

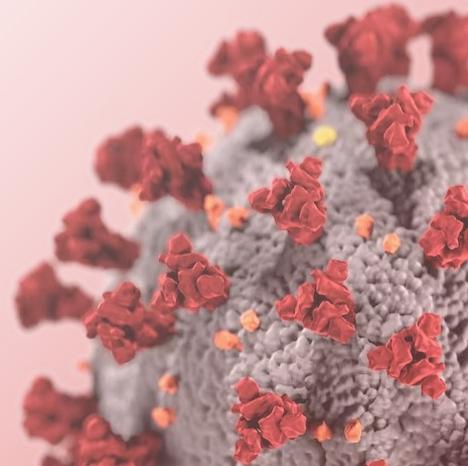


**EMERGING APPROACHES TO TREATING  
SPIKE PROTEIN-INDUCED DISEASES**

April 28-29, 2023 • Fort Worth, Texas

# The Once and Future Patient

Presented By:  
**Dr. Syed Haider**



# Conflicts of Interest

JUST PAY

ATTENTION

THIS IS SOOO

INTERESTING!!!

- Codeveloped the group coaching program intervention discussed

YOU'RE SUPER

ENGAGED!!

JUST LISTEN CAREFULLY

# The Real Conflicts



Sleep better for just \$189!



Only \$7499.00,  
or your first  
born child!



Block that blue light  
at night. Just \$84.99!



Get all these supplements for the low price of: \$987.43/mth!



# Just Kidding: These Ones



- This presentation might seem like I'm pulling on a lot of separate threads...

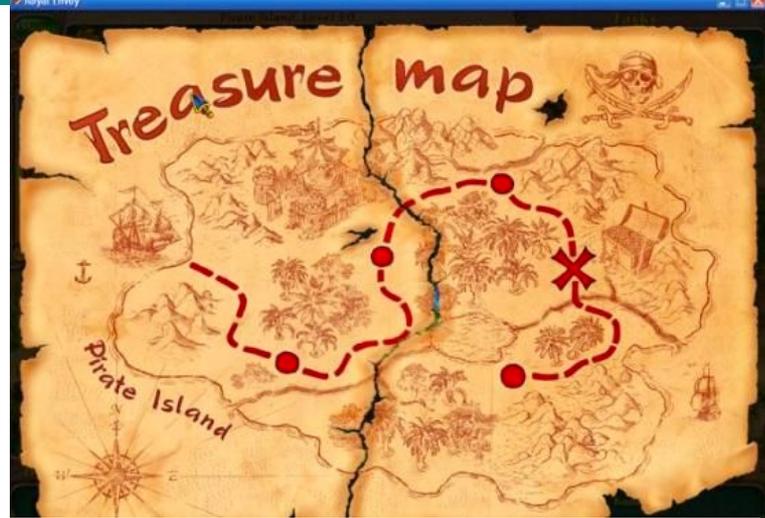


## Weird American Expression #5

"Let's just throw it at the wall and see what sticks."

- And if there's any unifying theme maybe it's the above.
- (you'll see it again ... and again)

- So here's a map:
- 1. **Dr loses a patient** (to lifestyle)
- 2. Pathophysiology
- 3. Mechanisms involved in: **fasting, cold, grounding**
- 4. Meta mechanism: **placebo effect** - use it.



- 5. Why lifestyle first? Two word: (actually) **Safe & Effective**
- 6. **How to change**
- 7. Change yourself, change your friends, **change the world**

## Case Report

Look ma,  
**NO IMAGES!**

49 y/o white male carpenter with **PMH of severe Long COVID** (80% improved w 2 weeks IVM) 1 yr prior, p/w severe worsening of Long COVID sx in Nov 2022, post repeat COVID infxn 1 month prior.

PMH: Trauma (child abuse), PTSD, Depression, Anxiety  
No meds or allergies. No COVID shots.

Diet: SAD

Exercise: was an avid cyclist before first bout of COVID, usually active lifestyle due to work.

Substances: **avg 2-3 beers per day. Rare oral THC use, ex heavy cannabis smoker for 18 years (quit in 2015).**  
3 cigarettes/day x 6 mths 15 yrs prior.



# Patient Beliefs

He used muscle testing “to ask his body what it needs” or would tolerate in terms of diet, exercise and supplements

(Muscle Testing involves bringing a substance close to a person and then testing variations in the strength of a specific muscle to determine if the substance is harmful, beneficial or neutral - if the muscle tests stronger than baseline the substance is considered beneficial, if weaker it's considered harmful and if no change it's considered neutral.)



# Correlation of applied kinesiology muscle testing findings with serum immunoglobulin levels for food allergies

W H Schmitt Jr <sup>1</sup>, G Leisman

Affiliations + expand

PMID: 10069623 DOI: [10.3109/00207459808986471](https://doi.org/10.3109/00207459808986471)

## Abstract

The pilot study attempted to determine whether subjective muscle testing employed by Applied Kinesiology practitioners, prospectively determine those individuals with specific hyperallergenic responses. Seventeen subjects were found positive on Applied Kinesiology (A.K.) muscle testing screening procedures indicating food hypersensitivity (allergy) reactions. Each subject showed muscle weakening (inhibition) reactions to oral provocative testing of one or two foods for a total of 21 positive food reactions. Tests for a hypersensitivity reaction of the serum were performed using both a radio-allergosorbent test (RAST) and immune complex test for IgE and IgG against all 21 of the foods that tested positive with A.K. muscle screening procedures. These serum tests confirmed 19 of the 21 food allergies (90.5%) suspected based on the applied kinesiology screening procedures. This pilot study offers a basis to examine further a means by which to predict the clinical utility of a given substance for a given patient, based on the patterns of neuromuscular response elicited from the patient, representing a conceptual expansion of the standard neurological examination process.



Review > Immunol Allergy Clin North Am. 2018 Feb;38(1):153-163.

doi: 10.1016/j.iac.2017.09.011.

# Unproven Diagnostic Tests for Food Allergy

Catherine Hammond <sup>1</sup>, Jay A Lieberman <sup>2</sup>

Affiliations + expand

PMID: 29132671 DOI: [10.1016/j.iac.2017.09.011](https://doi.org/10.1016/j.iac.2017.09.011)

## Abstract

The gold standard for diagnosis of immunoglobulin E (IgE)-mediated food allergy remains the oral food challenge, with serum IgE testing and skin prick testing serving as acceptable alternatives. However, the increase in prevalence of food allergy (both physician diagnosed and patient suspected) has led patients to pursue a variety of other alternative diagnostic procedures for suspected food allergy, which are reviewed in this article. These procedures (IgG testing, electrodermal testing, cytotoxic testing, provocation/neutralization, and applied kinesiology) have largely been unproven and may lead to unnecessary elimination diets.



He started drinking 2-3 beers every day during the pandemic and continued after developing LH, because he muscle tested the beer and “most of the time it would say neutral.”



Environmental Exposures: “toxic” **dust at work.**

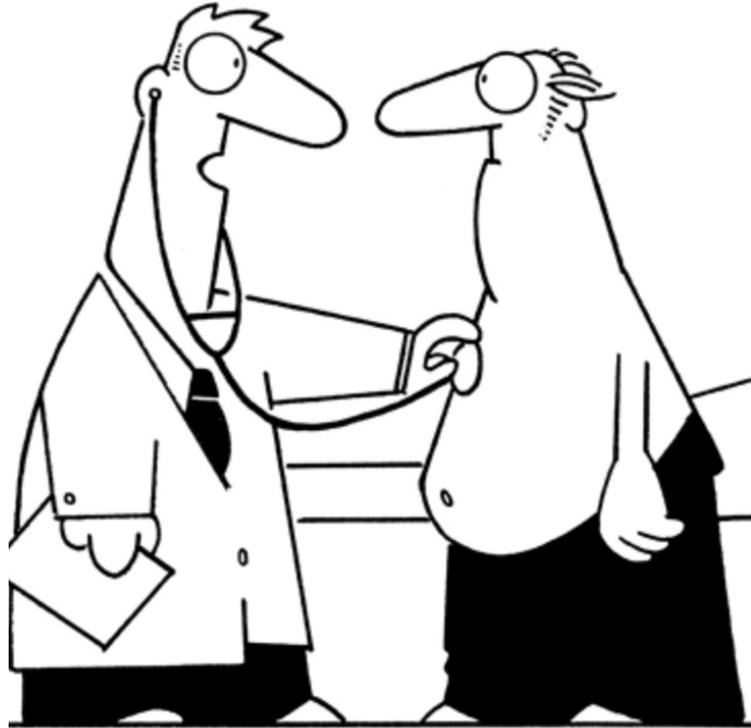


Oct '22: second bout of confirmed COVID-19, 2 days of severe body aches/fatigue and nausea, no cough.

Nov '22 1 month post COVID: Severe fatigue, severe exacerbation of depression, intermittent mod brain fog, mod headaches, mod back/neck pain, poor sleep w nocturnal palpitations, mild tinnitus.

All six significantly **worsened by stress** and improved when carefree, **tinnitus worsened by sugar**.

O/E: VSS, H: 5'7",  
Wt: 150lb, BMI:  
23.5 (normal)



**“Are you under a lot of stress lately,  
or have you always had six  
separate heartbeats?”**

# Not His First Rodeo

Labs & Radiology were recommended: patient declined



# First Rodeo: Testing was Normal



- During his first bout of Long COVID he did have testing done by PCP, that showed normal:
- CBC w diff, CMP, Lipid panel, TSH, ESR, t-TGA IgG, serum testosterone (416 ng/dl), free testosterone (11.9 pg/ml), urinalysis, HIV Ag/Ab, Lyme IgG/IgM Ab, CK (149 U/L), Mono Qual w/rflx Qn, Hep B surf Ab Qual, HCV Ab, HBsAg, Hep Be Ag, Hep B Core Ab, IgM, T. pallidum ab, stool O&P.
- Only + finding then was: Hep A Ab

# A Rare Breed

Was not interested in trying medications again and instead decided to join a comprehensive 8 week Long COVID lifestyle group coaching program because:

**“I’m really holistic-minded, into looking at the whole picture of the person, because it’s all connected” and “some of the techniques involved in the course excited me”.**



# Course Details

During the course he had access to written and video lessons, email access to the health coach, a **weekly 1 hour small group Q&A/group support/sharing session with the health coach**, personalized supplement recommendations and lab order/review/recs (declined).



# Lifestyle Course: More Topics Than Baskin Robbins Has Flavors

[Believe healing will happen](#)

Focus on [spiritual meaning](#)

Be [intentional](#)

Strengthen [purpose](#) (why do you want to get better?)

Avoid [negativity](#)

Practice [positive visualization](#) + [gratitude](#)

[Decrease anger](#) (esp manifest)

Shift focus from suffering to helping others

Improve [interpersonal relationships](#)

Increase [social connection](#)

Track symptoms

Avoid symptom aggravators

[Optimize sleep](#) hygiene

Get regular [sun exposure](#)

Do Zone 2 exercise as tolerated e.g. regular [walking](#),

[Soleus pushup](#) while seated

Optimize [digestion](#)

Eat an [anti-inflammatory low carb](#), whole foods diet avoiding vegetable oils and increasing [omega 3](#) intake

Considering a [low histamine diet](#) and/or [AIP](#)

Avoid toxins like [sugar](#), alcohol/drugs, pesticides, minimize chemical exposures in environment

Optimizing [oral/dental health](#)

pesticides like chlordane, and other toxins

[Intermittent fasting](#)

Daily [stress reduction](#)

[Track HRV](#) (as a marker of ANS function)

Regular [breathwork](#)

Practice [meditation](#) & meditative movement

Whole body cold and [heat](#) therapies

Grounding

Focused [supplementation of vitamins/herbs](#)

Consider OTC drug trials (esp [antihistamines](#), [aspirin](#))

Optimization via targeted lab work (esp [Vit D](#))

## Weird American Expression #5

"Let's just throw it at the wall  
and see what sticks."

Trigger warning: this is tiny on purpose.  
Zoom in at your own risk

# Interventions

The patient reported that **“the course was motivational because you want to tell the group you actually tried things.”**

After 1 week: started some of the recommended **supplements: [Turmeric](#), [Quercetin](#), [Bromelain](#), [NAC](#), [Zinc](#), [Mg](#) 300 mg, [D3](#) 4000 IU.**



Also stopped alcohol most days because after **“conversing with [the health coach], I thought this is the most important thing in the world to heal from this and I’m willing to do whatever it takes.”**

# Changed Diet, Started Grounding

After 3 weeks: cut sugar, processed foods, because “why not try it, just takes a bit of self discipline.”

After 1 month: started nighttime grounding because **“I had heard of it [before, and] knew that I felt good when I went camping or walked around barefoot, [so] when it was suggested in the course and it became a bit more concrete in my brain and I researched it a bit, I realized there was actually science behind it in addition to my own intuition.”**



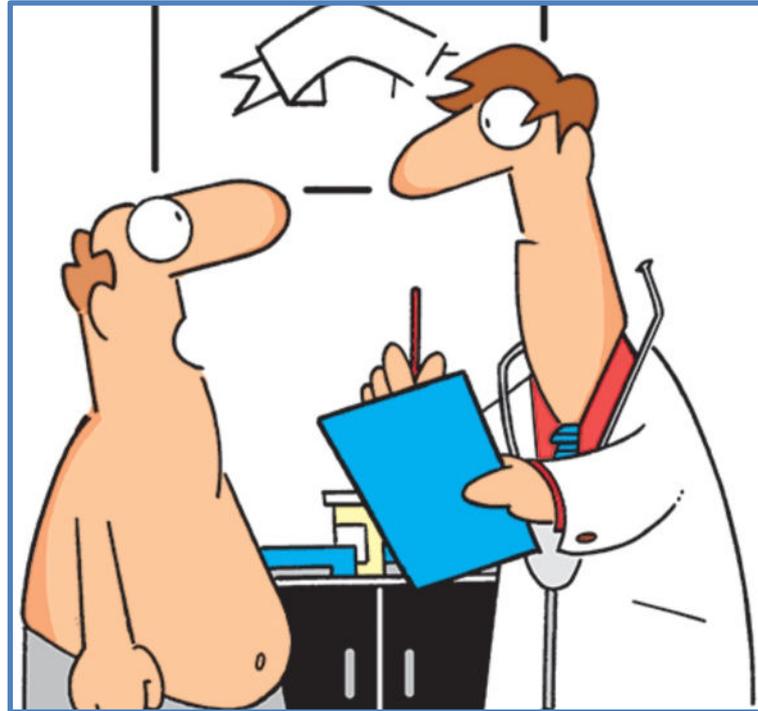
# Cold Plunge, Fasting, Quit Alcohol

**After 2 months:** started daily cold plunges in a nearby ice-cold river because “**the idea of cold plunging excited me**”, and daily 16-23 hr IF, because “I had been intrigued by fasting throughout most of my life [so] I thought that would be a great way to treat myself.”

**After 3-4 months** completely quit alcohol, because the health coach had “**reinforced it for me [and] it fully gelled for me.**”



# Fasting: When You Just Can't Figure Out What to Eat



**“Everyone knows food is bad for you,  
but I don’t know what else to eat!”**

# Results

The patient recalled there was “not too much of an effect” after starting supplements, or post dietary changes.

At 1 mth: **nighttime grounding gave him the “best sleep of my life” and improved all symptoms: “I was absolutely blown away by how much better I felt.”**

His sleep quality went from 3-7/10 to 10/10 immediately and fatigue went from 10/10 to 5/10 within 1 week.

2 mths: after starting cryo/IF within 1 week energy went from 3-7/10, to 7-9/10.

Joy/happiness went from 3/10 to 7/10 in a week.

Anger went from 6/10 to 2/10 within days.



At 4 months is better than before this LH exacerbation, fatigue is nearly gone now - still has some PEM after hard exercise, but is generally very active daily with work.

Symptoms are still exacerbated by stress.

Continues grounding, but has stopped cold immersion and IF (weight down 10lb) and is gradually increasing back to his previous exercise levels.



# Pathophysiology

Circulating spike protein

Tissue damage

Hypoxia

Inflammation in part via monocyte/microglia activation,

**Elevated levels of cytokines:** IL-1b, IL-6, IFN-g, TNF-a, IFNβ, pentraxin 3, IFNγ, IFNλ2/3, which are implicated in: cardiac remodeling, cardiac dysrhythmias, neuroinflammation, neurodegeneration, renal injury, insulin resistance, bone resorption and hair loss.

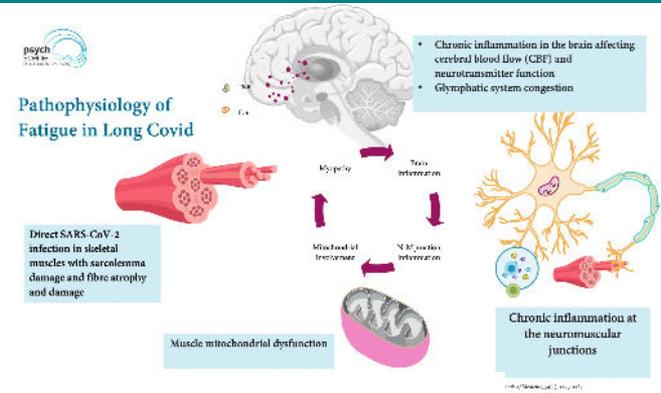
Insulin resistance is found in at least 35%, with **higher fasting insulin & C-peptide levels**  
Thyroid abnormalities including subacute thyrotoxicosis, Hashimoto's thyroiditis and Graves' disease

Vasculopathy, hyperactivated platelets

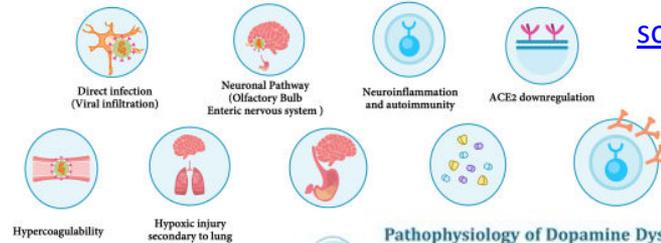
Blood brain barrier disruption & neuroinflammation (ref)

Dec nitrite levels indicating dec eNO synthase (not just LH, but all post COVID pts at 4 months)

Microclotting / Amyloidosis



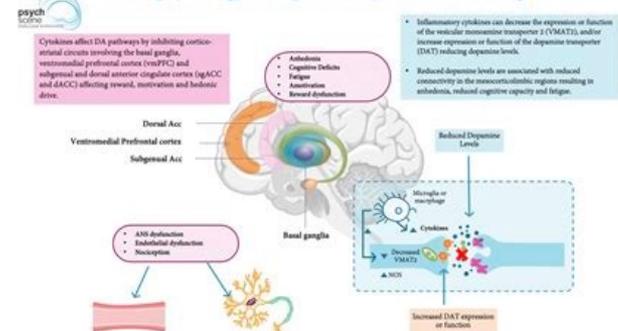
## Pathophysiology of Brain Involvement in Long COVID



source: [psychscenehub](https://psychscenehub.com)

Wu, Y., Xu, X., Chen, Z., Duan, J., Hayashi, K., Yang, L., ... & Yang, C. (2020). Neurological complications in coronavirus disease 2019 (COVID-19): A case series. *Journal of the Neurological Sciences*, 433, 117963. <https://doi.org/10.1016/j.jns.2020.117963>

## Pathophysiology of Dopamine Dysfunction in Long Covid



Miller, A. G., & Bauman, S. J. (2017). The role of inflammation in depression: from evolutionary perspective to modern treatment target. *Neuroscience & Biobehavioral Reviews*, 81, 321-336. <https://doi.org/10.1016/j.neubi.2017.07.002>

Reger, J. C., & Miller, A. G. (2015). Cytokine effects on the basal ganglia and dopamine function: the evolutionary source of inflammatory illness. *Frontiers in Neuroimmunology*, 6(2), 101-110. <https://doi.org/10.3389/fnimm.2015.00101>

# Pathophysiology

[Autoimmunity](#) (though chemokine antibodies to [CXCL13](#) and [CXCL16](#) are associated with decreased likelihood of LH)

[Autonomic dysfunction](#) esp. [vagus nerve](#) signaling

[Hormonal abnormalities](#) (esp low cortisol)

[Immune exhaustion](#) → [viral reactivation](#) syndromes (eg EBV)

[MCAS](#)

[Insulin Resistance \(Ref\)](#)

[Dyslipidemia](#)

[Mitochondrial dysfunction including a shift from using fatty acids/glucose to amino acids.](#)

[Activation of oncogenes](#) / inhibition of tumor suppressor genes

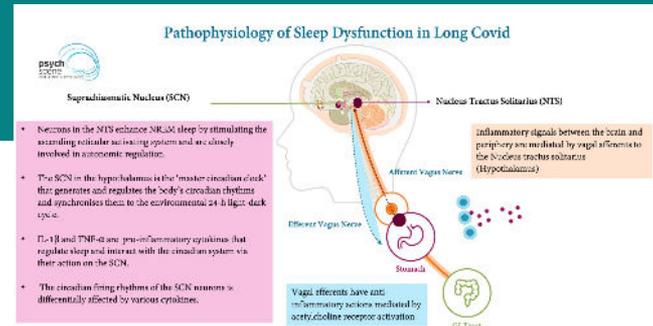
[Microbiome damage](#) (esp decreased bifidobacteria & akkermansia, but also derangements of fungi, viruses and archaea involved in immune regulation)

SARS-Cov-2 [viral persistence](#)?

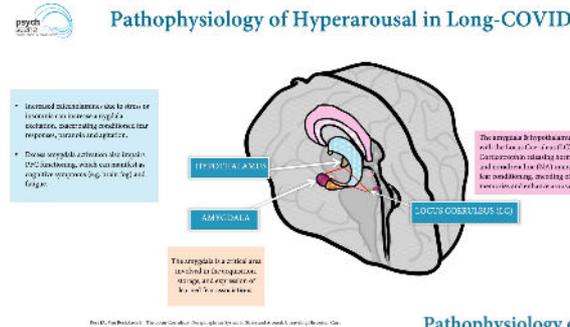
[Bacteriophage activity](#) of SARS-Cov-2?

[Persistent hyperviscosity](#)?

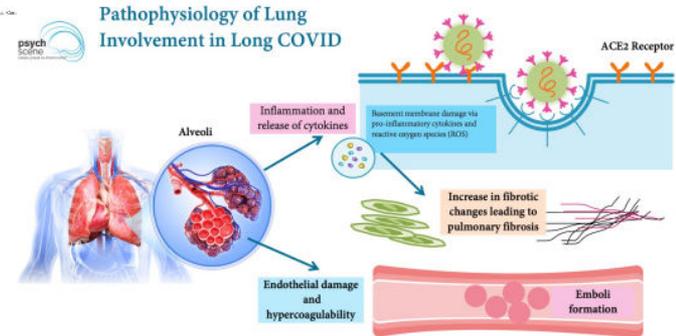
source: [psychscenehub](#)



Zhou H, Xu B, & Qian A. J. (2021). Neurochemical, Loop and Circuitry Mechanisms of Chronic Changes in Sleep Architecture.



Reid, P. (2021). The connection between COVID-19 and the autonomic nervous system.



# Long COVID Risk Factors

[Greater acute disease severity](#) / [SARS-CoV-2](#)

[RNAemia](#)

[Type 2 DM,](#)

[Epstein-Barr virus viremia](#) during acute infection

[Specific auto-Abs](#) (to: IFN- $\alpha$ 2, Ro/SS-A, La/SS-B, U1-snRNP, Jo-1, and P1: these were [likely preexisting](#)

prior to COVID infection, but in the vast majority

subclinical since EMR data showed only [6% of](#)

[autoAb-positive](#) patients had documented autoimmune conditions before COVID-19),

[female sex,](#)

[respiratory symptoms](#) during acute infection,

Preexisting [Autoimmune disease,](#)

**[Age < 50](#) in one study**

and in [another study a U shaped association with](#)

[highest risk among those ages 45-54 and 55-69, but](#)

[linearly increasing risk of 0.12% per decade between](#)

[18-70](#)

and [yet another study age > 50,](#)

Weird American Expression #5

"Let's just throw it at the wall  
and see what sticks."



# Risk Factors: continued

Number of preexisting comorbidities was positively correlated, among which the following individual ones were also each significantly correlated:  
hypertension (OR 1.3, P=0.018),  
obesity (OR 2.31, P=0.002),  
immunosuppression (OR 2.33, P=0.047),  
and psychiatric conditions (OR 2.32, P=0.007),  
Overweight,  
poor overall health,  
pre pandemic dx of asthma (OR 1.56; 95% CI 1.46-1.67),  
**Multiple prior COVID-19 infections,**  
Vitamin D deficiency and  
a genetic predisposition (the polygenic risk score (PRS) trait 'Tiredness/lethargy in past two weeks' contained risk allele distributions that were significantly different in Long COVID cases vs controls).

## Weird American Expression #5

"Let's just throw it at the wall and see what sticks."

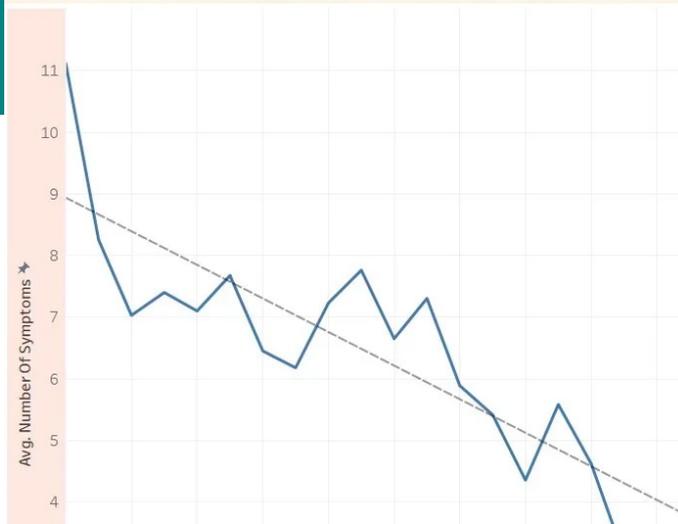
# FASTING (this conference)

• 2:00 – 5:00 pm: Afternoon Block

- LECTURE: Cardiac effects of spike protein: Dr. Aseem Malhotra
- PANEL: Photobiomodulation, Methylene Blue, and Intermittent Fasting: (30-minute presentations followed by discussions) with Dr. Paul Marik and Dr. Mobeen Syed



Recovery from Long Covid via the Autophagy Protocol



## Manipulation of autophagy by SARS-CoV-2 proteins

Lennart Koepke , Maximilian Hirschenberger , Manuel Hayn , Frank Kirchhoff  & Konstantin M. Sparrer 

### Effect of Periodic Autophagy on Adults with Symptomatic Long COVID Observational Study

Thomas Bunker<sup>1\*</sup>, Robert Carlson<sup>2</sup>, Jenny Olson<sup>3</sup>

...no proven treatment. The periodic induction of putative cellular autophagy via a variety of methods is shown to be a promising novel treatment. About half of the 'high compliance' group saw a 50% or greater reduction in the number of their Long COVID symptoms. Of course, follow-up is urgently needed including confirmation of safety and efficacy via rigorous



# Deliberate Cold Exposure



Why? Short acute stressors may strengthen us.

# Cold Exposure Therapy

Purposely exposing most of the body (often excluding the head) to cold temperature for a period of time has been used therapeutically by multiple cultures [for centuries](#). This can be accomplished nowadays by **cold showers, cold water immersion, or in dedicated cryotherapy chambers** that use cold air, though [water is more effective](#), since the poor thermal conductivity of air (1/20th that of water) [limits](#) cutaneous and core cooling.

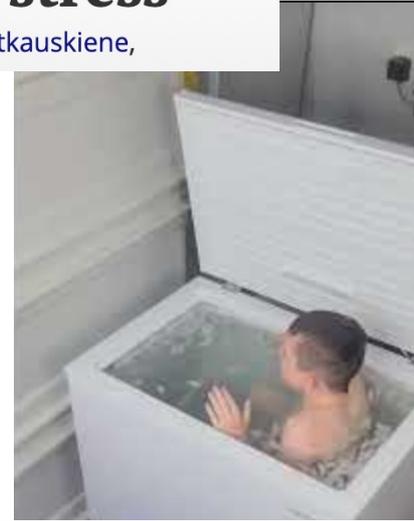


Beneficial effects have been seen at water temperatures ranging from 32F - 60F. Higher temps may require longer exposures for the same degree of benefit. **Adverse effects are [usually minimal](#), short lived and wane quickly.**

# Residual effects of short-term whole-body cold-water immersion on the cytokine profile, white blood cell count, and blood markers of stress

Milda Eimonte, Henrikas Paulauskas , Laura Daniuseviciute, Nerijus Eimantas, Astra Vitkauskiene,

Whole-body CWI produces an [acute stress reaction](#), evidenced by increased HR, hyperventilation, shivering, raised metabolism, and the marked release of stress hormones Epi, NE, and cortisol (for 12 hrs post exposure), though in [other study protocols](#) at lower temperatures for longer periods cortisol was [decreased](#).



# Whole-body cryotherapy as adjunct treatment of depressive and anxiety disorders

[Joanna Rymaszewska](#), [David Ramsey](#), and [Sylwia Chłodzińska-Kiejna](#)

Cold therapy [decreases fatigue](#) (shown in CFS), [improves](#) general well being, induces [post exposure relaxation](#), and [immediately improves mood](#). Cold exposure therapy [increases](#) positive affect & reduces negative affect and [decreases](#) anxiety and [depression](#).

All of which may have been particularly relevant in this patient with a long history of mood disorders that were significantly exacerbated by Long COVID.



How to Easily Build a COLD PLUNGE for ~\$200 Bucks

Cold exposure [increases](#) activity of eNO synthase, which [may counter](#) platelet endothelial dysfunction and thrombosis seen in acute [COVID](#) and [Long Haul](#).

## Whole-Body Cryotherapy Increases the Activity of Nitric Oxide Synthase in Older Men

[Magdalena Wiecek](#),<sup>1,\*</sup> [Zbigniew Szygula](#),<sup>2</sup> [Joanna Gradek](#),<sup>3</sup> [Justyna Kusmierczyk](#),<sup>1</sup> and [Jadwiga Szymura](#)<sup>4,\*</sup>

[Microbes Infect.](#) 2020 May-June; 22(4): 149–150.

PMCID: PMC7229726

Published online 2020 May 16. doi: [10.1016/j.micinf.2020.05.006](https://doi.org/10.1016/j.micinf.2020.05.006)

PMID: [32425647](https://pubmed.ncbi.nlm.nih.gov/32425647/)

## Covid-19 accelerates endothelial dysfunction and nitric oxide deficiency

[Shawn J. Green](#)

[Free Radic Biol Med.](#) 2021 Nov 1; 175: 216–225.

PMCID: PMC8404395

Published online 2021 Aug 30. doi: [10.1016/j.freeradbiomed.2021.08.237](https://doi.org/10.1016/j.freeradbiomed.2021.08.237)

PMID: [34474106](https://pubmed.ncbi.nlm.nih.gov/34474106/)

## Serum nitrite and nitrate: A potential biomarker for post-covid-19 complications?

[Jun Wang](#),<sup>a,b,1</sup> [Fanghua Mei](#),<sup>c,1</sup> [Lu Bai](#),<sup>a,b</sup> [Suhua Zhou](#),<sup>c</sup> [Di Liu](#),<sup>a,b</sup> [Lulu Yao](#),<sup>a,b</sup> [Amrita Ahluwalia](#),<sup>d</sup> [Reza A. Ghiladi](#),<sup>e</sup> [Lei Su](#),<sup>f</sup> [Tong Shu](#),<sup>f</sup> [Miaozhi Gong](#),<sup>g</sup> [Xiaofang Wang](#),<sup>h</sup> [Lijun Zhu](#),<sup>i</sup> [Kun Cai](#),<sup>c,\*</sup> and [Xueji Zhang](#)<sup>f,\*\*</sup>

Cold exposure also stimulates autophagy which might help **clear spike protein**, and increases mitochondrial energy production in muscle and fat cells which may be beneficial especially for **fatigue** since poor mitochondrial function has also been implicated in LH pathology.

## Effect of acute cold exposure on cardiac mitochondrial function: role of sirtuins

Mithra S Mohan <sup>1</sup>, S S Aswani <sup>1</sup>, N S Aparna <sup>1</sup>, P T Boban <sup>2</sup>, P R Sudhakaran <sup>3</sup>, K Saja <sup>4</sup>

Affiliations + expand

PMID: 36781815 DOI: [10.1007/s11010-022-04656-1](https://doi.org/10.1007/s11010-022-04656-1)

### Abstract

Cardiac function depends mainly on mitochondrial metabolism. Cold conditions increase the risk of cardiovascular diseases by increasing blood pressure. Adaptive thermogenesis leads to increased mitochondrial biogenesis and function in skeletal muscles and adipocytes. Here, we studied the



# Uric acid and glutathione levels during short-term whole body cold exposure

W G Siems <sup>1</sup>, F J van Kuijk, R Maass, R Brenke



[Winter swimming](#) lowers uric acid and **increases the antioxidant**

**glutathione, which [may be beneficial](#) to reduce oxidative stress in LH.**

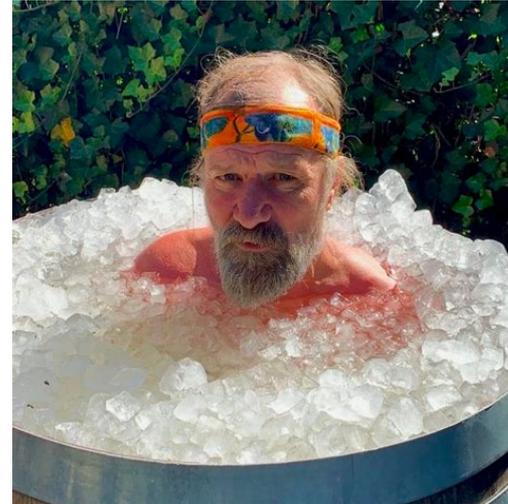
## Glutathione Supplementation as an Adjunctive Therapy in COVID-19

Vika Guloyan <sup>1</sup>, Buzand Oganessian <sup>1</sup>, Nicole Baghdasaryan <sup>1</sup>, Christopher Yeh <sup>1</sup>,  
Manpreet Singh <sup>2</sup>, Frederick Guilford <sup>3</sup>, Yu-Sam Ting <sup>1</sup>, Vishwanath Venketaraman <sup>1</sup>

# Whole-Body Cryostimulation as an Effective Method of Reducing Oxidative Stress in Healthy Men

Agata Stanek <sup>1</sup>, Karolina Sieroń-Stożny <sup>2</sup>, Ewa Romuk <sup>3</sup>, Armand Cholewka <sup>4</sup>,  
Tomasz Wielkoszyński <sup>3</sup>, Grzegorz Cieślar <sup>1</sup>, Sebastian Kwiatek <sup>1</sup>, Aleksander Sieroń <sup>1</sup>,  
Aleksandra Kawczyk-Krupka <sup>1</sup>

Cold exposure **decreases oxidative stress and inflammation (dec IL-8, IL-6, IL-17 TNF alpha)**, increases total antioxidant status in MS, and in healthy volunteers and improves autoimmunity (eg dec inflammatory cytokines, oxidative stress and disease activity in Ankylosing Spondylitis).



Meet Wim Hoff, “The Iceman”

## Autonomic nervous function during whole-body cold exposure before and after cold acclimation

**Discussion:** Cold exposure increased sympathetic activity, which was blunted after cold acclimation. Parasympathetic activity showed a minor increase in cold, which was enhanced after cold acclimation. In conclusion, cold habituation lowers sympathetic activation and causes a shift toward increased parasympathetic activity.

WHEN YOU FIRST JUMP INTO COLD WATER...



← No, I don't know what this is

Cold exposure may address ANS dysfunction in LH - as it leads to a beneficial shift toward [PNS activation](#) (above).

Cold may have contributed to [improved ANS function in CFS](#) below (confounded by the addition of stretching).

Combination of whole body cryotherapy with static stretching exercises reduces fatigue and improves functioning of the autonomic nervous system in Chronic Fatigue Syndrome

# Human physiological responses to immersion into water of different temperatures

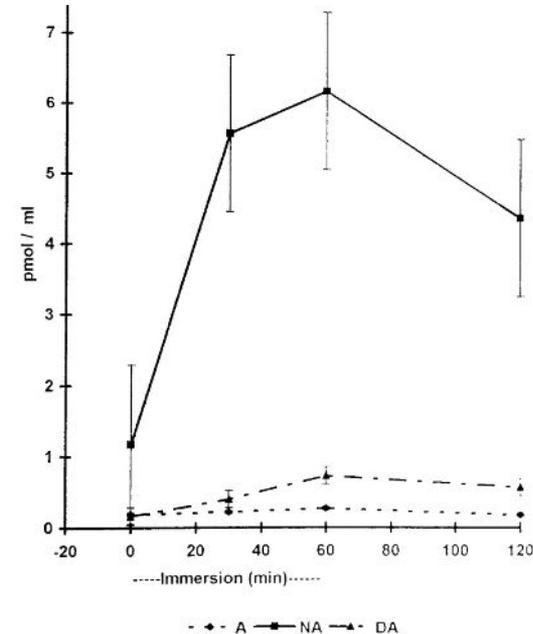
P Srámek<sup>1</sup>, M Simecková, L Janský, J Savlíková, S Vybíral

**Catecholamines** like NE are diminished at baseline and during exercise in those with Chronic Fatigue Syndrome, which has many similarities to LH.

So it's interesting that [immersion in 14°C](#) (57F) water for 1 hour **increased norepinephrine by 530%**. This may have some [antiinflammatory effects](#) such as [decreasing TNF \$\alpha\$](#) , and chemokine [MIP-1 \$\alpha\$](#)  (implicated in RA), as well as **possibly improving focus**.

**Dopamine was increased by 250%** which may improve **motivation, mood and focus**. Metabolic rate also went up by 350%.

**These changes persisted** throughout the 2 hours of follow up.

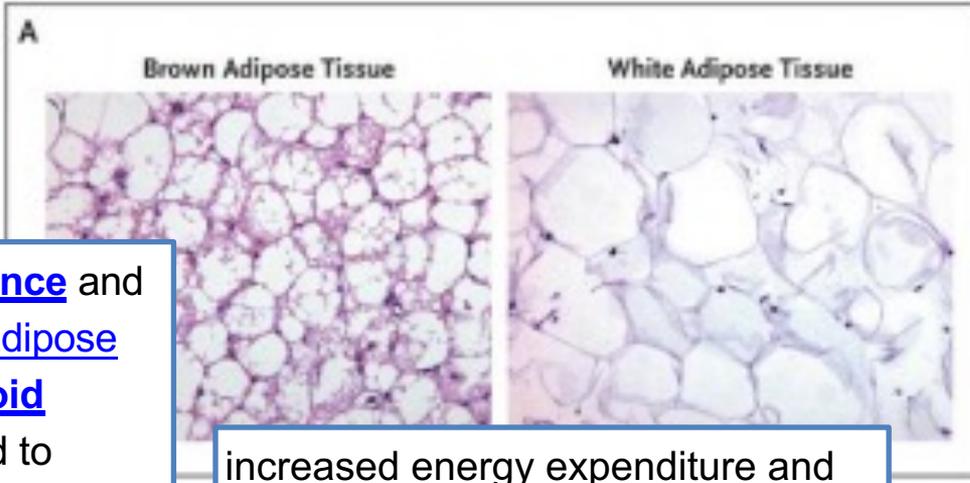


**Fig. 5** Changes in plasma catecholamine concentrations during and after immersion into cold water (14°C). [A] Adrenaline (●) [NA] noradrenaline (■) [DA] dopamine concentrations (▲)

## Increased insulin resistance due to Long COVID is associated with depressive symptoms and partly predicted by the inflammatory response during acute infection

Hussein Kadhem Al-Hakeim, Hal Shatha Rouf Moustafa, Michael M

doi: <https://doi.org/10.1101/202>



Cold decreases insulin resistance and activates and increases brown adipose tissue, which upregulates thyroid hormone, lowers BCAAs (linked to obesity, insulin resistance and DM), stimulates metabolism, improves insulin sensitivity. BAT activity is also an independent predictor of bone density, and increases the secretion of FGF21 (fibroblast growth factor 21), which itself leads to decreased blood sugar,

increased energy expenditure and weight loss via lipolysis, decreased hepatic triglycerides, **correction of dyslipidemia**, and amelioration of NASH. Cold exposure increases irisin which may also increase bone density and help reverse obesity and DM.

Cold therapy activates cold shock proteins:  
e.g. [CARHSP1 which binds to and stabilizes TNF](#) (Strike 1: not exactly what we want).

Cold [suppresses](#) neuronal apoptosis and **neuro-inflammation** - RBM3 (RNA binding motif protein 3), is a cold shock protein expressed in the brain that negatively regulates the progression of neurodegeneration.

Cold [increases adiponectin](#) levels, which is positively associated with [insulin sensitivity](#), [healthy weight](#), **lower inflammation (CRP)** and has been [linked to longevity](#).



Cold exposure also:

Decreases markers of atherosclerotic plaque

Decreases abd obesity

Decreases chronic pain e.g. in Fibromyalgia

Finally cold therapy **increases perceived health satisfaction**, which may itself have a positive placebo effect (see below).



Satisfied



## Lukewarm Water:

Interestingly compared to a control group at ambient air temperature, immersion in thermo-neutral water of 32C (89.6F) lowered the following: HR 15%, SBP 11%, DBP 12%, plasma renin activity 46%, plasma cortisol 34%, and aldosterone 17%.



You are **GROUND**ED  
for...  
**ETERNITY!**

again?



Do not ground this kid



Straighten up  
young man or we  
will send you out  
of your room.

# The Earth is an Antioxidant

Grounding affects the human body's bio-electrical field: upon grounding the electrical potential of the surface of the human body and in the venous blood rapidly drops from 0 mV to approximately -200 mV. When the body is disconnected from ground, the potential reverts.

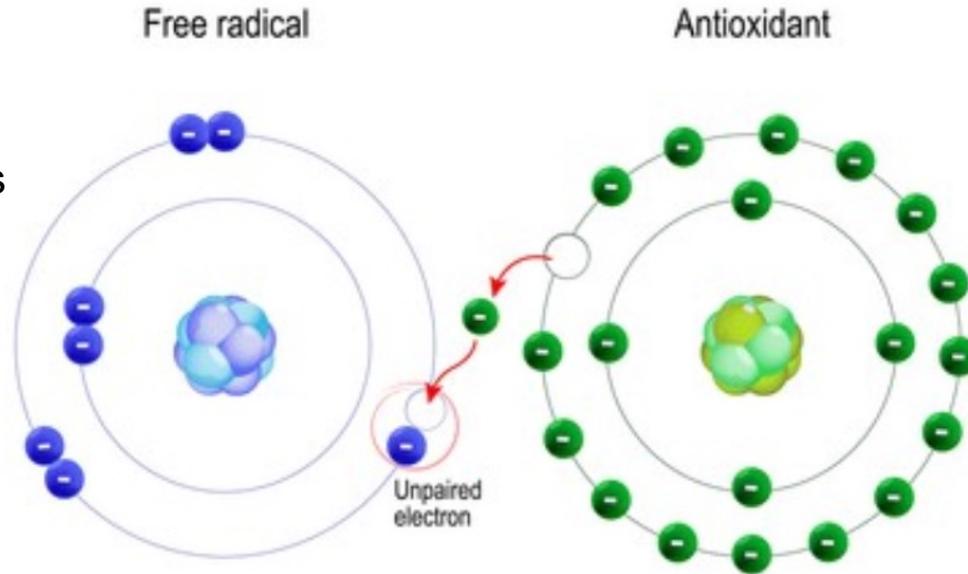
The grounding hypothesis holds that connecting the body to ground enables free electrons from the Earth's surface (electron donor) to spread over and into the body via acupuncture meridian pathways that have been shown to have low electrical resistance and even connect to specific organs, and via mucous membranes continuous with the skin.



Grounding works best when it's wet

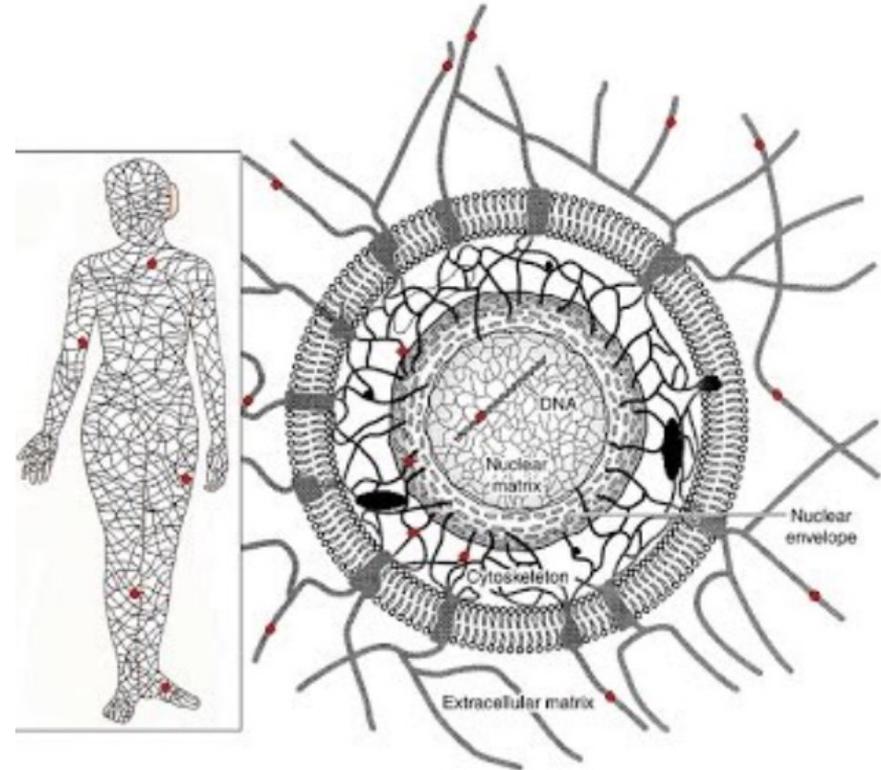
# What Is An Antioxidant Anyway?

Free radicals lack a full complement of electrons and damage tissues by taking electrons from them.

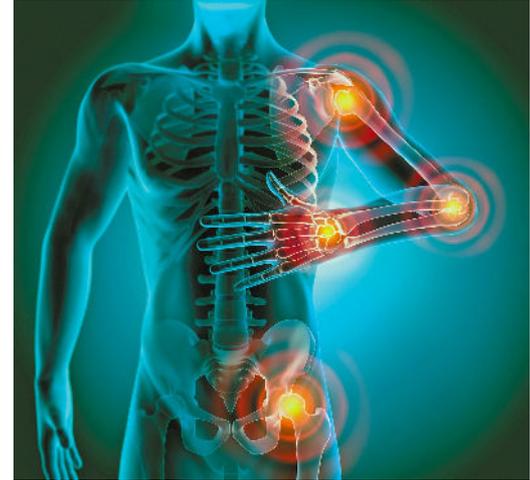


An antioxidant is any electron donor that can neutralize free radicals.

Once inside the body the free electrons are postulated to **recharge a body wide electrical reservoir formed by the extracellular matrix** and also to **travel via the semiconductive** (Rosenberg and Postow, 1969; Gutmann and Lyons, 1981; Gutmann et al., 1983) **piezoelectric extracellular connective tissue matrix specifically to areas of free radical (electron acceptor) formation because of the gradient in charge density created as electrons in the area are depleted by neutralizing those free radicals.**



The electrons, therefore, exert **antioxidant effects to prevent and resolve acute and chronic inflammation and importantly can easily bypass the “inflammatory barricade” which normally hinders the movement of antioxidants into injured areas** leading to incomplete tissue healing.



Wearing insulated shoes (rather than leather soled) and only walking barefoot inside high rise buildings or single story homes with floors that may be built atop insulated foundations means the natural charge accumulation that occurred in humans throughout most of evolutionary history may rarely occur for many in the modern world.

OK



Not OK



Further, as **hypothesized** by [James Oschman PhD](#): “providing **free or mobile electrons** to tissues **saturates the electron transport chains in mitochondria**, thereby **increasing** the availability of **ATP** that energizes the activities of immune cells and other cells involved in tissue repair ...

[**and perhaps**] electrical continuity between the human body and the surface of the earth allows geophysical electrical rhythms to cause rhythmic changes in the electrostatic tone of the matrix, which can **set the organism’s biological clocks.**”

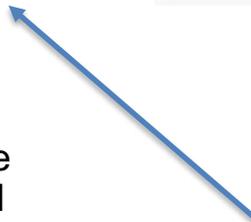


James Oschman lecturing next to a tensegrity model

Oschman also writes: “Because of the high density of negative charges on glycosaminoglycans (provided by sulfate and carboxylate groups of the uronic acid residues) the matrix is a vast whole-body redox system capable of absorbing and donating electrons at any point (Levine and Kidd, 1985). This electron transfer function extends to the interiors of cells as the cytoplasmic matrix is also strongly negatively charged (Ling, 1962). In other words, the entire extracellular and cellular matrix is a biophysical storage system or accumulator for electrical charge.



One of the causes of the physiological shifts that take place when barefoot contact with the earth is established could therefore be a normalization of electrical homeostasis in the proteoglycan network in the living matrix and its extensions into cells and nuclei.



don't worry I will not read all this



# Biotensegrity

“On the basis of thermodynamic, energetic and geometrical considerations, it has been concluded that the molecules of the ground substance form minimal physical and minimal electrical surfaces. **The mathematics of minimal surfaces reveals that tiny changes in one area can cause large changes in distant areas of the ground substance** (Karcher and Polthier, 1990). These concepts have implications for virtually all physiological and biochemical processes, membrane transport, antigen–antibody interactions, protein synthesis, oxidation reactions, actin–myosin interactions, sol to gel transformations in polysaccharides, and so on (Andersson et al., 1988). **Subtle interactions with a living system, as minimal as the introduction of a single photon, can produce a cascade of changes that shift the physiological state of the entire organism.** Such profound changes have been observed in many forms of complementary and alternative medicine, but have been difficult to comprehend on the basis of classical Newtonian physics, chemical laws of mass action, and Avogadro’s or Loschmidt’s number (discussed in detail by Heine (1997).”



are you a speed reader?

## Grounding the Body Improves Sleep Quality in Patients with Mild Alzheimer's Disease: A Pilot Study

Chien-Hung Lin<sup>1</sup>, Shih-Ting Tseng<sup>1</sup>, Yao-Chung Chuang<sup>2</sup>, Chun-En Kuo<sup>1,3,4</sup>,



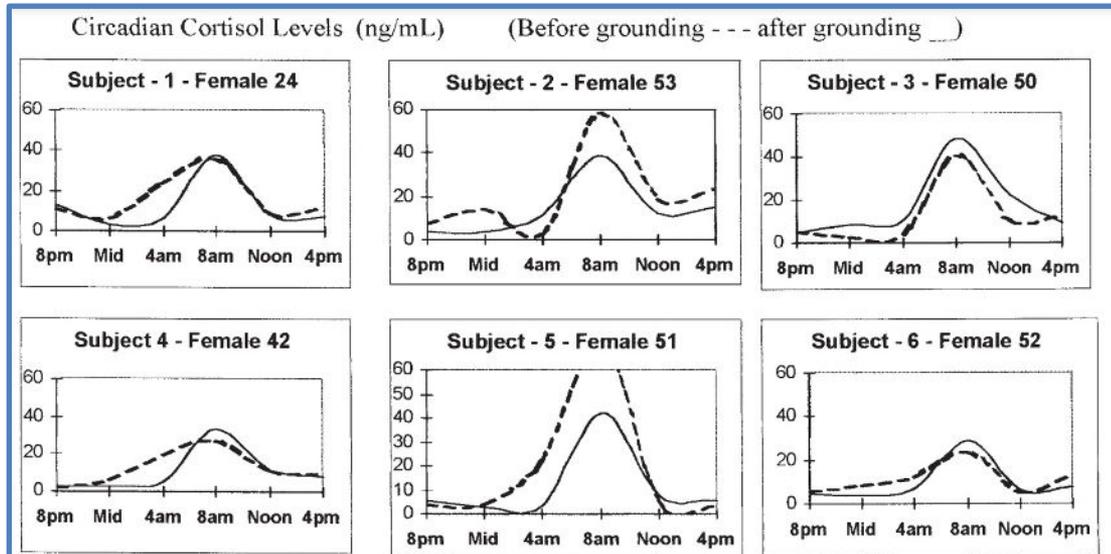
Grounding was shown to improve [sleep quality](#) in 22 subjects with mild AD in a prospective, randomized, double blind study.

# Research

The biologic effects of grounding the human body during sleep as measured by cortisol levels and subjective reporting of sleep, pain, and stress

Maurice Ghaly, Dale Teplitz

[Another 8 week study](#) of 12 subjects with complaints of disordered sleep and pain showed “measurable improvements in diurnal cortisol profiles, with cortisol levels significantly reduced during night-time sleep. Subjects' 24-hour **circadian cortisol profiles showed a trend toward normalization**. Subjectively reported symptoms, including **sleep dysfunction, pain, and stress, were reduced or eliminated in nearly all subjects.**”



# Grounding effects

Reduced blood viscosity was shown in a **double blind placebo controlled** trial of 28 subjects.

Reduced blood viscosity and increased zeta potential was demonstrated in 10 subjects.

Grounding the Human Body during Yoga Exercise with a Grounded Yoga Mat Reduces Blood Viscosity

January 2015 · Open Journal of Preventive Medicine 05(04):159-168

DOI:[10.4236/ojpm.2015.54019](https://doi.org/10.4236/ojpm.2015.54019)

Earthing (Grounding) the Human Body Reduces Blood Viscosity—a Major Factor in Cardiovascular Disease

Gaétan Chevalier, PhD,<sup>1</sup> Stephen T. Sinatra, MD, FACC, FACN,<sup>2</sup> James L. Oschman, PhD,<sup>3</sup> and Richard M. Delany, MD, FACC<sup>4</sup>

# Emotional Stress, Heart Rate Variability, Grounding, and Improved Autonomic Tone: Clinical Applications

Gaétan Chevalier, S. Sinatra • Published 2011 • Medicine

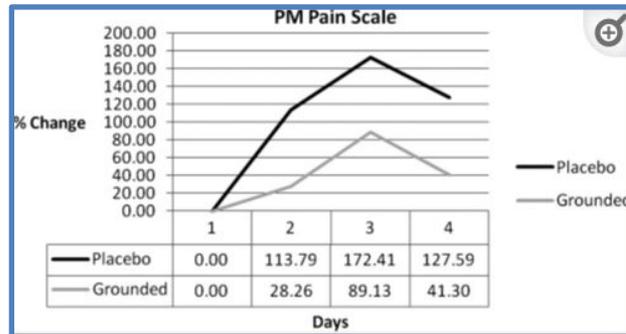
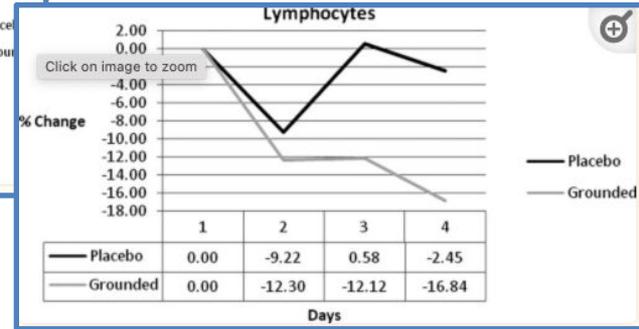
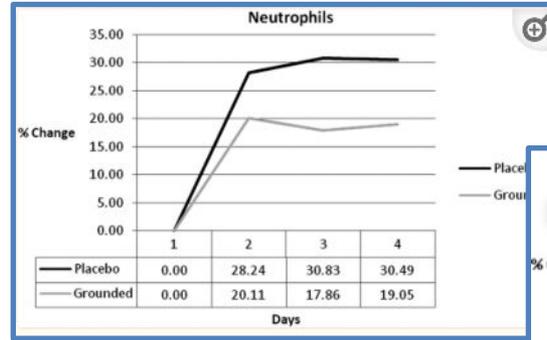
Grounding appears to reduce pain, reduce emotional stress, shift the autonomic nervous system from sympathetic toward parasympathetic activation, and increase heart rate variability (a sign of ANS health).



# Pilot Study on the Effect of Grounding on Delayed-Onset Muscle Soreness

Dick Brown, Ph.D.,<sup>1</sup> Gaétan Chevalier, Ph.D.,<sup>2</sup> and Michael Hill, B.S.<sup>1</sup>

In a [placebo controlled study](#) of 8 subjects with induced Delayed Onset Muscle Soreness (DOMS), pain, BP, neutrophil and lymphocyte counts were all lower in the grounded group.



Grounding was reported to initiate

healing and complete pain relief of

an 8 month old chronic ankle ulcer

in an 84 y/o diabetic woman within

2 weeks (no confounding

therapies reported).



# The Belief Effect



Most of the research on cold exposure, grounding, supplements, diet and fasting has been done on **small cohorts, much of it had suboptimal study design and almost none of it was specific to LH.**

Although plenty of anecdotal evidence does suggest a connection between [alcohol and LH symptoms](#), there has been no structured research done yet (though [alcohol intolerance](#) has been shown in [up to 80% of CFS/ME](#) patients, which is suggestive).

## A Rough Guide to SPOTTING BAD SCIENCE

Being able to evaluate the evidence behind a scientific claim is important. Being able to recognise bad science reporting, or faults in scientific studies, is equally important. These 12 points will help you separate the science from the pseudoscience.

### 1. SENSATIONALISED HEADLINES



Article headlines are commonly designed to entice viewers into clicking on and reading the article. At times, they can over-simplify the findings of scientific research. At worst, they sensationalise and misrepresent them.

### 7. UNREPRESENTATIVE SAMPLES USED



In human trials, subjects are selected that are representative of a larger population. If the sample is different from the population as a whole, then the conclusions from the trial may be biased towards a particular outcome.

### 2. MISINTERPRETED RESULTS



News articles can distort or misinterpret the findings of research for the sake of a good story, whether intentionally or otherwise. If possible, try to read the original research, rather than relying on the article based on it for information.

### 8. NO CONTROL GROUP USED



In clinical trials, results from test subjects should be compared to a 'control group' not given the substance being tested. Groups should also be allocated randomly. In general experiments, a control test should be used where all variables are controlled.

### 3. CONFLICTS OF INTEREST



Many companies will employ scientists to carry out and publish research - whilst this doesn't necessarily invalidate the research, it should be analysed with this in mind. Research can also be misrepresented for personal or financial gain.

### 9. NO BLIND TESTING USED



To try and prevent bias, subjects should not know if they are in the test or the control group. In 'double blind' testing, even researchers don't know which group subjects are in until after testing. Note, blind testing isn't always feasible, or ethical.

### 4. CORRELATION & CAUSATION



Be wary of any confusion of correlation and causation. A correlation between variables doesn't always mean one causes the other. Global warming increased since the 1800s, and pirate numbers decreased, but lack of pirates doesn't cause global warming.

### 10. SELECTIVE REPORTING OF DATA



Also known as 'cherry picking', this involves selecting data from results which supports the conclusion of the research, whilst ignoring those that do not. If a research paper draws conclusions from a selection of its results, not all, it may be guilty of this.

### 5. UNSUPPORTED CONCLUSIONS



Speculation can often help to drive science forward. However, studies should be clear on the facts their study proves, and which conclusions are as yet unsupported ones. A statement framed by speculative language may require further evidence to confirm.

### 11. UNREPLICABLE RESULTS



Results should be replicable by independent research, and tested over a wide range of conditions (where possible) to ensure they are consistent. Extraordinary claims require extraordinary evidence - that is, much more than one independent study!

### 6. PROBLEMS WITH SAMPLE SIZE



In trials, the smaller a sample size, the lower the confidence in the results from that sample. Conclusions drawn can still be valid, and in some cases small samples are unavoidable, but larger samples often give more representative results.

### 12. NON-PEER REVIEWED MATERIAL



Peer review is an important part of the scientific process. Other scientists appraise and critique studies, before publication in a journal. Research that has not gone through this process is not as reputable, and may be flawed.



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A SURGEON CUTS  
THROUGH THE EVIDENCE

So perhaps this patient simply  
experienced multiple placebo effects.

In fact most of the [history of medicine](#)  
may simply be the history of the placebo  
effect.

Physicians used it before and they use it  
now - [one survey](#) showed 77% of GPs in  
UK use placebos weekly.

[Surgery](#) in many cases may be the  
ultimate modern placebo.

# SURGERY, THE ULTIMATE PLACEBO



'The scalpel is probably the most powerful placebo known to  
modern medicine. Ian Harris provides the surgical antidote:  
facts and rational argument.' - Dr Norman Swan

IAN HARRIS

The placebo effect might be more accurately termed the belief effect because [it's been suggested that it depends on:](#)

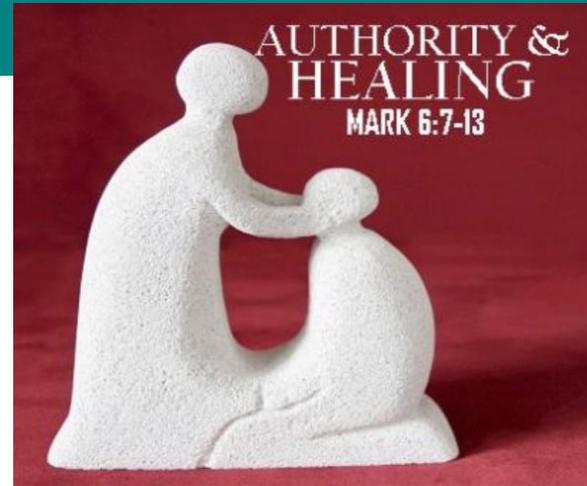
Patient belief

Provider belief

(And a good relationship between the two)

Another theory by [Steve Bierman, MD](#) posits that the placebo effect is not about belief, but really depends on the power Authority holds over the subconscious mind.

Ill patients regress back to a childlike state of trusting and obeying the dictates of the “One Least Uncertain”.



<sup>13</sup> They drove out many demons and anointed many sick people with oil and healed them.

There are some pervasive myths around the placebo effect:

1. that it's only subjective,
2. it's relatively rare and
3. it requires deception.

1. In fact ([Green & Wright, 2017](#)): “Studies demonstrate that **placebo medication can improve objective measures** such as **C-reactive protein**,<sup>1</sup> liver enzymes,<sup>2</sup> **pulmonary function**,<sup>3,4</sup> white blood cell count,<sup>5</sup> **postprandial glucose**,<sup>6</sup> **brain glucose metabolism**,<sup>7</sup> dopamine<sup>8</sup> pCO<sub>2</sub> levels,<sup>9</sup> **beta adrenergic activity of the heart**,<sup>10</sup> opioids<sup>11</sup> and **cortisol levels**.<sup>12</sup> In reality, **the mind helps the body to make the medicine.**”



2. [Studies](#) estimate that 60-90% of modern drugs and other therapies prescribed by physicians also depend on the placebo effect (it is also estimated that [60-90% of patient visits](#) are related to psychosocial, mind-body issues or stress).

The placebo effect has also been shown in 70% of cases of [angina](#), [asthma](#), [herpes](#) and [duodenal ulcers](#). **[Placebos regrow hair 1/3 of the time](#)**. It's also been documented in a significant percent of [CHF](#) patients and even affects [mortality](#) from [heart disease](#).

3. Placebos [work just as well](#) even when patients know they are placebos.



# Placebo Effects: From the Neurobiological Paradigm to Translational Implications

Fabrizio Benedetti  

Strong placebo effects are present in [Parkinson's disease](#).

Placebos increase [sports performance and mental functioning](#).

[The effect](#) of narcotics and NSAIDs on pain and the effect of benzodiazepines on anxiety almost entirely depends on the awareness of the patient - when they are unaware they have been given the medication it doesn't work.



*Research Article*

# Mind-Set Matters

## Exercise and the Placebo Effect

Alia J. Crum and Ellen J. Langer

*Harvard University*



Even the benefits of exercise seem to be in part mediated by placebo effects.

[Crum and Langer \(2007\)](#) at Harvard studied 84 female hotel room attendants and showed that there is likely a powerful nocebo effect present in most people that prevents them from experiencing the full benefits of the regular physical activity they are already doing, that they don't perceive as beneficial "exercise".

When half the hotel room cleaners were informed how much exercise they already did on a daily basis, and that it met the Surgeon General's recommendations for daily exercise, over the next month they went on to lose an avg of half a pound a week, lowered their SBP by an avg of 10 pts, and significantly reduced their body fat, WHR and BMI - all without changing anything in their daily activities, diet, etc - though they did perceive themselves as exercising more than before.

There were no changes noted in the non intervention group, who were given the same information without explicitly being told that their day to day activities met the definition of significant exercise.

Perception trumped reality. Biology bowed to belief.



"How long have you been working for us, Mom?"

Of course this is not to suggest additional exercise isn't important, but the way it's presented shouldn't minimize the benefits of existing activities. Rather what we already do should be fully appreciated in order to obtain maximum benefit.

The same principle likely applies to other areas of lifestyle

like social interaction, diet, sleep, meditation (many [could be said to meditate](#) without considering it meditation), etc.

If patients are taught the benefits of these activities and shown that they already do them sufficiently, their perception of their own health might improve, followed perhaps by an improvement in outcomes.



# Believing Ourselves to Death

The most significant outcome of beliefs that can be studied is death.

A study by [Kaplan and Camacho \(1983\)](#) showed that **perceived health was a better predictor of mortality than actual health** and another by [Idler and Kasl \(1991\)](#) showed that **elderly people who perceived their health as poor were 6X more likely to die** than those who perceived their health as excellent, **regardless of their actual health status.**



"Poor Fred — I didn't know you could *die* of hypochondria."

# Perceived Health





**“I would be a lot healthier if you’d stop finding things wrong with me!”**

# Placebo Propagation

In our hyperconnected modern world placebo and nocebo effects show social propagation as do attitudes, behaviors and some diseases (e.g. [emotions](#), [smoking cessation](#), [obesity](#) and [suicide](#)), so patients with access to social media and a never ending stream of fear porn around Long COVID may be adversely affected.



## Implications of Placebo and Nocebo Effects for Clinical Practice: Expert Consensus

[Andrea W.M. Evers](#),<sup>a,\*</sup> [Luana Colloca](#),<sup>b</sup>  
[Fabrizio Benedetti](#),<sup>f</sup> [Ulrike Bingel](#),<sup>g</sup> [Chri](#)



“In this survey of international experts on placebo research, there was strong consensus that patients should be informed about placebo and nocebo effects and that health-care professionals should be trained to maximize placebo effects and minimize nocebo effects.”

# Activating The Belief Effect

## From Bench to Bedside: Converting Placebo Research into Belief Activation

Jen Green, ND, FABNO<sup>1</sup> and Heather Wright, ND, FABNO<sup>2</sup>

Weird American Expression #5

"Let's just throw it at the wall  
and see what sticks."

### Abstract

Research on the placebo effect contains important elements that can be harnessed to improve clinical care. This paper proposes a new term, "Belief Activation," to describe the deliberate use of placebo effect tools by both patients and clinicians to catalyze healing. Belief Activation includes, but is not limited to, maximizing patient and practitioner expectations, classical and social conditioning, spirituality and prayer/intention, therapeutic relationship, healing environments, and minimizing the nocebo effect. This paper demonstrates ways in which Belief Activation is a form of evidence-based medicine and seeks to translate knowledge from placebo research into medical practice.

8. *Practitioner expectancy* refers to our own beliefs and is surprisingly impactful. In a double-blind RCT, when doctors were lead to believe that the medication could not work, patients experienced almost no placebo effect.<sup>52</sup> We can boost our own positive expect-

placebo response, spiritual belief impacts placebo independently from patient expectancy, and possibly with greater effect.<sup>55,56</sup> Connection to a religious

7. Creating a *Healing environment* can potentially trigger the mobilization of a patient's emotion regulatory resources.<sup>45</sup> Research has demonstrated that patients with a window view to nature had shorter stays at the hospital and took less potent analgesic medication.<sup>46</sup> Other data suggest that exposure to natural environments may improve mental well-being and reduce stress.<sup>47,48</sup> The representation of nature through art has also been associated with health benefits.<sup>45</sup> Strategies to improve noise control in a hospital improved cardiac patient recovery,<sup>49</sup> and noise can be managed by lowering telephone volumes, placing occupants in single rooms, and dimming lights.<sup>50</sup> Attention to the

Weird American Expression #5

"Let's just throw it at the wall and see what sticks."

1. *Patient expectations* are a large part of Belief Activation. In a systematic review, 15 of 16 studies showed that positive expectations of outcome were associated with better health outcomes.<sup>30</sup> As practitioners, we can help patients access Belief Activation by speaking positively about treatments<sup>31-34</sup> and by being enthusiastic.<sup>32</sup> While we do not want to promise patients that they will be healed using a particular technique, we do want to be hopeful and build on our patients' strengths. We can reinforce patients' beliefs in them-

5. *Conditioned placebo substitution* is a new dosing strategy where physicians begin to dose patients with full strength medication and then give lower doses or placebo for maintenance. In psoriasis, patients receiving 25% to 50% of the initial dose long term had the same response rates as full dose long term.<sup>39</sup> In children with



2. *Goal activation* is when unconscious goals (such as the desire to cooperate with medical staff, social inclusion, personal empowerment, or the need to achieve) get activated by situational cues.<sup>35</sup> When study participants

3. *Patient preference* and *Sense of control* help to maximize expectancy. Patient preference helps replicate past successes<sup>36</sup>; whenever possible, it is best to offer

In pain, anxiety, and Parkinson's disease studies, patients informed of timing and potential benefit of receiving treatment had significantly better outcomes than those from whom treatments were concealed.<sup>38</sup>

Weird American Expression #5

"Let's just throw it at the wall and see what sticks."

4. *Classical conditioning* is a process in which a certain stimulus evokes a specific response when repeatedly paired with another stimulus. Procedures of any kind tend to activate Classical Conditioning,<sup>27</sup> for example, acupuncture, cranio-electrical stimulation, laser, intravenous therapies, and hands-on therapies. It may also be beneficial and supportive to lean toward delivery systems with a distinct smell or taste to access classical conditioning.<sup>5,36</sup> An example would be chewable natural health products or herbs with a distinct smell/taste.

ations<sup>35</sup> and understanding and considering potential opposing goals (such as secondary gain from an illness)

6. *Social conditioning* is based on the idea that we learn health responses by observing others and “beliefs are contagious”<sup>42</sup> (a concept described by Bertrand Russell). Placebo analgesia rates were enhanced in two different studies by watching a demonstrator receive pain relief from a placebo.<sup>43,44</sup> In practice, we

Weird American Expression #5

“Let’s just throw it at the wall and see what sticks.”

The *Nocebo effect* is the opposite of placebo—when negative expectations lead to side effects.<sup>75</sup> Cancer patients with higher expectations of chemotherapy side effects are reported to have more side effects.<sup>76</sup>

tion.<sup>64</sup> In addition, patients of physicians with high empathy scores were significantly more likely to have good control of hemoglobin A1c (56%) than were patients of physicians with low empathy scores (40%,  $p < 0.001$ ).<sup>65</sup>



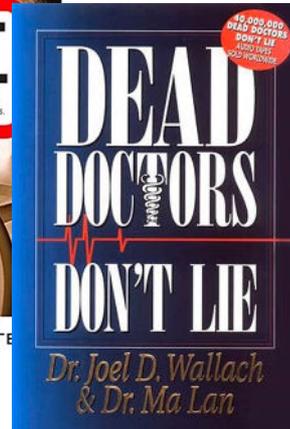
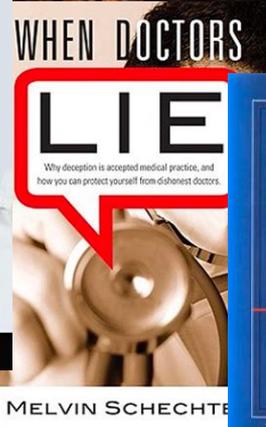
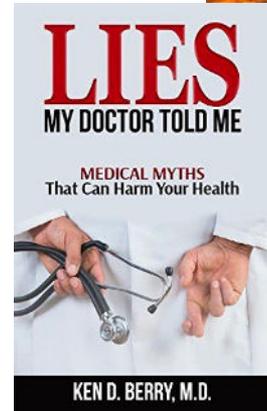
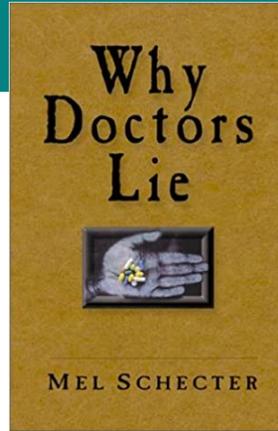
# NOCEBOS & PERCEPTION MANAGEMENT



# Do You Lie?

The first precept of the patients group coaching program was “believe you will get completely better”. This was also the implicit and explicit message delivered from start to finish.

But **we know this is not always true, so why imply it?** Why not say you could get worse, you could get better and overall you probably have a 20% chance of not improving at all over the next 2 months?



Symptomatic recovery may depend on clearance of the spike protein, dissolution of microclots, normalization of the immune system, etc - all of which can very likely be impacted by environmental inputs ranging from lifestyle factors, to supplements, to medications and procedures.

## HOW THE ENVIRONMENT IMPACTS OUR HEALTH

People are exposed to risk factors in their homes, work places and communities through:

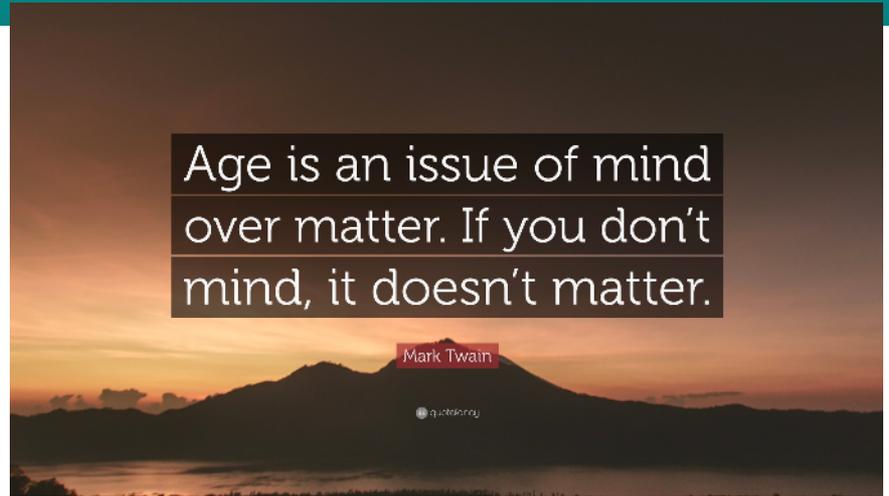


Along the way **Long Haul** likely **waxes and wanes because of** incompletely understood, poorly measurable **environmental inputs**, or perhaps because of complex superimposed physiological cycles, or both.

The environment includes factors under our control and stressful events outside our control.

The **effect of psychological stressors depends on our perception of them**. What is stressful for one person is less so, or entirely benign for another.

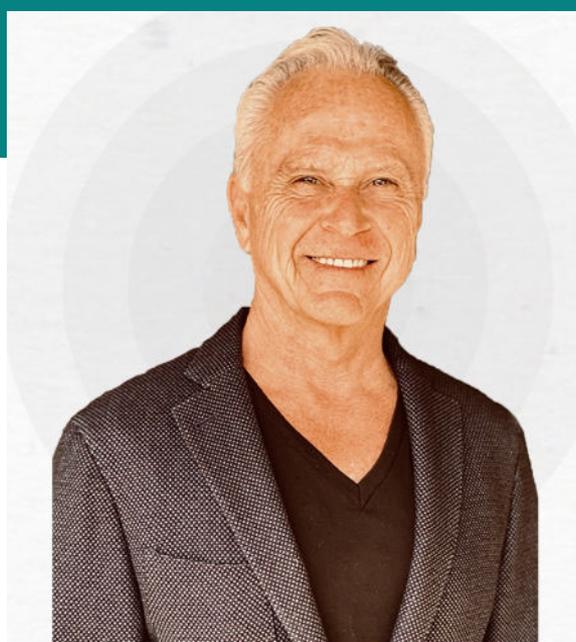
The **brain mediates the effects of stress on the body** and can strongly contribute to disease or health via neural and hormonal pathways, but the output of the brain depends on the mind and how we perceive the world, our beliefs about it, about ourselves and about our health.



**So the mind** is in a sense a part of the environment that affects the health of our body and **can create disease states** as placebo and nocebo research shows (e.g. patients exposed to [fake poison ivy](#) develop real rashes).

Dr Steve Bierman knows this all too well.

He's a medical doctor who also trained in hypnosis and a communication technique called Neuro Linguistic Programming (NLP), and became famous for using **verbal suggestion alone** in the ER to perform **painless procedures without anesthesia including injections, stitches and childbirth, as well as often spontaneously converting SVTs, halting minor bleeding and relieving asthma exacerbations.** In his private medical hypnosis practice he describes numerous cases of **tumors shrinking, auto-immune disease resolving, depression reversing and helping patients achieve bloodless fields during invasive major surgeries.**



“

*Many of his cures seem like miracles.*



# HEALING

## Beyond Pills & Potions

CORE PRINCIPLES FOR HELPERS & HEALERS



STEVE BIERMAN, MD

He wrote an instructional book for clinicians called “Healing Beyond Pills & Potions” in which he explains that patients invest their physicians with significant authority and their subconscious minds take very seriously everything they say as well as how they say it.

He explains that a few [carefully chosen words](#) can often mean the difference between suffering and relief, but **thoughtless communication usually causes psychological pain and may even contribute to creating disease via the nocebo effect.**

For example when communicating the chances of dying you could say:

**“You have an 81% chance of dying from this condition.”**

Or, more hopefully you could say:

**“You have a 19% chance of surviving this condition.”**

But, he explains neither of these is actually true, since the **data is based on a study or studies of patients who may be quite dissimilar** and even if not there is usually a wide range of variation within the studied population and **the particular patient in front of you may even have some unknown genetic or environmental advantage over them.**

So he gives an example of a version of the truth, **“artfully delivered”** wherein some statements are more emphatic so that the subconscious perceives them as commands:



“Ruth, before I share your diagnosis, let me tell you the one thing I know from experience with absolute certainty. In medicine, miracles happen every day. I know this, and I know as I look at you that you may very well be the next miracle I witness.

“Your diagnosis is osteosarcoma, which is a kind of cancer. And we all know that cancer is not a diagnosis we want. Some people **[gesturing away with the left hand]** die from this. But it is also a diagnosis, **Ruth, you can survive [leaning in, touching her shoulder with the right hand]**. In fact, in scientific studies 19% of people (almost 1 in 5) with this diagnosis do go on to beat it ... and survive. People, perhaps, very much **like you.**



“We will start treatment right away, and I’ll be with you throughout. Some people can have difficulties with the treatment [list those]. But then, Ruth, you can also have a very smooth and comfortable course through treatment.

“We will be together. Let’s see **how well you do.**”

Some physicians may feel uncomfortable with delivering this degree of hope to a likely terminal cancer patient. But in Dr Bierman's experience **delivering hope makes a significant positive difference** in his patient's outcomes. Though not all survive, **even those who fail to clinically improve seem to experience less distress** along the way.

Regardless, **for Long Haulers focusing on hope is certainly warranted, since most do improve.** And since a positive outlook or belief shifts the internal environment of the body away from stress [and inflammation](#) by changing the mind and the output of the brain, the lifestyle coaching course was designed to instill the belief that healing will happen.



"Well, it's not the worst I've seen."

# Why Begin with Lifestyle?



*"I stopped taking the medicine because I prefer  
the original disease to the side effects."*

# Would You Like to Try Lifestyle or The \$987 Long COVID Supplement Protocol?

1. Nattokinase 100-200mg (2000-4000 FU)/day
2. Serrapeptase: (250000 units) per day can split into 1-3 doses per day.
3. Nicotinamide mononucleotide: 500-1000 mg per day
4. Spermidine: (follow standard dosing instructions on the product)
5. Resveratrol (500mg twice daily).
6. Monolaurin 1000 mg 3x a day (immune booster/antiviral)
7. Sodium Butyrate 1000 mg morning and evening (supports microbiome)
8. Curcumin,
9. Nigella Sativa
10. Dandelion
11. Vitamin C (500mg twice daily).
12. Vit D 5,000-10,000 IU daily.
13. Vit K2 (100-200 mcg daily),
14. Zinc (50mg daily).
15. Quercetin (250-500mg daily)
16. Bromelain 90 mg daily (we have a combo supplement for these:
17. 10,000 IU of vitamin A daily in bioavailable retinol form.
18. 20 IU of vitamin E as bioavailable alpha-tocopherol daily
19. Omega 3 fatty acids 4g/day
20. NAC (n-acetylcysteine): 600-1500 mg/day (can increase up to 50mg/kg/day)
21. Melatonin
22. Selenium: 200 mcg daily
23. Copper: 2 capsules of Mitosynergy Mitoactivator Extra Strength daily
24. Get 3 mg of manganese per day
25. Molybdenum: 500 micrograms per week or 45-150 micrograms per day
26. Probiotics
27. L-Arginine 1-2 grams twice daily
28. Methylene Blue (MB)
29. Magnesium:
30. High dose Vit C: Intravenous Vitamin C Mitochondrial energy optimizer with pyrroloquinoline quinone (e.g., Life Extension Energy Optimizer or ATP 360®).
31. Artemisinin 200-300mg/day

## Weird American Expression #5

"Let's just throw it at the wall and see what sticks."

"We combined all your medications into ONE convenient dose."



Long COVID susceptibility is linked to modifiable risk factors as outlined earlier.

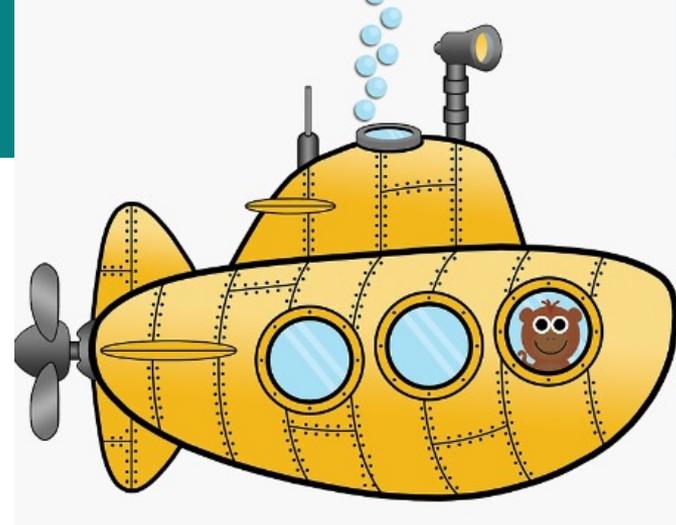
Its waxing and waning, at least in part, is due to environmental and psychosocial factors.



"There's nothing wrong with your computer, I think it's all in your head."

Lifestyle is almost always the most safe and effective medical intervention for any illness.

Most if not all moderate lifestyle changes in most patients can safely be assumed to be entirely beneficial without risk until proven otherwise.



yellow (nuclear) submarine





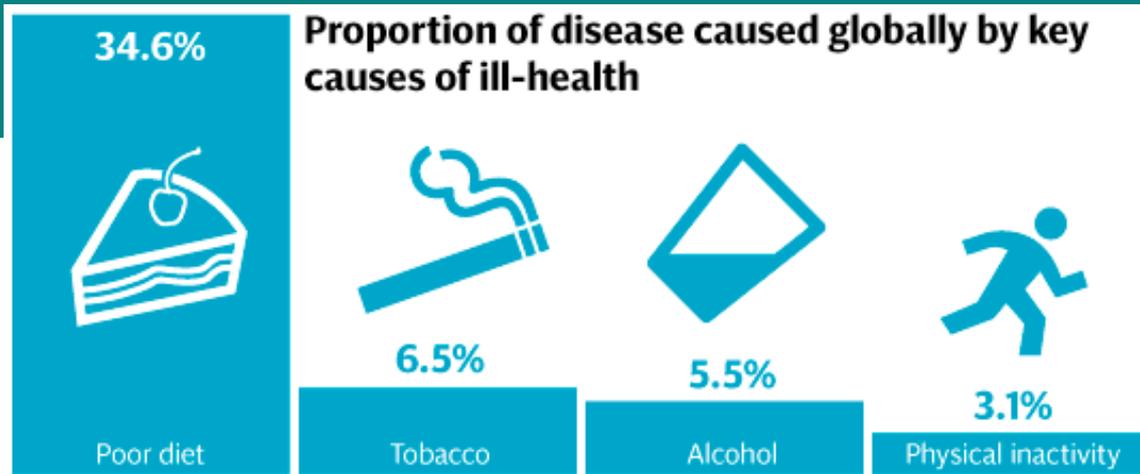
[Analysis of data](#) from Nurses Health Study II linked having 5/6 of the following healthy lifestyle factors to half the risk of post COVID complications:

1. BMI 18.5 - 24.9
2. never smoking
3. at least 2.5 hrs mod to vigorous activity/week
4. moderate alcohol intake (5 - 15 grams per day)
5. “high diet quality” (upper 40 percent of the Alternate Healthy Eating Index-2010 score)
6. 7-9 hours a day of sleep.

Note: “Healthy diets” in this study were defined by the US HHS dietary guidelines 2015-2020, so actually healthy diets had they been assessed may have provided a stronger association.



“You’ll have to find another excuse. The vet said I should remove salt, fat and homework from my diet.”



Source: Prof Simon Capewell, Professor of Clinical Epidemiology, University of Liverpool, analysis of Lancet global burden of disease report

A small handful of lifestyle factors are thought to account for much of the incidence of some of the biggest killers:

Heart disease, Cancer, Lung disease, Stroke, Alzheimers, Diabetes, CKD

The U.S. CDC estimates that eliminating just 3 risk factors: poor diet, inactivity and smoking would prevent 80% of all heart disease and stroke; 80% of type 2 diabetes; and 40% of all cancers.

Other important and proven modifiable risk factors include:

**Second hand smoke** ([up to 30%](#) increased risk of CAD/CVA/Lung CA)

**Alcohol use** ([7th leading risk factor](#) overall for death and disability, but from ages 15-49 it was the leading risk factor for death globally in 2016.

[No safe level reported](#))

**Fasting** ([improves](#) obesity, diabetes, cardiovascular disease, cancers and neurological disorders, a [self published observational study](#) by Thomas Bunker, PhD shows 90% of the high compliance group showed improvement while 49% of them had a 50% or greater reduction in symptoms.)



**Sun exposure - i.e. not just Vit D which is a secondary marker** ([similar risk](#) as smoking. [two fold higher](#) mortality between avoiders and highest exposure group, [12.8% of US deaths](#) attributable to serum 25(OH)D <75 nmol/L, [↑ incidence](#) of breast cancer, colorectal cancer, hypertension, cardiovascular disease, metabolic syndrome, multiple sclerosis, Alzheimer's disease, autism, asthma, type 1 diabetes and myopia)



**Interpersonal relationships** (1/3 of adults 45 up feel lonely, isolation → 50% ↑ in dementia, 29% ↑ in depression, 32% ↑ CVA. In those with HD loneliness → 4X ↑ risk of death, 68% ↑ risk hospitalization, 57% ↑ risk of ED visits).

### **Spirituality / Religious Belief / Meaning**

(Spirituality is linked to ↓ chronic disease, ↑ longevity/ ↓ all cause mortality (hazard ratio, 0.73; 95% CI, 0.63-0.84 which is independent of behavioral factors like smoking, drinking, exercising, socioeconomic status, negative affect, and social support),

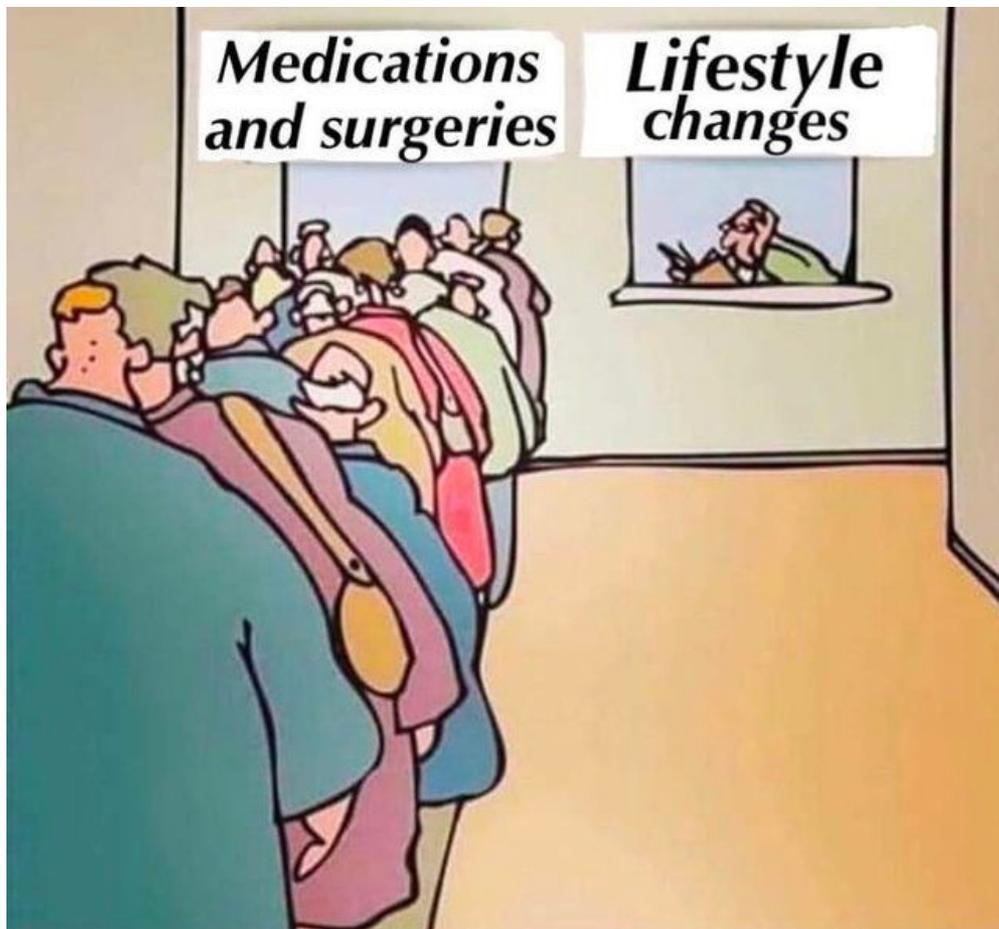
↓ depression (odds ratio, 0.67; 95% CI, 0.58-0.81), ↓ suicide & alcohol/substance use.

Spiritual interventions improve QOL in serious illnesses. Up to 96% of pts want spiritual care during serious illness)

The point is that a comprehensive lifestyle overall could very well have a profound impact on any chronic disease.



# Successfully Promoting Lifestyle Change



Behavior change is hard, but **communicating in a small group** and **taking advantage of group support and identification has been proven to induce behavioral change.** This approach can be extremely effective even the first time a message is conveyed.

It's **well known** that setting small achievable goals is effective (e.g. SMART goals) as well as problem solving barriers and self-monitoring.



## Reverse ego-depletion: Acts of self-control can improve subsequent performance in Indian cultural contexts

Krishna Savani <sup>1</sup>, Veronika Job <sup>2</sup>

Research suggesting willpower was finite proved difficult to replicate and studies even showed the opposite, that using willpower increased willpower later, though there also appears to be an effect of belief - **the theory someone has about willpower may affect their willpower** - ie whether they believe it is finite or not.

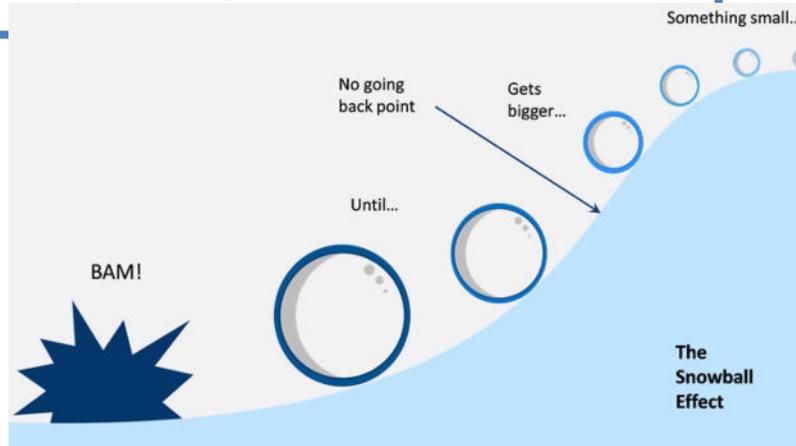


## Autonomous Goal Striving Promotes a Nonlimited Theory About Willpower

Vanda Sieber<sup>1</sup>, Lavinia Flückiger<sup>2</sup>, Jutta Mata<sup>2</sup>, Katharina Bernecker<sup>3</sup>, Veronika Job<sup>4</sup>

Affiliations + expand

PMID: 30654723 DOI: [10.1177/0146167218820921](https://doi.org/10.1177/0146167218820921)



Thankfully [research shows](#) that striving autonomously towards a goal can lead to a shift from believing willpower is limited to believing it is not.

The **belief that willpower is unlimited may lead to a snowball effect** as small initial changes lead with little effort to gradually larger and larger changes, or alternatively the same may occur as the **initial changes become habit, therefore no longer requiring willpower**, but serving as building blocks for bigger changes later.

# • LEARN ONE -> DO ONE -> TEACH ONE

- Comprehensive lifestyle change is even harder than quitting an addiction
- Encourage patients to start free community support groups
- Spreading the word helps them and others

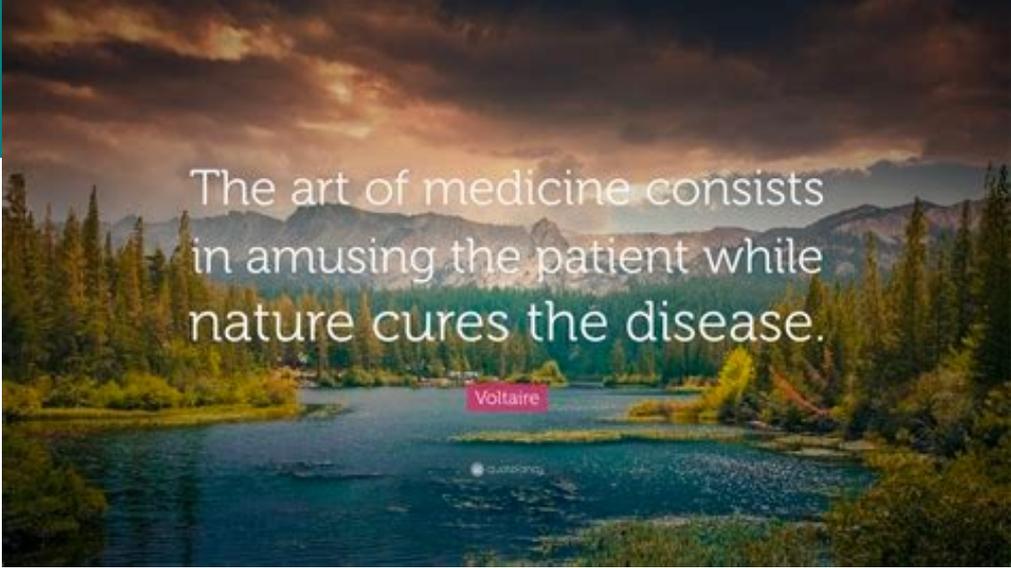


# What's the Message?

At first I thought this case was mostly about grounding, cold exposure and fasting, because the patient was most vocal and emphatic about the immediate benefits he experienced from those interventions.

But maybe there was a delayed effect from quitting alcohol, starting supplements, or changing diet, even though he didn't consider them important.





The art of medicine consists  
in amusing the patient while  
nature cures the disease.

Voltaire

Then I thought what if one or more of the above was just a placebo effect? Or the changes he experienced were just indicative of reversion to the mean?

Or his overall improvement over the course of a few months could have simply been the natural course the disease would have followed with no interventions at all - we know most Long Haulers do get better over time.

Any of these could be true, but **healing isn't just about the final outcome**, it's also about the experiential journey to that outcome.

**One possible path involves suffering and powerlessness and another involves at least the perception of empowerment if not actual empowerment.**

Which is why clinicians should encourage lifestyle interventions, make full use of the belief effect of placebos and perhaps above all **engage in perception management rather than just medication management.**

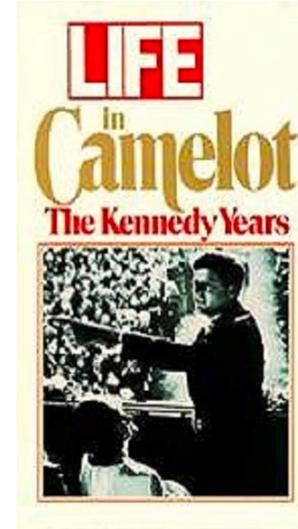
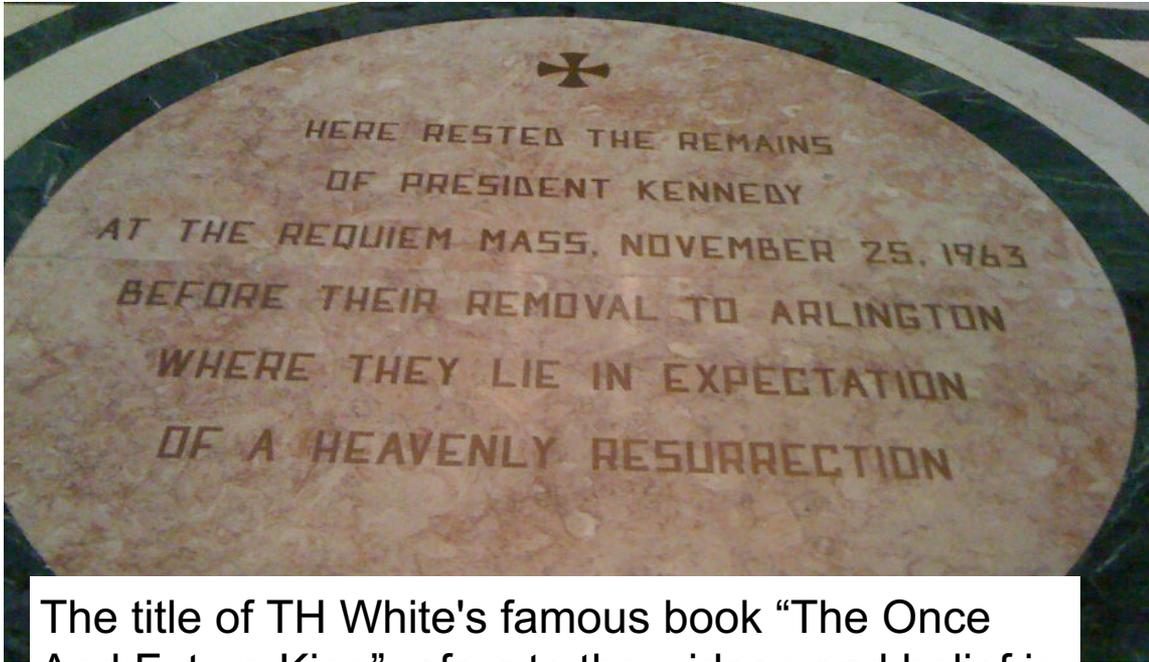


# Doctor Bot

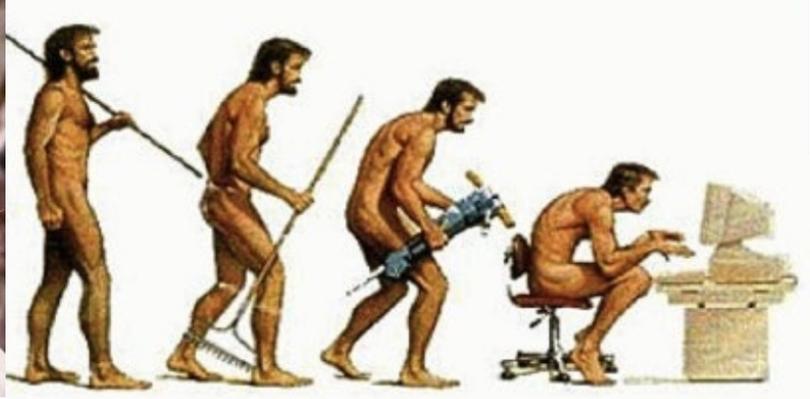
- Blind protocol following is low-hanging fruit for AI
- But we can do better: humans will become more human.



# The Once and Future Patient

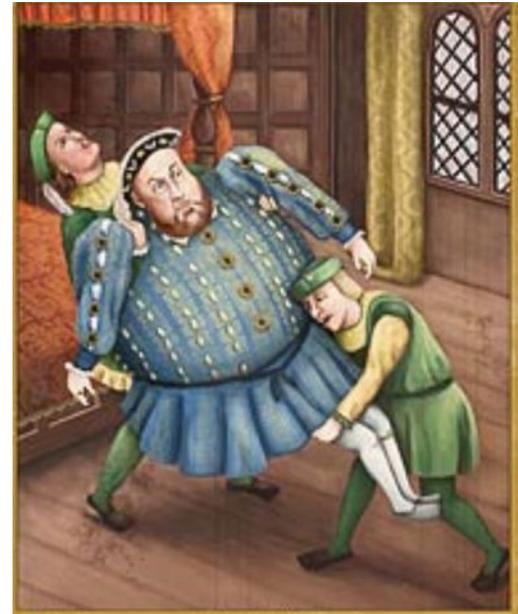


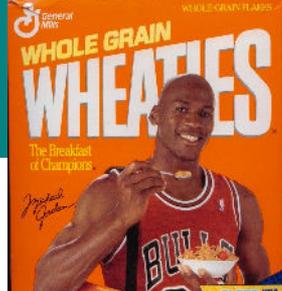
The title of TH White's famous book "The Once And Future King" refers to the widespread belief in Old England that King Arthur, like the Messiah, will one day return to save his people and be King again.



**Most of what patients nowadays struggle to learn and practice of a healthy lifestyle was in days past a universal given** such that doctors rarely had to preach it.

**The sedentary life with limitless access to sugar and other refined carbs as well as the obesity, rotten teeth and gout that go with them was once the sole province of the wealthy.**

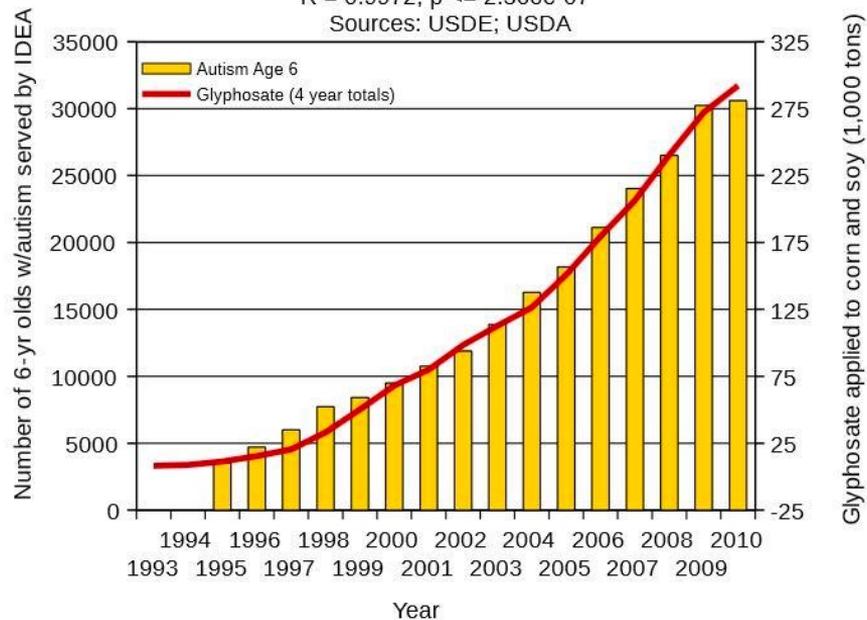




But at this point it's clear that unless we course correct, will not slow down until it takes us all.

**The only solution is for physicians and patients to fix the environment that is destroying us all.**

Autism Prevalence 6 yr-olds & Glyphosate applied to corn & soy crops  
 glyphosate is total of year indicated + 3 previous years  
 $R = 0.9972, p \leq 2.366e-07$   
 Sources: USDE; USDA

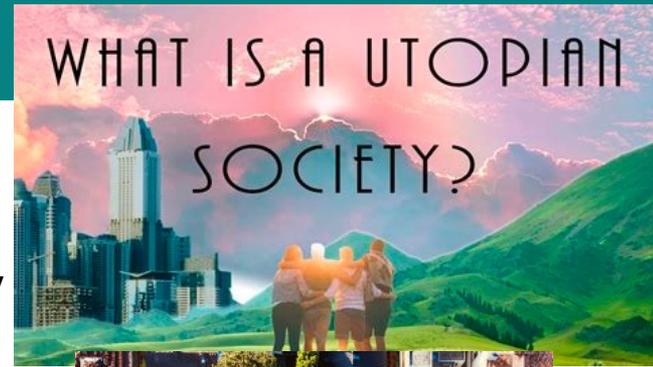


A concerted effort towards lifestyle change is often what's required to reverse chronic disease or simply remain healthy today, but the only way humanity thrives is if we engineer a healthy environment in the future that makes **the right lifestyle for human flourishing the effortless, default mode of existence for most people again.**

# DESIGNING HEALTHY COMMUNITIES



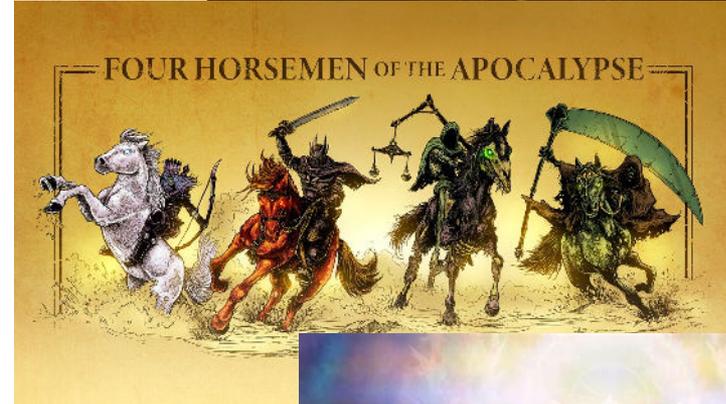
RICHARD J. JACKSON WITH STACY SINCLAIR



Few still believe in King Arthur's return, though **many do await the Messiah** to save us.

But until then **we are not helpless and it's up to us** to do our best to fix this mess we've gotten ourselves into.

**The patient that was once, must be again.**



# We made it!

- Bonus Slide:
- I prompted an online AI powered image generator to show us what Pierre Kory's next Senate hearing would look like...



# AI generated image: Pierre Kory's Next Senate Hearing





**THANK YOU**

