

Jayney Goddard MSc, FCMA, FRSM

President, The Complementary Medical Association Chair, British Academy for Lifestyle Medicine First let's look at EMOTIONAL STRESS and some important and often ignored sources of devastating stressors



- Lack of love from self and others (I.L.L.)
- Social isolation/loneliness
- Poor relationships with ourselves and others
- Lack of self-compassion



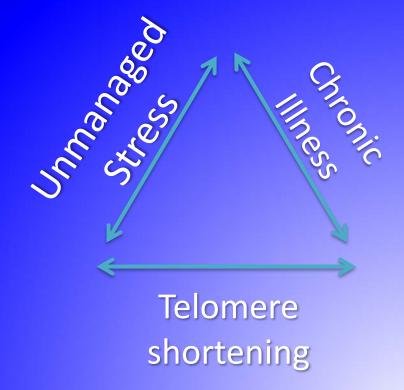
What happens if we don't manage our response to stress?

All major stressors lead to elevated cortisol levels, promoting imbalance throughout our entire hormonal cascade:

- Chronic inflammation
- All the devastating diseases we wrongly associate with being a natural part of ageing

cortisol from unmanaged stress response leads to telomere shortening, leading to shorter lifespan

There is a direct correlation between stress and telomere shortening





Telomeres are DNA-protein complexes that cap chromosomal ends, promoting chromosomal stability

Think of them as being a bit like the plastic bits on the ends of your shoelaces — that stop your laces from unraveling



Why do telomeres shorten?

When cells divide, the telomere is not fully replicated due to limitations of the DNA polymerases in completing the replication of the ends of the linear molecules, leading to telomere shortening with every replication.

OR . . . Think of it as taking a photocopy of a photocopy – and how an image degrades with repeated copying



Love, Kindness and Compassion How do they REALLY affect our health?



Positive emotions and well-being

Nuns who had written short personal essays:

It was found that the nuns who expressed the most positive emotions lived 10 years longer and were protected from dementia.



Furthermore, when we are able to embrace positive emotions, we feel good, our thinking becomes more



- Creative
- Integrative
- Flexible





Fredrickson, B. L. (2003). The value of positive emotions: The emerging science of positive psychology is coming to understand why it's good to feel good. American Scientist, 91, 330–335.



Supportive social ties add up to 9 healthy years to your life Particularly when we work towards a common goal

Julianne Holt-Lunstad, PhD, associate professor of psychology, Brigham Young University, Provo, Utah. Robert Kaplan, PhD, distinguished professor, UCLA School of Public Health, Los Angeles. Holt-Lunstad, J. *PLoS Medicine*, July 2010

Warmth & love in relationships <u>dramatically</u> reduces your chances of developing chronic illnesses



House JS, Landis KR, Umberson D (1988) Social relationships and health. Science 241: 540–545. Social Relationships and Mortality Risk: A Meta-analytic Review Julianne Holt-Lunstad, Timothy B. Smith, J. Bradley Layton PLOS Published: July 27, 2010



Most of us innately sense that compassion, love, and social support have health benefits for recipients

The recent Harvard study "Parental Warmth and Flourishing in Mid-Life" strongly supports this





Russek, L. G., & Schwartz, G. E. (1997). Feelings of parental caring predict health status in midlife: A 35 year follow-up of the Harvard Mastery of Stress Study. Journal of Behavioral Medicine, 20, 1–13.

• In the remarkable "Harvard Mastery of Stress Study", 126 healthy young male students were randomly selected in the early 1950s and given questionnaires about their perceptions of the love they felt from their parents.

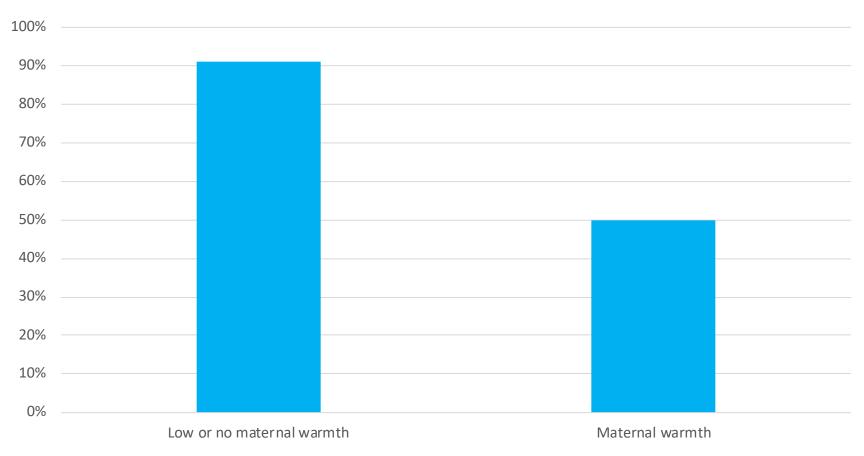
Russek, L.G., Schwartz, G.E. Feeling of Parental Caring Predict Health Status in Midlife: A 35-Year Follow-up of the Harvard Mastery of Stress Study. *J Behav Med* **20**, 1–13 (1997) doi:10.1023/A:1025525428213



At follow-up 35 years later:

91% of participants who did not perceive themselves to have had warm relationships with their mothers had medically diagnosed midlife diseases (including coronary artery disease, high blood pressure, duodenal ulcer, and alcoholism), as compared to only 45% of those who reported a warm relationship with their mothers.

Percentage of men with chronic illnesses at mid-life

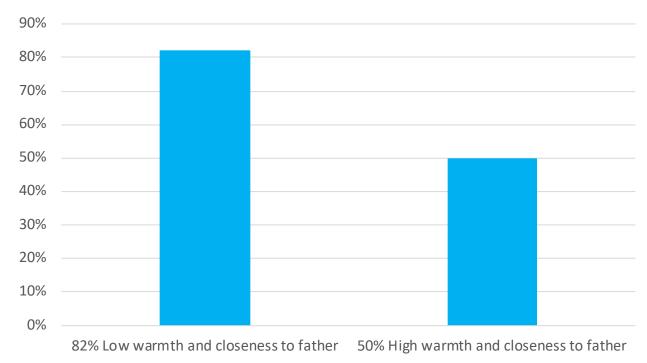


■ Percentage of men with chronic illnesses at mid-life

See also Harlow's experiments on maternal attachment in Rhesus monkeys



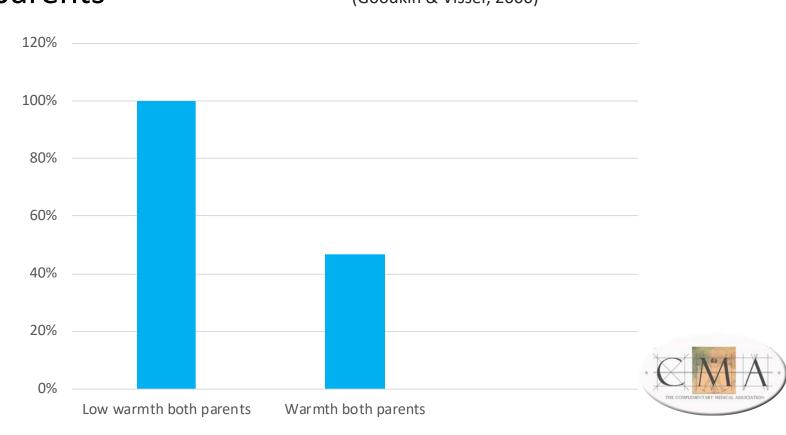
In addition, 82% of those indicated low warmth and closeness to their fathers had these diagnoses too, compared with 50% who reported high warmth and closeness.





100% of those with low warmth and closeness from both parents had chronic diseases diagnosed in midlife, vs only 47% who had warm and close relationships with both parents

(Goodkin & Visser, 2000)



Being loved, cared for, and supported by others is critically important to health <u>and</u> treatment efficacy





Caring deeply

Women, too, are deeply affected by emotional stress. In the now very well-known 2004 study by Epel, Blackburn et al., two groups of women were studied:

- mums looking after healthy children
- mums looking after chronically ill children



The researchers were keen to find out whether emotional stress can be correlated with premature ageing – as frequently people who are chronically stressed often look 'haggard' and will often report undesired weight change.

The researchers were particularly interested in whether stress influences telomere length.



It was found that the women with highest levels of perceived stress caring for their chronically ill children had telomeres that were, on average, shortened by one decade.



How about animals?

Does receiving love affect their health too?



Researchers in the late 1970s were studying the effects of a diet high in fat and cholesterol in rabbits.



During the study, a rather strange anomaly became apparent:

One subgroup of rabbits had 60% less atherosclerosis than the group as a whole, even though they ate the same diet.



Nerem, R. M., Levesque, M. J., & Cornhill, J. F. (1980). Social environment as a factor in diet-induced atherosclerosis. Science, 208, 1475–1476.

It was eventually discovered that the lab assistant who fed and cared for this particular group of rabbits took them out of their cages, petted them, and talked to them before feeding.

The study was repeated twice with the same results and was reported in 'Science'.



Altruism, happiness and health in seniors



Selflessness and altruism lead to happiness and health

Retires older than 65 who volunteered to help others rated significantly higher on

- Life satisfaction
- Will to live

And they had far fewer symptoms of

- Depression
- Anxiety
- Somatisation



Hunter, K. I., & Linn, M. W. (1980–1981). Psychosocial differences between elderly volunteers and non-volunteers. International Journal of Aging and Human Development, 12, 205–213.

Numerous studies show that adult altruistic behaviour is associated with enhanced well-being, improved morale, self-esteem, and positive emotions.





Depressive symptoms are greatly reduced among people of all ages who help others and they have higher levels of happiness, plus evidence of enhanced overall wellness.

Musick, M. A., Herzog, A. R., & House, J. S. (1999). Volunteering and mortality among older adults: Findings from a national sample. Journals of Gerontology Series B-Psychological Sci- ences Social Sciences, 54(3), S173–S180.

The "Helper's High"

In fact, research by Luks shows that two thirds of helpers reported a distinct physical sensation associated with helping:

- About half report a "high" feeling
- 43% felt stronger and more energetic
- 28% felt warm
- 22% felt calmer and less depressed
- 21% felt greater self-worth
- 13% experienced fewer aches and pains



Philanthropy

- Giving excites several different 'happiness' chemicals including:
- Dopamine, and endorphins euphoria
- Oxytocin— tranquillity, serenity or inner peace

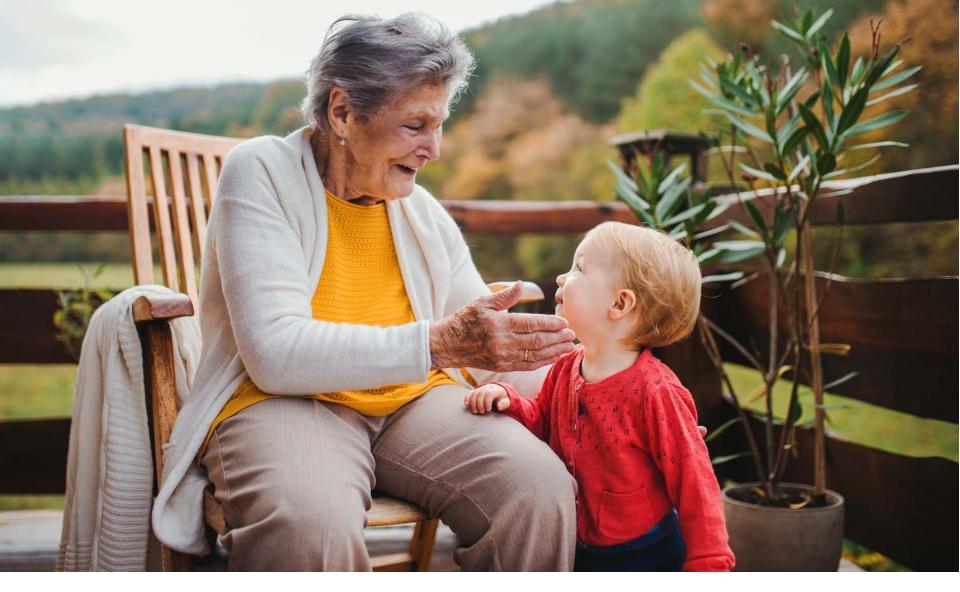
 Brains viewed on MRI machines showed that just the thought of giving elicited this cascade of happiness chemicals. Charitable donations trigger our mesolimbic system In a study from Bremen, Germany, elderly people who helped adolescents work on a life problem improved their own cognitive performance at the same time.



The simple yet empowering act of advising a younger person helped boost the brainpower of the elder, when measured on a word test.

Institute for Research on Unlimited Love

https://unlimitedloveinstitute.org
Stephen G Post
https://www.stephengpost.com



Another study found that older adults who shared a memorized story with children improved their own memory. Once again, the very act of being in a mentorship role with a younger person helped the elder boost their mental abilities.

The kindness of physical touch - Baby massage

The effects of doing kind and compassionate actions can be measured physiologically:

Older adults massaging infants had measurably lower levels of stress hormones, including salivary cortisol and plasma norepinephrine and epinephrine. (Noradrenalin / adrenalin)



Witnessing kindness and compassion

Even just watching kindness and compassion in action makes you physically more resilient – as does thinking about love.

Students were asked to watch a film about about Mother Teresa's work, or they were given the task of "dwelling on love".





After the two tasks were undertaken it was found that there was a significant increase in the protective antibody salivary immunoglobulin A (S-IgA)

This forms part of your first line of defense against invading pathogens





Mantzios, M. and Wilson, J. (2014). Exploring Mindfulness and Mindfulness with Self-Compassion-Centered Interventions to Assist Weight Loss: Theoretical Considerations and Preliminary Results of a Randomized Pilot Study. *Mindfulness*, 6(4), pp.824-835.

Three groups of soldiers were taught to meditate

- A control group just given diet 'tips' in writing
- 2. A general mindfulness meditation group
- 3. A meditation group with extra selfcompassion or loving-kindness (Metta meditation) training

- The two meditation groups of soldiers did the meditation as taught, for five weeks (the control group did nothing, only following the diet 'tips' if they wanted to)
- Participants lost weight in both meditation groups, while the control group gained weight during the initial five weeks.
- After six months of subsequent, self-motivated and unguided meditative practice, only the mindfulness with self-compassion meditation group continued losing weight, while the mindfulness meditation group showed no significant weight difference.
- The findings suggest that developing both mindfulness and self-compassion practices appears more promising for weight loss than meditation alone, or simply dieting.

Even brief training counts Brief mindfulness meditation

Brief mindfulness meditation training alters psychological and neuroendocrine responses to social evaluative stress - the "TSST"

Creswell, J., Pacilio, L., Lindsay, E. and Brown, K. (2014). Brief mindfulness meditation training alters psychological and neuroendocrine responses to social evaluative stress. *Psychoneuroendocrinology*, 44, pp.1-12.

- Cortisol 1
- But . . .
- Less self-reported stress reactivity following brief mindfulness training
- No, or very low changes to both systolic and diastolic BP following TSST





A meta-analytic review of the effects of mindfulness meditation on <u>telomerase</u> activity

 Four pioneering randomized control trials, including a total of 190 participants, provided information on the effect of mindfulness meditation on telomerase.

• The meta-analysis results indicated that mindfulness meditation leads to increased telomerase activity in peripheral blood mononuclear cells. (Effect size of d = 0.46)



The even bigger picture: Compassionate Eating

The most <u>compassionate</u> and <u>cruelty-free</u> foods that we can eat most powerfully promote wellness





Take time to be mindful

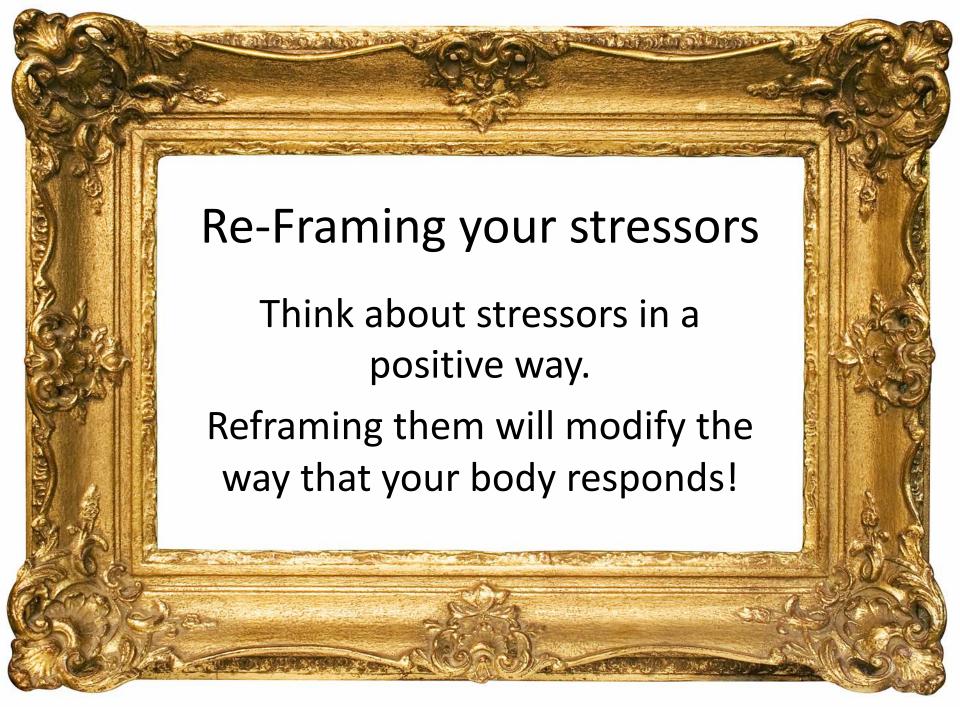
Treat yourself – and all other sentient beings - with kindness and compassion

Reflect this in your daily actions towards yourself and others <u>and</u> be mindful about your food choices. It helps us all live more happily, healthily and gives us the gift of vibrant youthful longevity!

Remember . . .



- Volunteer at a homeless shelter.
- Sign up for a fundraising walk, run or other event in aid of a good cause.
- Help at an animal rescue centre.
- Hold a fundraiser for a cause close to either your own heart or the heart of someone else you know.
- Pick up litter on the beach or in a local park.
- Let someone go in front of you in a queue.
- Pay a stranger a compliment.
- Make dinner for a friend or family member in need.
- Offer to buy a cinema ticket for the person behind you in the queue.
- Pay for someone's meal at a restaurant.
- Donate Christmas gifts to an orphanage or to a collection point.
- Donate to a charity.
- Hold doors open for people.
- Thank a teacher with a gift.
- Donate your clean old clothes to charity.
- Babysit for free ideal for new parents who haven't had the time or opportunity to get out.
- Plant a tree plant anything!
- Do a favour without asking for anything in return.
- Offer to take a new neighbour on a tour of your area.





My special gifts to you!

- Yoga Nidra for Deep Restorative Sleep
- The Relaxation Response instructional recording
- My Rewind Your Body Clock
 10 Step Quick Start Plan
- My whole food, Plant-based SOS-Free e-Book of delicious, compassionate recipes

And . . .

Coming very soon:

My special Loving-Kindness 'Metta' meditation download

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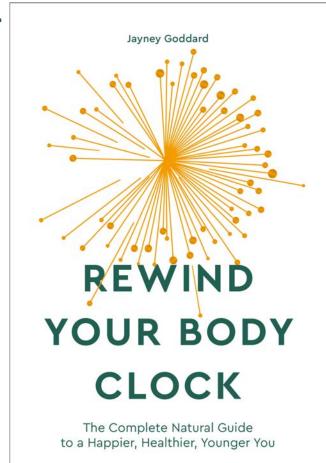
27th March

- Resilience and Positive Psychology CPD training – Promoting Health Through Happiness!
- There is also the opportunity for you to license the training so that you can train others to deliver this beautiful and important course.

Contact me at Jayney@The-CMA.org.uk

Get happier, healthier & younger now with my 21 Day Rewind Challenge – starting April 1st

Mindset, meditation,
nutrition, happiness,
gratitude, breathwork,
hormonal health, herbal
medicine, Ayurveda, libido,
natural facelift, exercise,
stress response management,
environmental health, sleep,
biological age tests and more



Nurture the roots of your being . . . your tender humanity in compassionate relationship to the world around you and you will thrive





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