



# Extreme Wellness

## Building Resilience at the Edge of Comfort



Prof Marc Cohen

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[www.drmarc.co](http://www.drmarc.co)

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## CONFLICT / CONFLUENCE OF INTEREST

I've spent over 30 years practicing and researching holistic health as a university professor and integrative doctor and published more than 100 peer-reviewed scientific papers and multiple textbooks on simple practical solutions that promote health and wellness.

I've also spent years developing business interests with the same purpose, and I'm currently an owner of [Beautiful Water](#), the [Extreme Wellness Institute](#), [Maruia Hot Springs](#), [Extremely Alive Wellness Tonics](#), and [Pronoia Press](#).

I therefore have a commercial interest in some of the products and services mentioned in this presentation.



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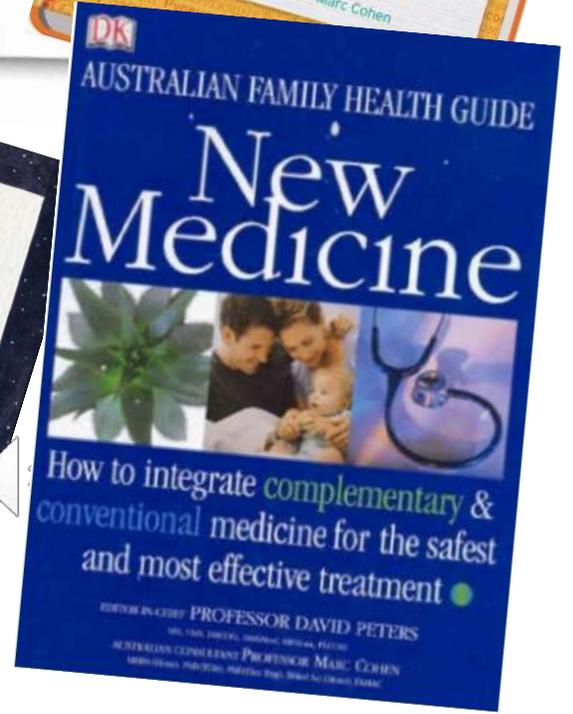
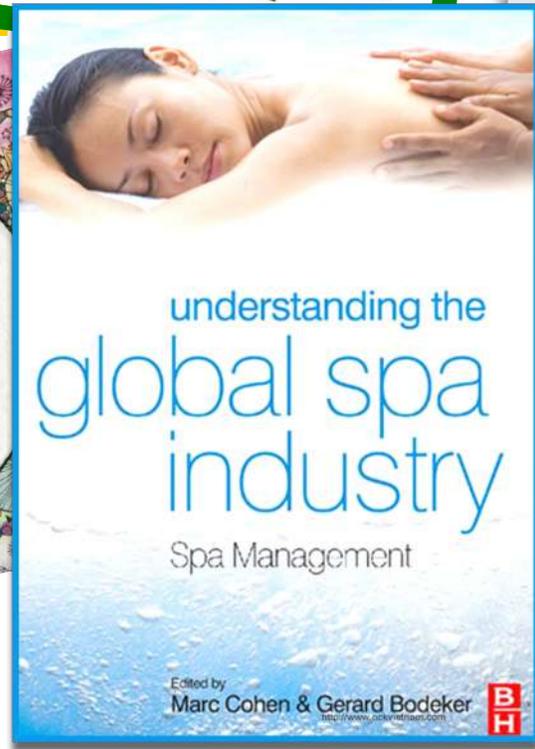
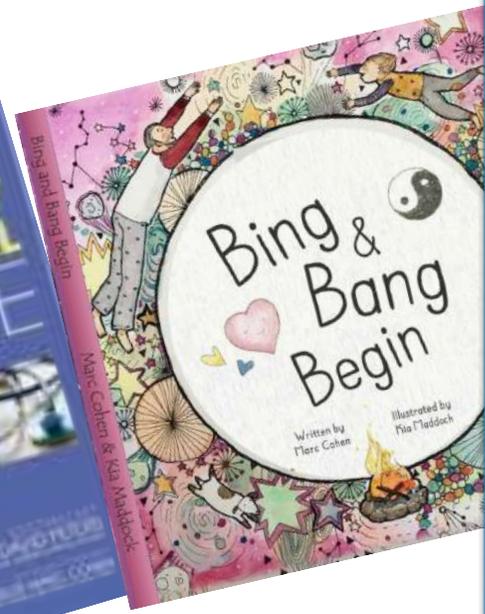
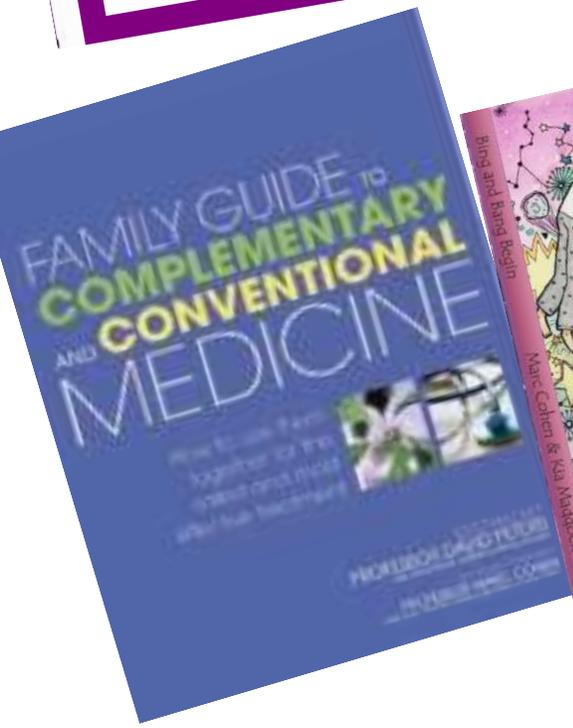
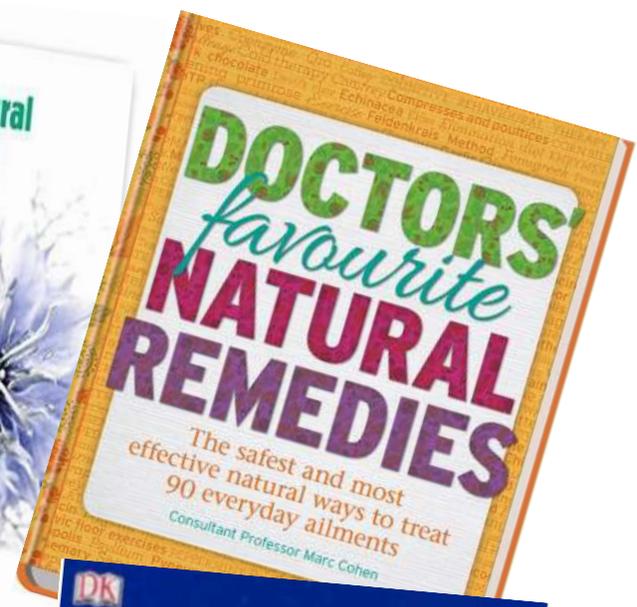
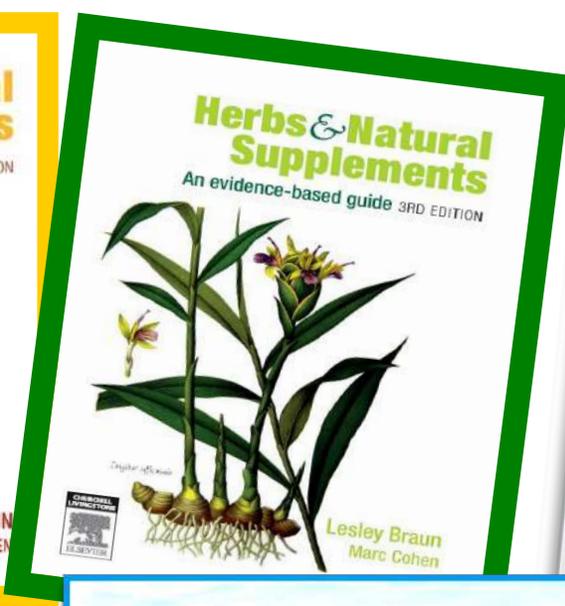
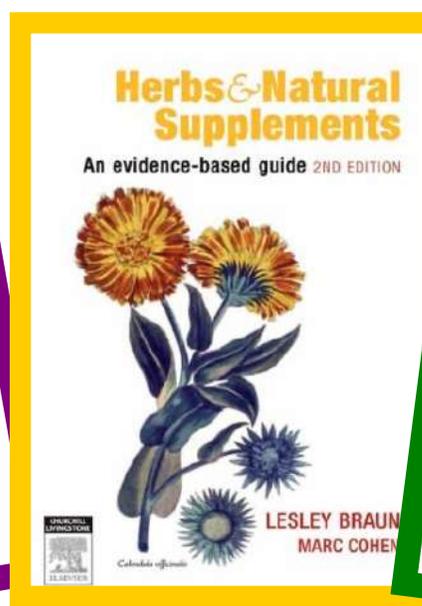
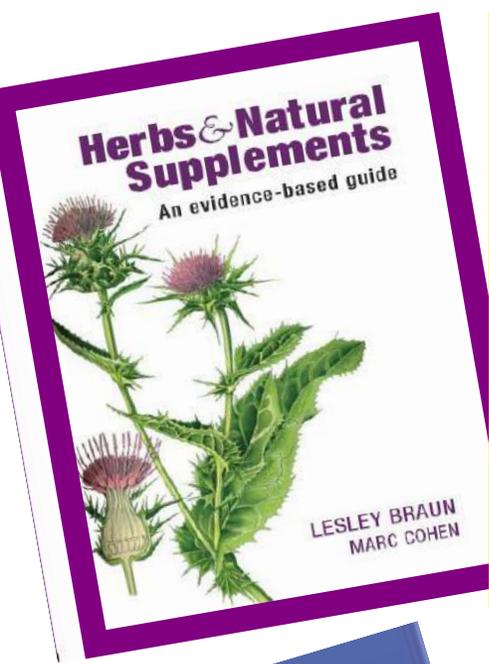
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# More Than 3 Decades of Wellness Research



- **Yoga** – BP, HRV, O2, Flow, Sleep,
- **Breathing** - Buteyko, Dysfunctional
- **Meditation** – Brain function,
- **Bathing** –Sauna, Hot springs,
- **Herbs**, Adaptogens, Elite performance
- **Integrative Medicine**, Acupuncture, massage
- **Lifestyle**, Organics, Retreats, Elite athletes

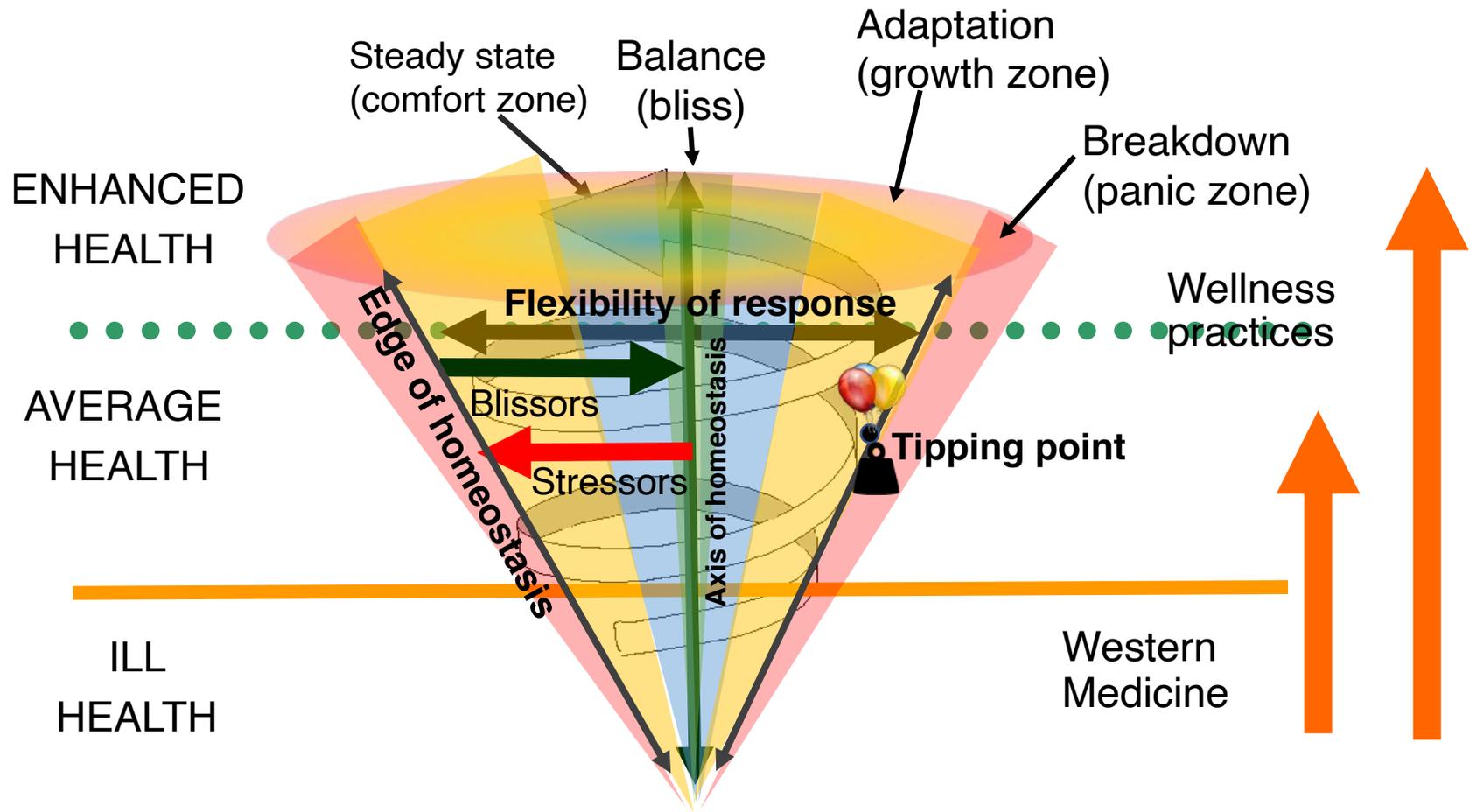


# Content



- Recipe For Wellness
- Hacks 2 Relax
- Extreme Wellness Protocol
- Bathing Protocol
  
- Cold Water Hokey Pokey
- Common Sense Safety Protocol
- Daily Wellness Protocol
- Whirl of Wellness

# WELLNESS



# ILLNESS

# The Recipe for Wellness



## The Recipe for Wellness

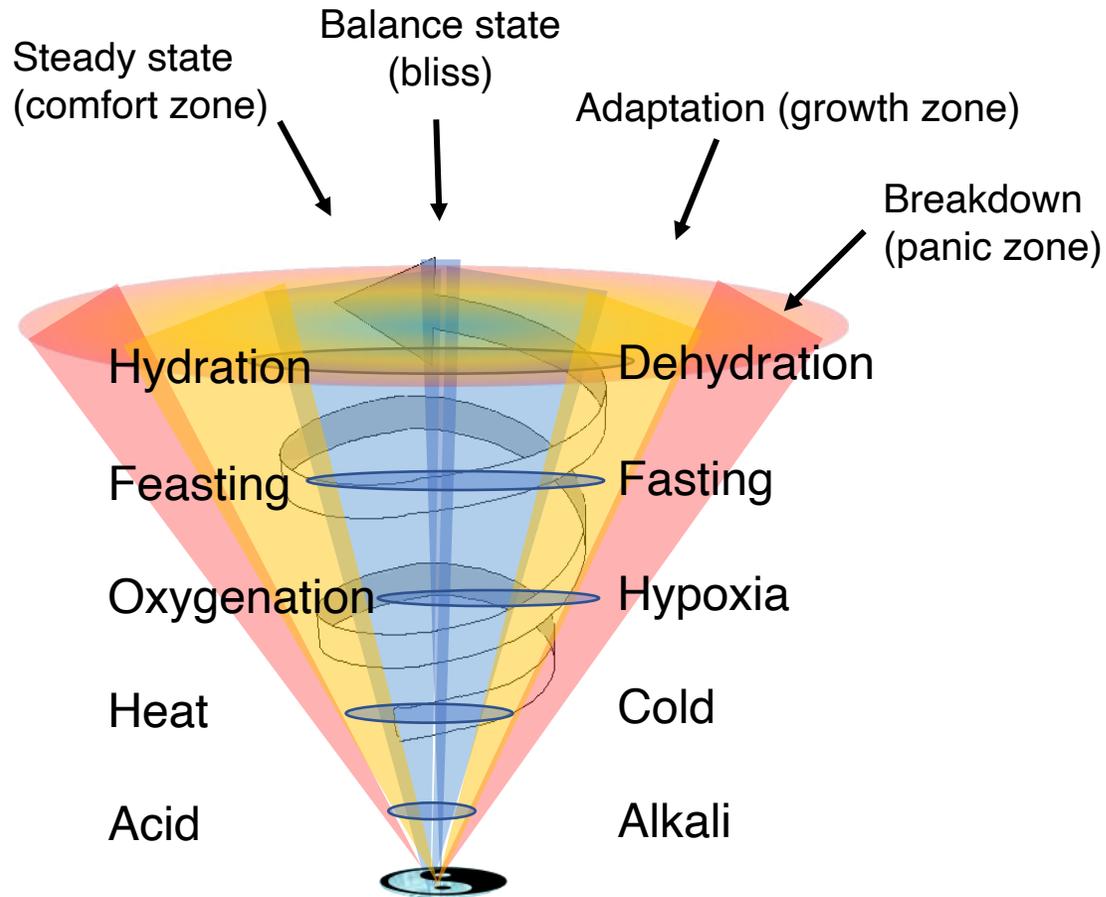
Bathe in beautiful water  
Prepare delicious food

Make the most of every breath  
Dance through every mood

Tend the soil beneath your feet  
Embrace sunshine from above

Share your gifts with all the world  
Fill your life with love

# Physiological Extremes & Activities of Living



## Extremes

- H<sub>2</sub>O (drinking)
- Glucose (eating)
- O<sub>2</sub> (breathing)
- Temp (sheltering)
- CO<sub>2</sub> (doing)

# Building Resilience Through Hormesis



- Find edge of tolerance then stay and relax there
- Practice being **relaxed *when stressed***
- The **breath** is the link between mind and body
- Practice being **relaxed *when relaxed***
- Create balance by **alternating** between extremes

Your ability to be relaxed under stress is a measure of resilience

# The 10 Hacks to Relax – Relax on Demand



The “10 Hacks to Relax” serve as emotional first aid anytime you are scared, anxious, upset or in pain:

1. Touch all your fingers
2. Wiggle your toes
3. Soften your stomach
4. Breathe through your nose
5. Sigh
6. Smile
7. Swallow
8. Sing
9. Flutter your eyelids
10. Focus within

# Extreme Wellness Lifestyle Prescription



## 5 Elements of Extreme Wellness

- Bladder - H<sub>2</sub>O
- Bowel – Glucose
- Breath - O<sub>2</sub>
- Body - Temp
- Brain - CO<sub>2</sub>

# Bladder - Filter & Flush

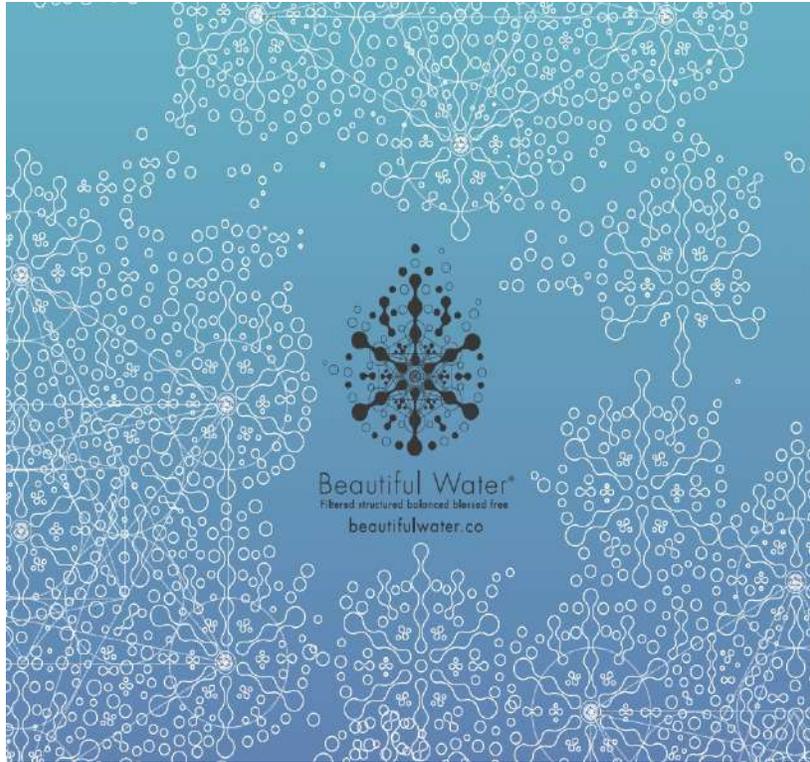


Drink filtered water. Use a filter or be one



Pass plenty of clear straw-coloured urine

# Use a Filter or Be One



- Drinking less poison is good for you!
- Ideal systems filters all bathing and drinking water
- Connect with local springs and give thanks to water
- Bless your water, give it structure, expose it to sunlight
- *“When you get the basic things right, other things seems to go right by themselves”*

- Bill Mollison Founder of Permaculture



# Modern lifestyle beverages

*Caffeine fires us up, sugar keeps us going and alcohol brings us down*



Available in every home, restaurant, hotel room, airplane

# Tulsi –A herb for all reasons



- The ultimate adaptogen – like liquid yoga
- Relaxes – without depressant effects of alcohol
- Alerts – without agitation of caffeine
- Balances energy – without highs and lows of sugar
- Antimicrobial & facilitates detoxification

## REVIEW

### Tulsi - *Ocimum sanctum*: A herb for all reasons

Marc Menrice Cohen

School of Health Sciences, RMIT University, Victoria, Australia

## ABSTRACT

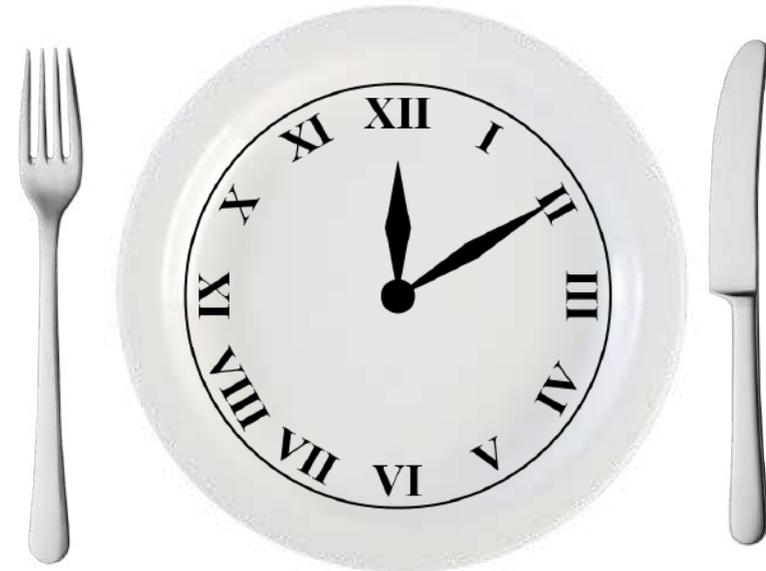
The predominant cause of global morbidity and mortality is lifestyle-related chronic diseases, many of which can be addressed through Ayurveda with its focus on healthy lifestyle practices and regular consumption of adaptogenic herbs. Of all the herbs used within Ayurveda, tulsi (*Ocimum sanctum* Linn) is preeminent, and scientific research is now confirming its beneficial effects. There is mounting evidence that tulsi can address physical, chemical, metabolic and psychological stress through a unique combination of pharmacological actions. Tulsi has been found to protect organs and tissues against chemical stress from industrial pollutants and heavy metals, and physical stress from prolonged physical exertion, ischemia, physical restraint and exposure to cold and excessive noise. Tulsi has also been shown to counter metabolic stress through normalization of blood glucose, blood pressure and lipid levels, and psychological stress through positive effects on memory and cognitive function and through its anxiolytic and anti-depressant properties. Tulsi's broad-spectrum antimicrobial activity, which includes activity against a range of human and animal pathogens, suggests it can be used as a hand sanitizer, mouthwash and water purifier as well as in animal rearing, wound healing, the preservation of food stuffs and herbal raw materials and traveler's health. Cultivation of tulsi plants has both spiritual and practical significance that connects the grower to the creative powers of nature, and organic cultivation offers solutions for food security, rural poverty, hunger, environmental degradation and climate change. The use of tulsi in daily rituals is a testament to Ayurvedic wisdom and provides an example of ancient knowledge offering solutions to modern problems.

Key words: Adaptogen, Ayurveda, holy basil, lifestyle, *Ocimum sanctum*, stress, tulsi

# Bowels - Feast & Fast



The feast is in the  
first bite



Fast for > 12 hrs before  
'breakfast'

# Do your Guts have the Gripes?



- Antibiotics
- Chlorine in water
- Dead ferments such as bread and beer
- Pesticides, preservatives, plastics in food
- Few living foods, unlike our cultured ancestors

# Support your microbiome



Fibre feeds your  
inner ecology



Ferments provide  
microbial allies

# Creating a Wellness Culture



## Brew Your Own Medicine

Living ferments have been used as medicine for thousands of years.

Tonics can be made from living kombucha vinegar infused with leaves, roots, flowers, fruits and fantastic fungi.

Brews can be sipped, taken as a shot, used to make refreshing drinks, spritzers, mocktails or cocktails, or used as a salad dressing or starter culture

.

# Advanced Science + Ancient Wisdom

Open Access Article

## Microbial Diversity and Characteristics of Kombucha as Revealed by Metagenomic and Physicochemical Analysis

by  Mayank Kaashyap<sup>1</sup>  Marc Cohen<sup>2</sup>  and  Nitin Mantri<sup>1,3,\*</sup>

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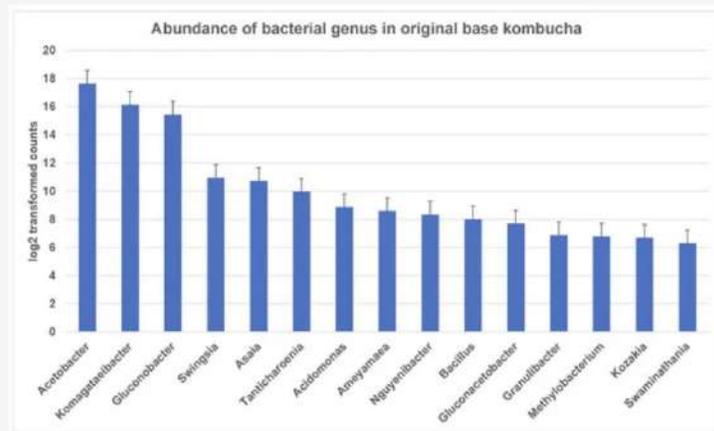


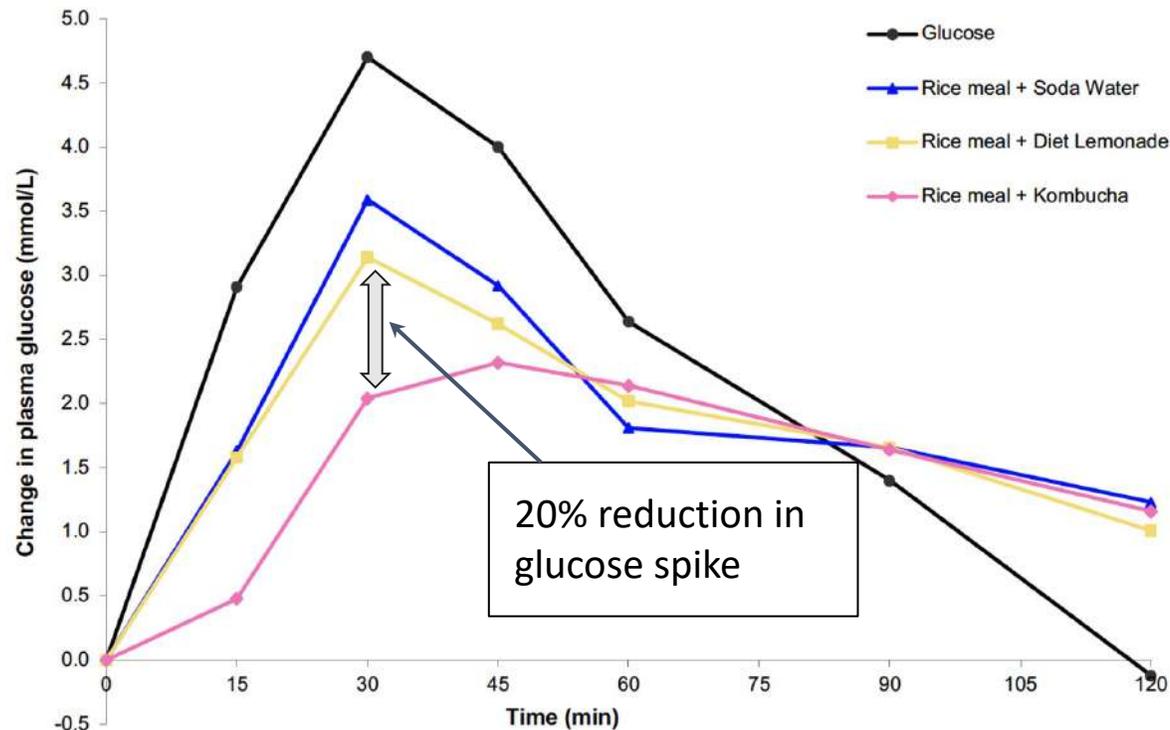
Figure 1

Recently published research shows our kombucha vinegar base contains

- >200 probiotic species
- High levels of gluconobacter
- More than twice the polyphenols of green tea

*“The broad microbial diversity with proven health benefits for the human gut suggests kombucha is a powerful probiotic.”*

# Improved Blood Sugar Control



Double-blind randomised placebo controlled, cross-over study performed at the University of Sydney SUGiRs Lab.

Glycaemic control and insulin response were measured after a standard meal consumed with either kombucha, water or diet soft drink.

Kombucha resulted in a 20% reduction in post-prandial blood sugar spike

Glycemic Index and Insulin Index after a Standard Carbohydrate Meal Consumed with live Kombucha: A Randomised, Placebo-Controlled, Crossover Trial – submitted for publication

Fiona S. Atkinson, Marc Cohen, Karen Lau and Jennie C. Brand-Miller

# Breath – Pant and Hold



Conscious breathing can control  $O_2$ , pH, &  $CO_2$

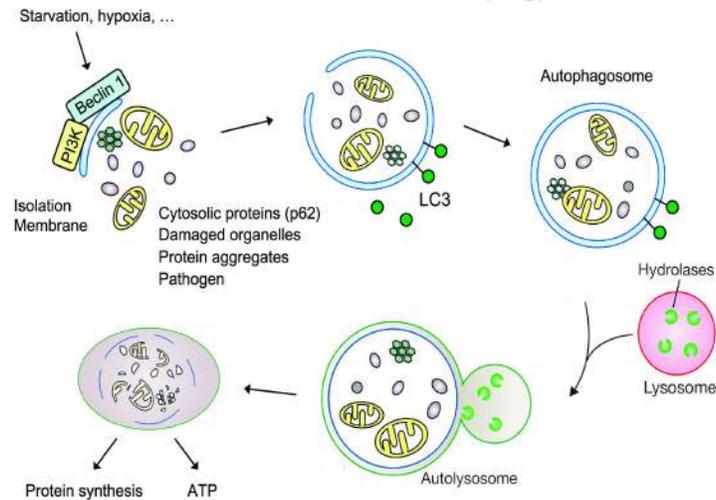
$\uparrow$ pH ( $\downarrow$  $CO_2$ ) - Hyperventilate

$\downarrow$ pH, ( $\uparrow$  $CO_2$ ) - Breath hold

$\downarrow$  $O_2$  - Hyperventilate + hold empty

$\uparrow$  $O_2$  - Hyperventilate + hold full

# Physiological Changes with Transient Hypoxia



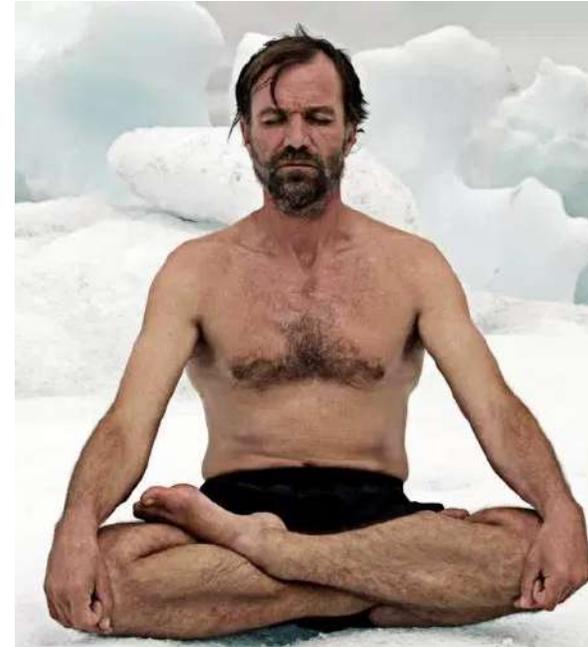
- $\uparrow$  dynorphin  $\Rightarrow$   $\uparrow$  endorphin receptor number & sensitivity
- $\uparrow$  mitogenesis and cellular efficiency - mops up free  $O_2$  radicals
- $\uparrow$  apoptosis/autophagy of aberrant/ageing cells/organelles
- $\uparrow$  erythropoietin -  $\uparrow$  Hct &  $O_2$  carrying capacity of blood
- Mobilises stem cells from hypoxic niches in bone marrow

<http://labs.feinberg.northwestern.edu/congconghe/home/>

# Body - Hot & Cold



Sweat – clean your skin  
from the inside out



Burn – activate your  
metabolism to make heat

# Benefits of Heat



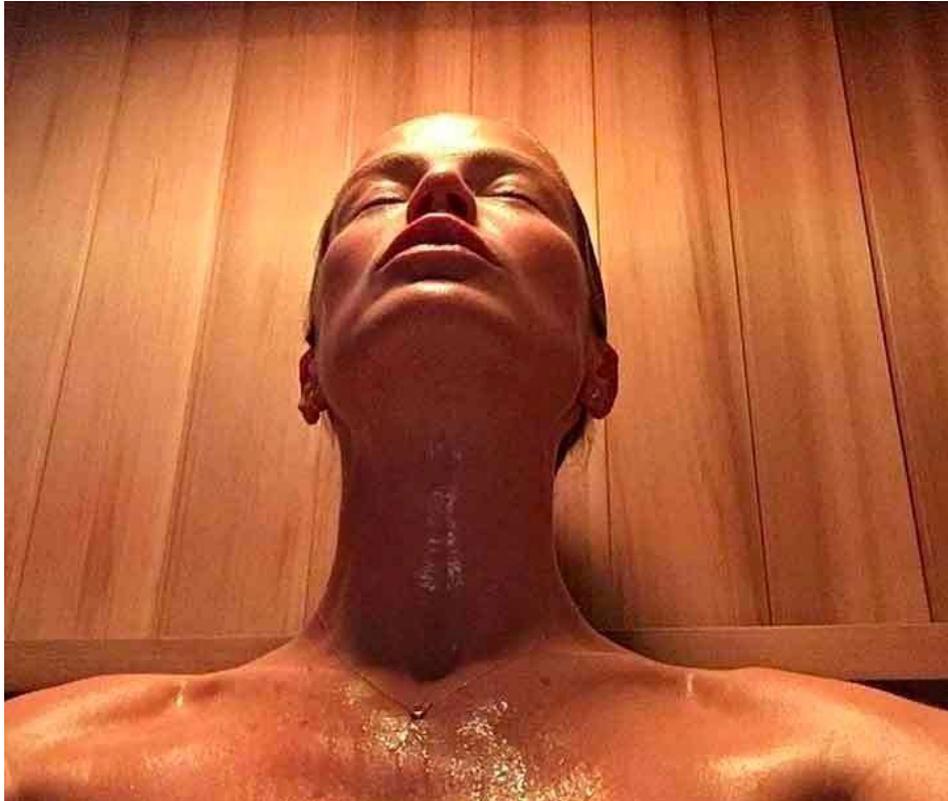
- Detox - flushes blood through periphery without producing extra metabolic waste
- Vascular – creates cardiovascular exercise
- Immunity - induces benefits of fever without the metabolic cost
- Hormetic stress builds physiological and psychological resilience
- Relaxation - induces muscle relaxation and enhances sleep

# Physiological Effects of Heat-Stress



- ↑ blood pH
- ↑ body temp (simulates fever)
- ↑ cardiac output & lower peripheral resistance
- ↑ vascular function
- ↑ immune activity
  
- ↑ benefit with hydration
- ↑ autophagy & resilience (hormesis)
- ↑ anti-inflammatory responses
- ↑ detoxification from organs and skin
- ↑ effect with cold and essential oils

# Psychological Benefits of Heat-Stress



- Focus on fun and positive action
- 'Forced-mindfulness'
- Enhanced relaxation and sleep
- Activates the placebo response, positive thinking and 'remembered wellness'
- Social activity that enhances social connection

# Turning Up The Heat on COVID-19



For the past 600 million years, insects, fish, reptiles, birds and mammals have raised their body temperature to combat viral infections.

Historical and epidemiological evidence shows regular sauna bathing improves cardiovascular, respiratory and immune function and protects against pneumonia and viral infection.

RCT evidence shows regular sauna bathing halves the incidence of respiratory viral infections and gives symptom relief and improves the course of the common cold.

# Cold



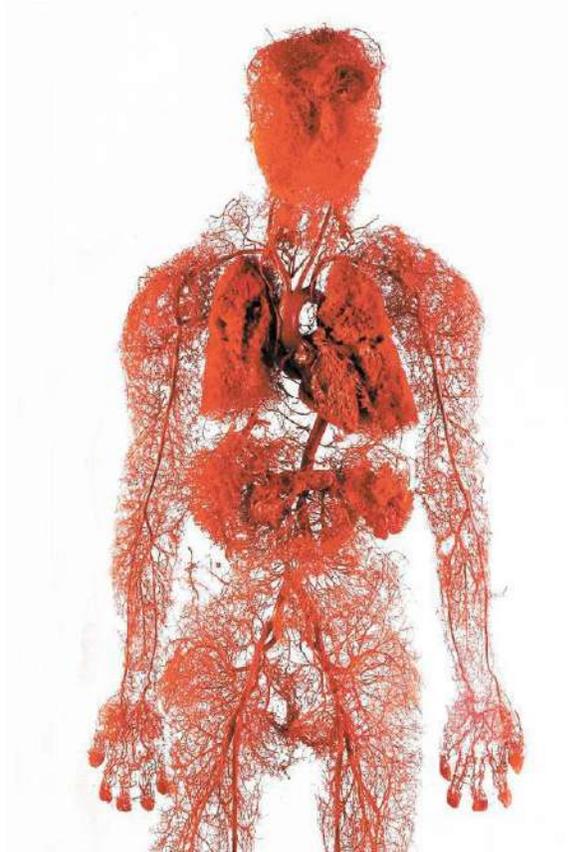
- Cold causes peripheral vasoconstriction and drives blood into core
- Induces detoxification and diuresis
- Produces gasp reflex and hyperventilation that mimics anxiety/panic
- Reduces pain and inflammation
- Induces endorphins and elevates mood and physical and mental wellbeing

# Cold showers reduce sick days



- RCT of cold showers in healthy adults (n=3018)
- Hot to cold shower for 30, 60 or 90s at 10-12°C
- 29% less sick days after one month
- Length of shower did not matter
- 2/3rd continued taking cold showers

# Benefits of Regular Hot and Cold Exposure



<http://melinamina.blogspot.com.au/2014/05/insan-vucudununkan-damar-yollar-haritas.html>

Cold keeps you cool  
under pressure



- Mental focus / willpower - forced mindfulness
- Improves circulation - exercises vascular system
- Keeps skin and hair healthy
- Reduces pain and inflammation
- Improves metabolism and induces brown fat

# The Cold Water Hokey Pokey



The benefits of cold  
showers are many . . .

yet they can be  
uncomfortable

# Common Sense Safety



- **Drink:** Stay hydrated with good quality water.
- **Take care:** Heat sources can burn or scald and sudden changes in posture can cause dizziness or fainting
- **Tune in:** Use comfort as a guide to safe limits. Enjoy the 'forced mindfulness' of temperature extremes and relaxation with thermal comfort.
- **Be aware:** Heat tolerance varies widely. Don't go beyond being 'comfortably uncomfortable' and avoid extremes of temperature if impaired by drugs or alcohol.
- **Rest:** Spend as much time resting as spent in extremes. Explore the blissful state of homeostasis and enjoy cooling down when hot and warming up when cold.

# Brain - Do & Don't



## **Do nothing**

Actively do nothing -there's always less you can do



## **Do everything**

Engage in activities that generate a sense of flow

# Bathing at Rest



- Buoyancy defies gravity and relaxes muscles
- Immersion in water mimics the safety of the womb
- Thermo-neutral bathing lets you achieve thermal balance and reduce stress levels
- Essential oils, salts, herbs and tonics aids relaxation
- Bathing enhances sleep

Clark-Kennedy, J., Kennedy, G., Cohen, M. Conduit, R. (2021) Mental health outcomes of balneotherapy: a systematic review, *International Journal of Spa and Wellness*, 4:1, 69-92, DOI: [10.1080/24721735.2021.1913368](https://doi.org/10.1080/24721735.2021.1913368)

# The Power of Stillness



The greatest movement comes from the stillest point . . .

. . . but happens on the edge!

The greatest resilience happens when you remain calm and still in the midst of movement and change

# Finding Comfort in Any Situation



- You don't need to be a daredevil!
- Explore your willingness to tolerate discomfort
- Be mindful of your mind - how happy are you with discomfort?
- Pursue stillness (doing nothing)
- Actively do nothing - there is always less you can do!

# Healthy Habits for Happy Humans



## Daily Wellness Protocol

Do the Cold-Water Hokey-Pokey  
to start your daily protocol,

Drink tonics and teas to prevent disease  
avoid sugar and alcohol

Eat good food, mostly plants  
only when you're in the mood

Eat leaves, roots, flowers, fruits,  
fungi and fermented food

Do hot, cold, rest, repeat,  
at least 3 times each week

Connect with friends, emotionally cleanse,  
and relish a good night's sleep

# The Whirl of Wellness

Go From Wired & Tired to Chilled & Fulfilled



Hold someone's hand, gaze into their eyes  
Walk barefoot in nature, bask in sunrise  
Choose a dance partner, go find your groove  
Do tai chi or yoga, mindfully move  
Share a massage, enjoy healing touch  
Focus on one thing, and don't think too much  
Help someone in need, donate to a cause  
Play games, meditate, read stuff from bookstores  
Turn off your screens, get a good sleep  
De-clutter, spark joy, love what you keep  
Make time for a hobby, play chess, fly a kite  
Make use of your hands, draw, paint, sew or write  
Dig around in a garden, pick up a guitar  
Slip into a bathtub, sauna, or spa  
Care for a pet, take up a sport  
Go on vacation, make your home a resort  
Lie in a hammock, release pent-up stress  
Relax and do nothing, then do even less  
Have a laugh, share a joke, give someone a kiss  
Say a prayer, chant a mantra, follow your bliss

# The Antidote to Fear



Foster love of poetry  
Express yourself through dance  
Fill your life with fun and joy  
Friendship and romance

Focus on the things you want  
Be the change you want to see  
Spread goodwill to all you meet  
Live fearless and free

Dr. Marc

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<https://linktr.ee/drmarcextremewellness>