |                                |  |   |   |
|                                     |   |                                |  |   |   |
|                                     |   |                                |  |   |   |

#### The Power of Positivity

## *"The pessimist sees difficulty in every opportunity. The optimist sees the opportunity in every difficulty."*

Identify and name your 'inner critic' or 'saboteur'.





### lt's a bit muddy, isn't it?

#### The Power of Positivity

## *"The pessimist sees difficulty in every opportunity. The optimist sees the opportunity in every difficulty."*

- Identify and name your 'inner critic' or 'saboteur'.
- Gratitude journal count your blessings.
- Don't blame: reframe how did I contribute to this situation? What can I learn from it? How can I resolve things and move on?

### *"I have never got indigestion from eating my words."*



# MANAGE YOUR TIME

The sense of being overwhelmed or overworked is a consequence of having unfinished business.

It is crazy to do something you're not doing while doing something else.

Only have a 'today' list of things to do, and do them, one by one and completely. Tip start with a big result. Do the hardest first.

#### Say No to Stress - Summary

- Generate vital energy yoga, t'ai chi, breathing exercises
- Build in relaxation time yoga, meditation, relaxation exercises
- Daily supplements energy &chill nutrients / herbs as needed
- Eat a low GL diet
- Minimise stimulants and alcohol
- Get a good quality and quantity of sleep
- Manage your time
- Keep your stress log for a couple of weeks to reset your mindset
- HeartMath® exercise to build resilience





The Brain Bio Centre is at the Putneymead Medical Centre, Putney, London SW15

#### www.brainbiocentre.com

The Brain Bio Centre is a wholly owned subsidiary of the Food for the Brain Foundation www.foodforthebrain.org

patrick@foodforthebrain.org

patrick HOLFORD & Susannah Lawson

The **STRESS CURE** 

HOW TO RESOLVE STRESS, BUILD RESILIENCE AND BOOST YOUR ENERGY

