

# Mindful Eco-Wellness

Living life to maximize health, happiness, and environmental sustainability

Bruce Barrett MD PhD  
Department of Family Medicine & Community  
Health  
School of Medicine and Public Health  
University of Wisconsin, Madison

Awareness, Care, and Sustainability for our  
Earth

7 March 2025    Webinar

# ***Mindful Climate Action***

[www.fammed.wisc.edu/mca/](http://www.fammed.wisc.edu/mca/)



## **Mindful Eco-Wellness: Steps Toward Personal and Planetary Health**

**Bruce Barrett, MD, PhD<sup>1</sup> , Sarah Walters, BS<sup>1</sup>,  
Mary M. Checovich, MS<sup>1</sup>, Maggie L. Grabow, PhD, MPH<sup>1</sup>,  
Cathy Middlecamp, PhD<sup>2</sup>, Beth Wortzel, MA, LSCW<sup>3</sup>,  
Kaitlin Tetrault, MB<sup>4</sup>, Kevin M. Riordan, BA<sup>5,6</sup>, and  
Simon Goldberg, PhD<sup>5,6</sup>**

Global Advances in Integrative Medicine and Health  
Volume 13: 1-13

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DOI: 10.1177/27536130241235922

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Image courtesy of Jason Vargo 2016



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Review

Climate change, human health, and epidemiological transition

Bruce Barrett<sup>1</sup>, Joel W. Charles, Jonathan L. Temte



Article

## Mindfulness and Climate Change Action: A Feasibility Study

Maggie Grabow<sup>1,2</sup>, Thomas Bryan<sup>3</sup>, Mary M. Checovich<sup>1</sup>, Alexander K. Converse<sup>4</sup>, Cathy Middlecamp<sup>3</sup>, Margaret Mooney<sup>5</sup>, Elisa R. Torres<sup>6</sup>, Samuel G. Younkin<sup>2</sup> and Bruce Barrett<sup>1,\*</sup>



Preventive Medicine Reports

Volume 28, August 2022, 101878



## Health and sustainability co-benefits of eating behaviors: Towards a science of dietary eco-wellness

Bruce Barrett

## Behavioral Eco-Wellness

by Bruce Barrett

*Sustainability* 2024, 16(11), 4536; <https://doi.org/10.3390/su16114536>



## Imagining Eco-Wellness: A Scoping Review of Interventions Aimed at Changing Individual Behaviors to Promote Personal Health and Environmental Sustainability

Brandon R. Kim, MD, MPH; Maggie L. Grabow, PhD, MPH; Sarah Walters, BS; Sabrina Rateike, BS; Mary Hitchcock, MA, MLS; Bruce Barrett, MD, PhD



Article

## An Environmental Impact Calculator for 24-h Diet Recalls

Thomas Bryan<sup>1,\*</sup>, Andrea Hicks<sup>2</sup>, Bruce Barrett<sup>3</sup> and Catherine Middlecamp<sup>1</sup>



## Goal: Increase Health & Happiness while Decreasing Carbon Footprint



[www.myhealthylivingcoach.com/find-happiness-can-improve-health/](http://www.myhealthylivingcoach.com/find-happiness-can-improve-health/)



<https://as2.ftcdn.net/v2/jpg/>

Learn and practice **Mindfulness** to

**Reduce Stress,**

**Enhance Awareness,**

and support the **Health Behaviors**

that also promote **Environmental Sustainability**

**Social and behavioral factors account for >50% of morbidity and mortality.  
(Health care, genetics, and physical environment each contribute <20%)**

**Upwards of 60% of humanity's carbon footprint comes from  
greenhouse gas emissions traceable to choices and behaviors  
at the individual and household level.**

**Many/most of the choices & behaviors that enhance health are also low carbon.**

- Marmot MG. Social differentials in health within and between populations. *Daedalus: Journal of the American Academy of Arts and Sciences*. 1994;123(4):197-216.
- Petrovic D, de Mestral C, Bochud M, et al. The contribution of health behaviors to socioeconomic inequalities in health: a systematic review. *Preventive Medicine*. 2018;113:15-31.
- Fernández-Ballesteros R, Valeriano-Lorenzo E, Sánchez-Izquierdo M, Botella J. Behavioral Lifestyles and survival: A meta-analysis. *Front Psychol*. 2022;12:786491.
- Ivanova D, Stadler K, Steen-Olsen K, et al. Environmental impact assessment of household consumption. *Journal of Industrial Ecology*. 2016;20(3):526-536.
- Druckman A, Jackson T. Understanding households as drivers of carbon emissions. In: *Taking stock of industrial ecology*. Springer, Cham; 2016:181-203.
- Merz JJ, Barnard P, Rees WE, et al. World scientists' warning: The behavioural crisis driving ecological overshoot. *Sci Prog*. 2023;106(3):00368504231201372.

# Drive less, Walk and Bike More

## Avoid air travel

### Use buses and trains instead



[www.zifflaw.com](http://www.zifflaw.com)



dreamstime.com

ID 187614109 © Sabina Ac

<https://thumbs.dreamstime.com/>

## Plogging: Picking up Litter while Jogging

a new way to stay physically fit and clean up the local environment.



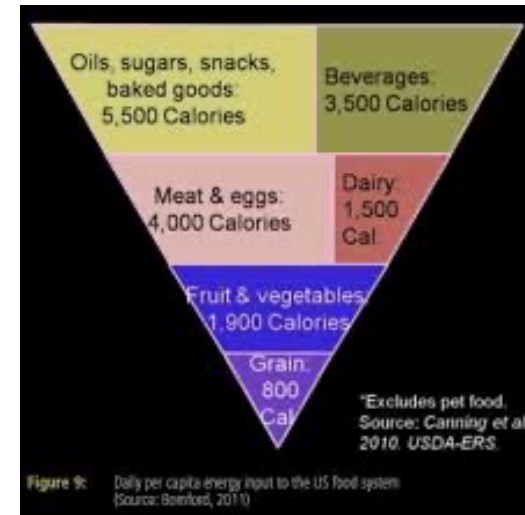
<https://www.triplepundit.com/story/2019/plogging-hot-and-environmentally-friendly-fitness-trend/83646>



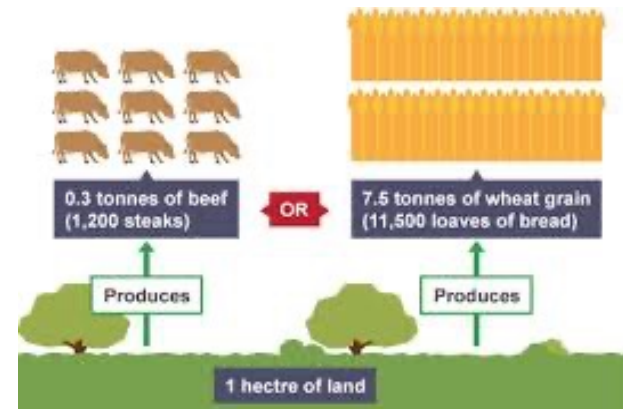
# Eat lower on the food chain!



[digestiondarryltan2h.blogspot.com](http://digestiondarryltan2h.blogspot.com)

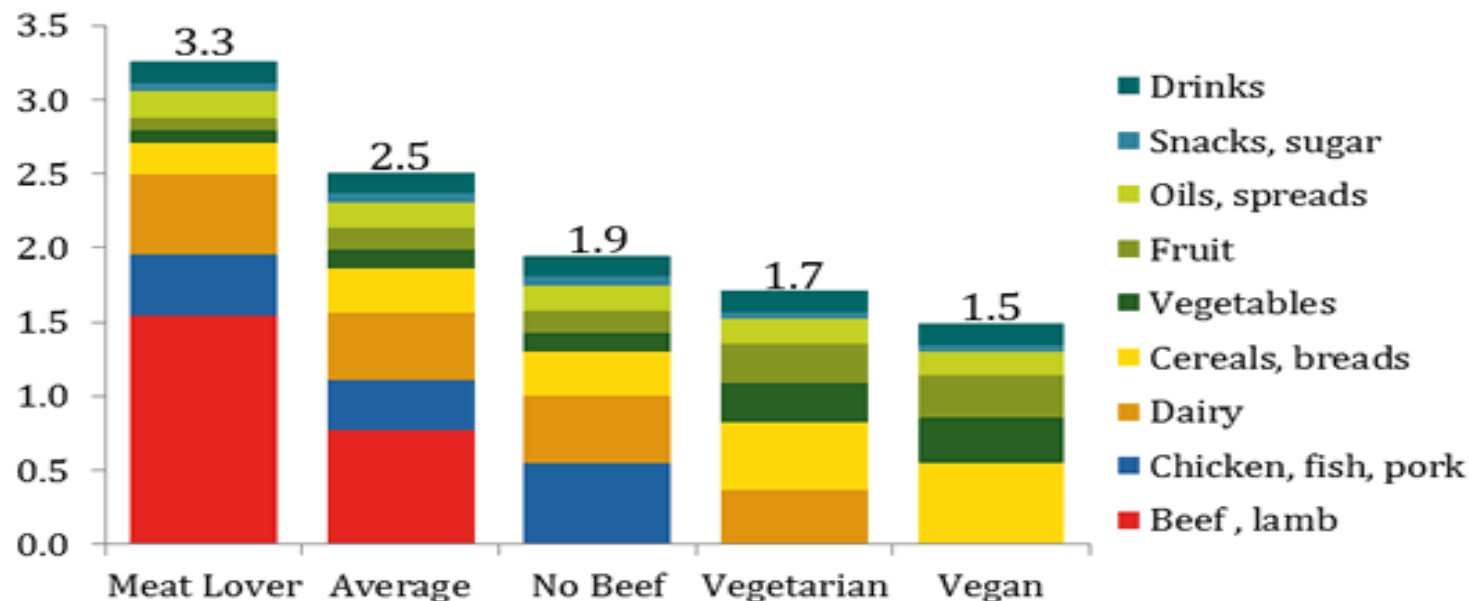


[www.businessinsider.com](http://www.businessinsider.com)



[www.bbc.co.uk](http://www.bbc.co.uk)

## Foodprints by Diet Type: t CO<sub>2</sub>e/person



Note: All estimates based on average food production emissions for the US. Footprints include emissions from supply chain losses, consumer waste and consumption. Each of the four example diets is based on 2,600 kcal of food consumed per day, which in the US equates to around 3,900 kcal of supplied food.

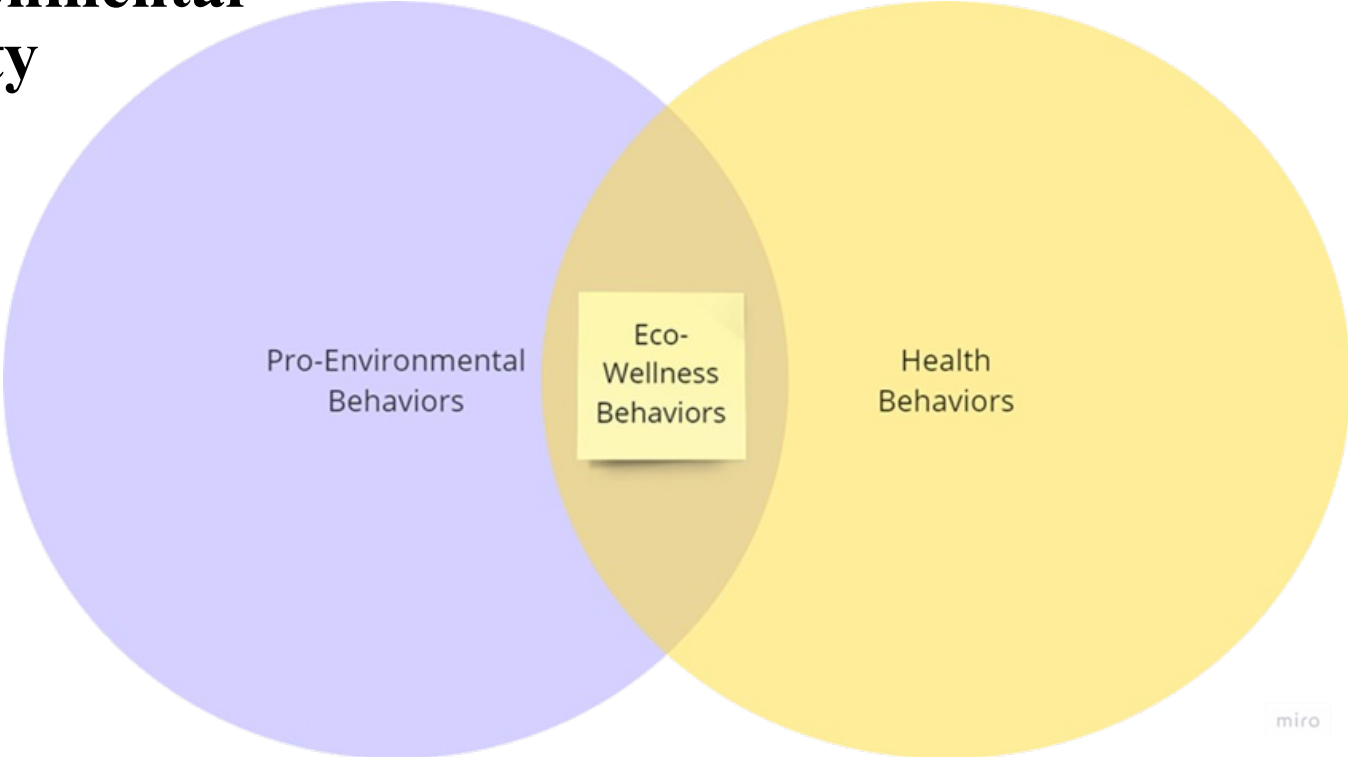
Sources: ERS/USDA, various LCA and EIO-LCA data



<https://www.greeneatz.com/foods-carbon-footprint.html>

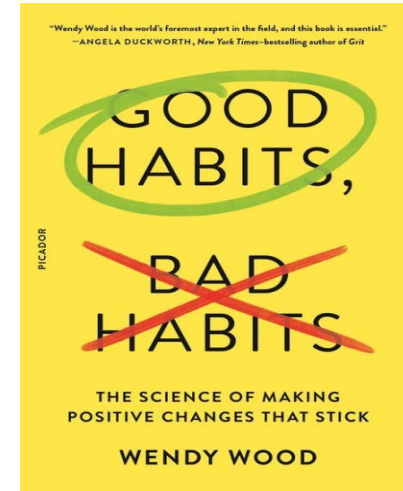
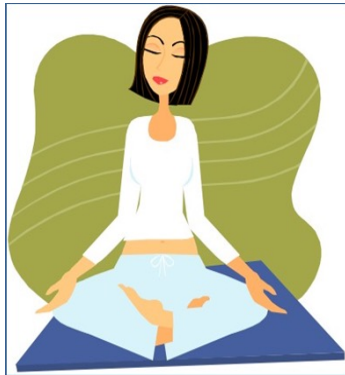
# Eco-Wellness

**Living life to maximize health,  
happiness & environmental  
sustainability**



# Behavioral Eco-Wellness

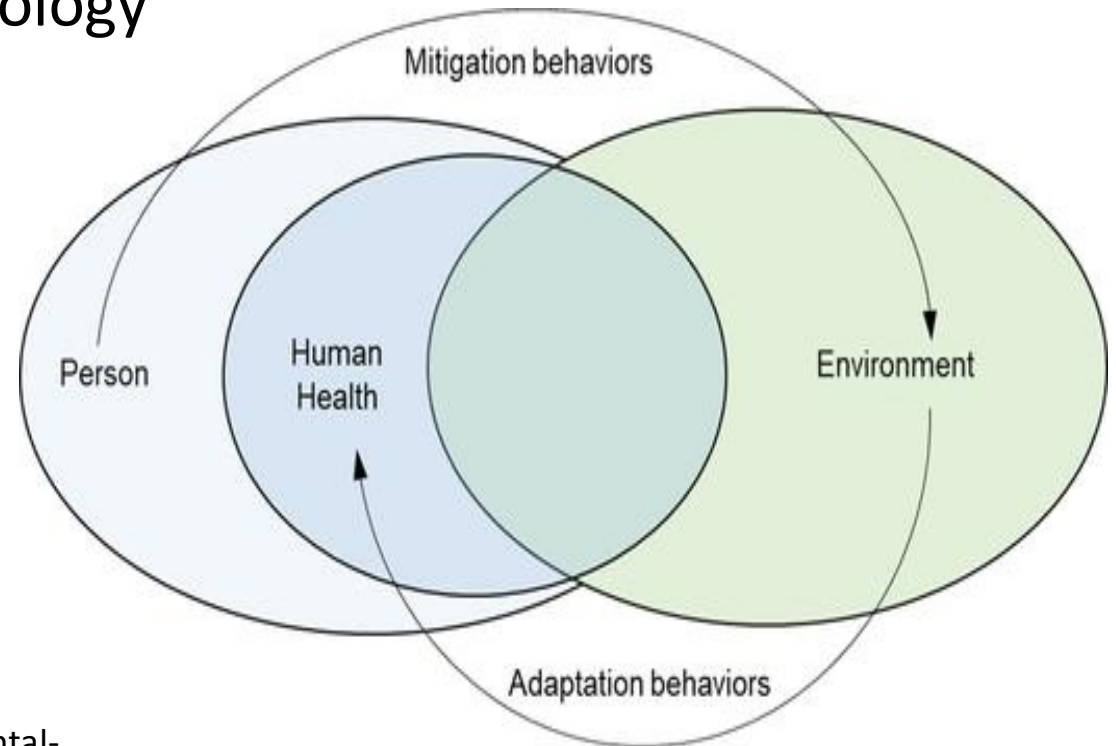
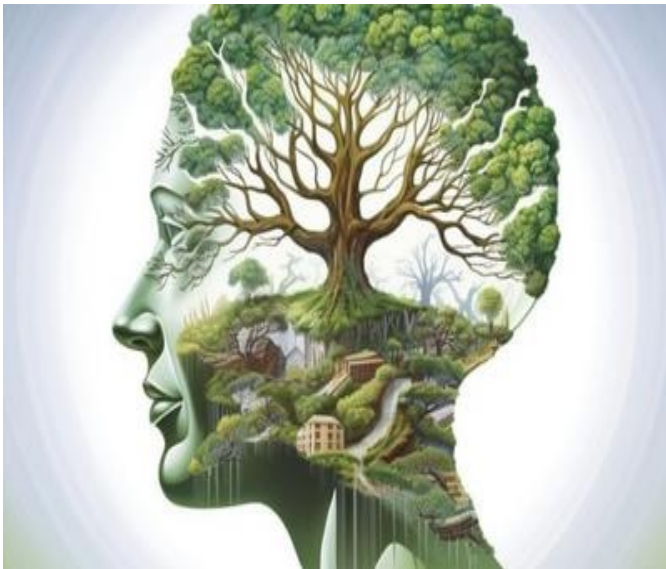
Scientific study of the choices, behaviors, and habits that promote both personal health and environmental sustainability



Barrett B. Behavioral Eco-Wellness. *Sustainability*. 2024;16(11):4536.

<https://www.ecowatch.com/50-healthiest-foods-on-the-planet-1882012154.html>

# Behavioral Eco-Wellness is related to Environmental Health Psychology

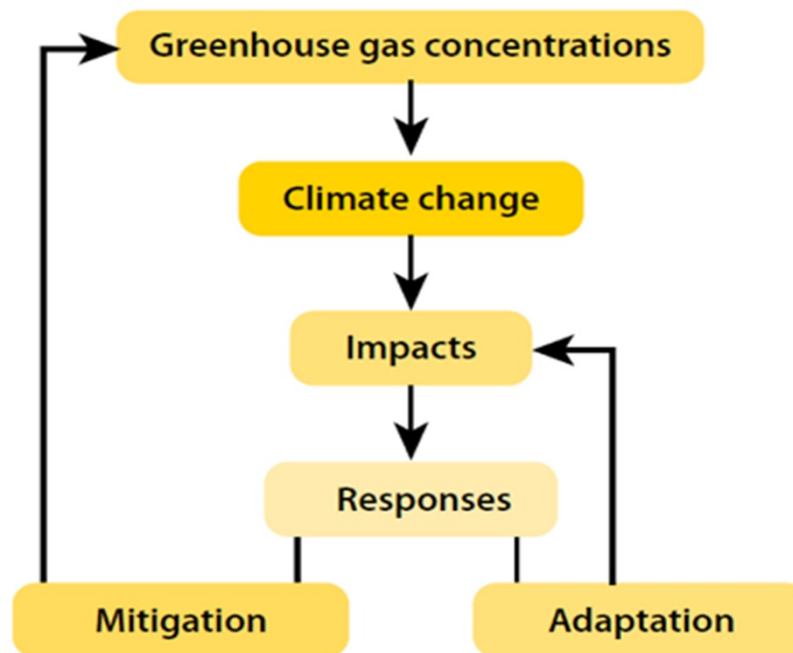


[www.all-about-psychology.com/leveraging-environmental-psychology-to-drive-ecofriendly-behavior.html](http://www.all-about-psychology.com/leveraging-environmental-psychology-to-drive-ecofriendly-behavior.html)

Inauen J, Contzen N, Frick V, et al. Environmental issues are health issues: Making a case and setting an agenda for environmental health psychology. *Eur Psychol.* 2021;26(3):219-229.

Reduce greenhouse gas emissions - **Mitigation**

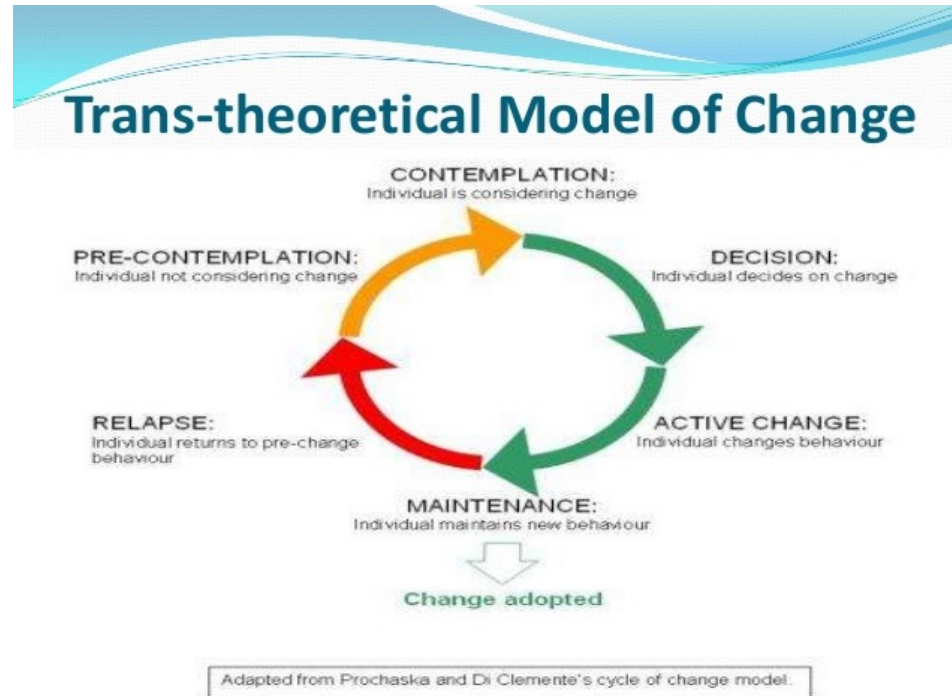
**Adaptation** - Deal with it the best we can



<http://www.cifor.org/cobam/background/adaptation-and-mitigation.html>

Stages of Change

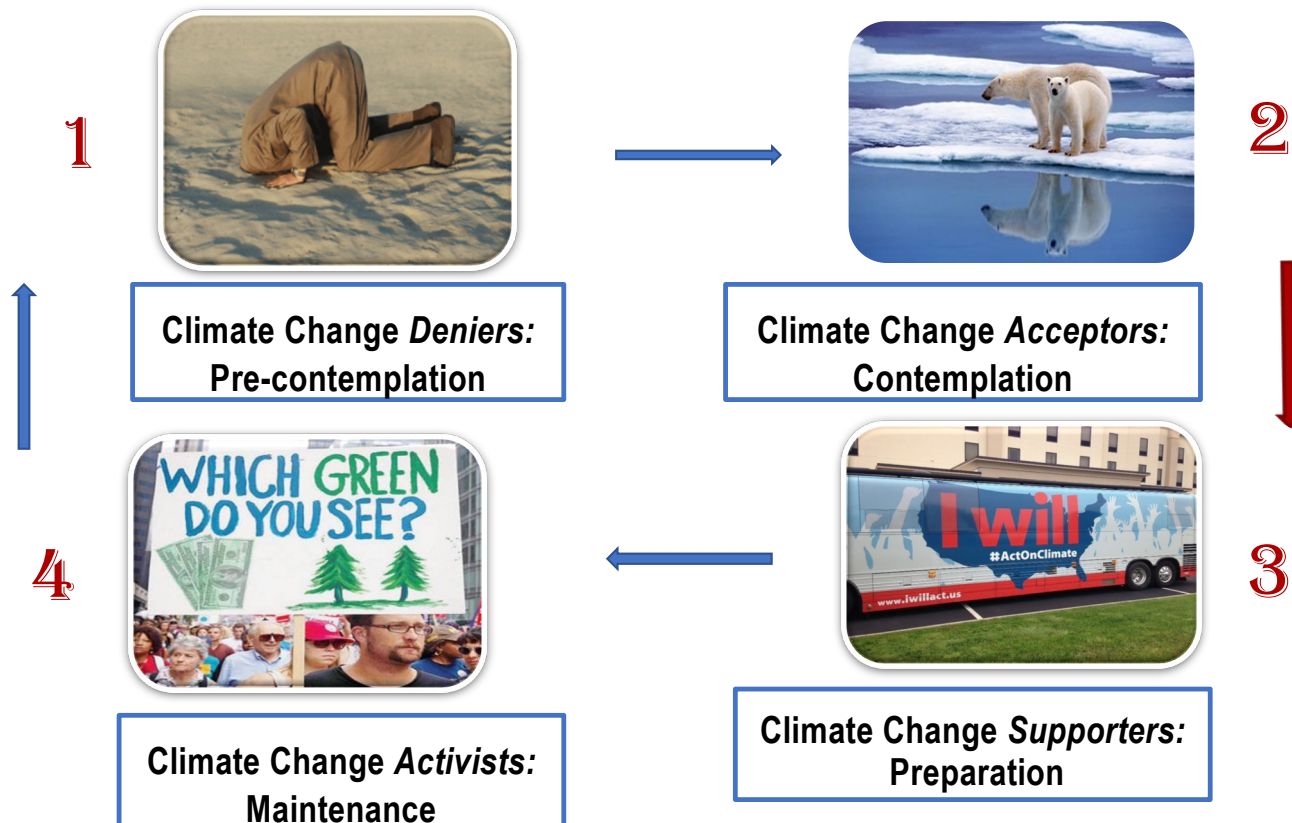
## Conceptual framework



Motivational  
Interviewing

<https://image.slidesharecdn.com/prochaskaanddiclemente-strantheoreticalmodelofchange-140210195150-phpapp02/>

- C. C. Diclemente and J. O. Prochaska. Self-change and therapy change of smoking behavior: a comparison of processes of change in cessation and maintenance. *Addict.Behav.* 7 (2):133-142, 1982.
- J. O. Prochaska, C. C. Diclemente, et al. Criticisms and concerns of the transtheoretical model in light of recent research. *Br.J.Addict.* 87 (6):825-828, 1992.
- J. O. Prochaska and C. C. Diclemente. Stages of change in the modification of problem behaviors. *Prog.Behav.Modif.* 28:183-218, 1992.



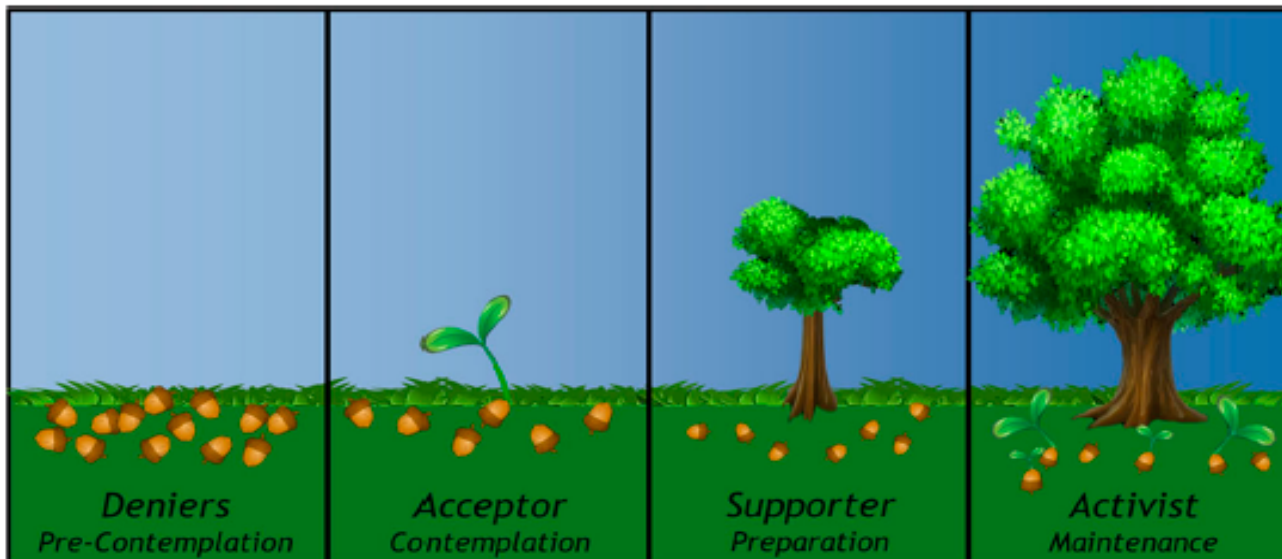
from Denial to Mindful Climate Activism



Concept Paper

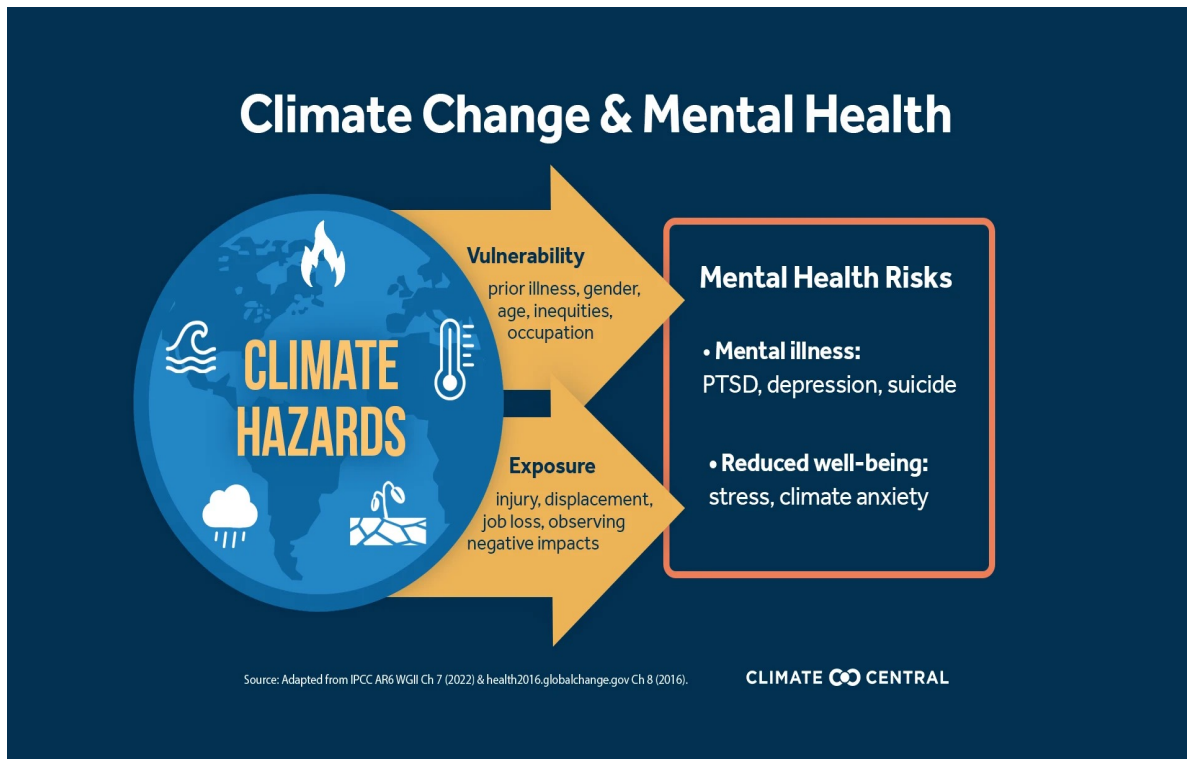
## Mindful Climate Action: Health and Environmental Co-Benefits from Mindfulness-Based Behavioral Training

Bruce Barrett <sup>1,\*</sup>, Maggie Grabow <sup>1,2</sup>, Cathy Middlecamp <sup>3</sup>, Margaret Mooney <sup>4</sup>, Mary M. Checovich <sup>1</sup>, Alexander K. Converse <sup>5</sup>, Bob Gillespie <sup>6</sup> and Julia Yates <sup>1</sup>



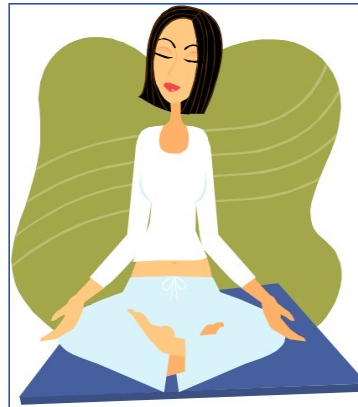
<https://www.fammed.wisc.edu/mca/>

# Climate-related Anxiety, Distress, Dysphoria



# Mindfulness Based Stress Reduction

## MBSR



**Pioneered by Jon Kabat-Zinn PhD  
Center for Mindfulness in Medicine, Health Care  
University of Massachusetts Medical School**

# Mindful Eco-Wellness Weekly Curriculum

<p><b>Week 1: Introduction</b></p> <p><b>Mindfulness Practice(s):</b> Introduction to Mindfulness</p> <p><b>Climate Action Component:</b> Climate Science/Carbon Footprint 101</p>	<p><b>Week 2: Air</b></p> <p><b>Mindfulness Practice(s):</b> Breath Awareness, Moments of Mindfulness</p> <p><b>Climate Action Component:</b> <u>Education:</u> Mindful breathing and Air Quality <u>Action:</u> Air quality improvement examples offered + invitation to develop self-selected air quality improvement action</p>	<p><b>Week 3: Water</b></p> <p><b>Mindfulness Practice(s):</b> Loving Kindness Meditation, Compassion, Self-Compassion</p> <p><b>Climate Action Component:</b> <u>Education:</u> Water Considerations for Sustainable Lifestyles <u>Action:</u> Water conservation examples offered + invitation to develop a self-selected energy conservation action</p>
<p><b>Week 4: Food</b></p> <p><b>Mindfulness Practice(s):</b> Body Scan, Mindful eating</p> <p><b>Climate Action Component:</b> <u>Education:</u> Mindful eating, Healthy and Sustainable Diets, Carbon Footprint of Food <u>Action:</u> Food conservation examples offered + invitation to develop a self-selected healthy diet for people and planet sustainability</p>	<p><b>Week 5: Transportation</b></p> <p><b>Mindfulness Practice(s):</b> Walking Meditation, Simple Yoga</p> <p><b>Climate Action Component:</b> <u>Education:</u> Transportation and Carbon Footprint <u>Action:</u> Active transportation conservation examples + invitation to develop self-selected active transportation conservation action</p>	<p><b>Week 6: Household Energy</b></p> <p><b>Mindfulness Practice(s):</b> Mindfulness of thoughts and emotions</p> <p><b>Climate Action Component:</b> <u>Education:</u> Household Energy and Carbon Footprint <u>Action:</u> Household Energy conservation examples offered + invitation to develop a self-selected household energy conservation action</p>
<p><b>Week 7: Purchasing &amp; Consumption</b></p> <p><b>Mindfulness Practice(s):</b> Mindfulness of desires and beliefs</p> <p><b>Climate Action Component:</b> <u>Education:</u> Purchasing &amp; Consumption related to Carbon Footprint <u>Action:</u> Invitation to not buy something/ anything new / focus on reusing and reducing</p>		<p><b>Week 8: Ethics</b></p> <p><b>Mindfulness Practice(s):</b> Mindfulness of core values</p> <p><b>Climate Action Component:</b> <u>Education:</u> Ethical considerations and observed inequities in the causes and consequences of climate change; Focus on Resiliency and Coping <u>Action:</u> Invitation to become more politically/socially aware and active</p>

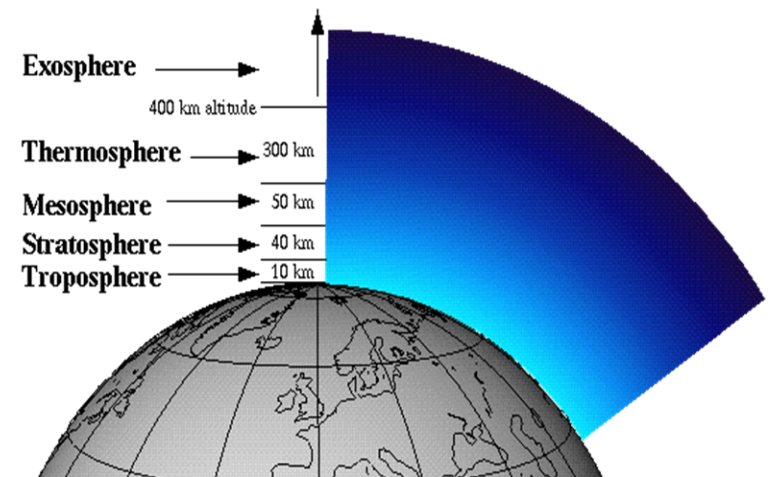
# Air - breath meditation



[www.earthfedmuscle.com/cdn/shop/articles/breathBlogLead\\_1500x.jpg?v=1608819801](http://www.earthfedmuscle.com/cdn/shop/articles/breathBlogLead_1500x.jpg?v=1608819801)



[https://as1.ftcdn.net/v2/jpg/00/64/45/64/1000\\_F\\_64456457\\_mOIFTWFhNbhqKClfHTv6PfbCpBtLAo0m.jpg](https://as1.ftcdn.net/v2/jpg/00/64/45/64/1000_F_64456457_mOIFTWFhNbhqKClfHTv6PfbCpBtLAo0m.jpg)



[www.etap.org/demo/Earth\\_Science/es8/atmosphere.gif](http://www.etap.org/demo/Earth_Science/es8/atmosphere.gif)

# Water - meditation

[www.sciencefocus.com/science/  
what-colour-is-water](http://www.sciencefocus.com/science/what-colour-is-water)



<https://oceanservice.noaa.gov/facts/oceanwater.jpg>



[https://cdn.promptden.com/images/  
1bb194b8-fd5f-4781-97c5-d9f377391970.webp](https://cdn.promptden.com/images/1bb194b8-fd5f-4781-97c5-d9f377391970.webp)

# Food - mindful eating



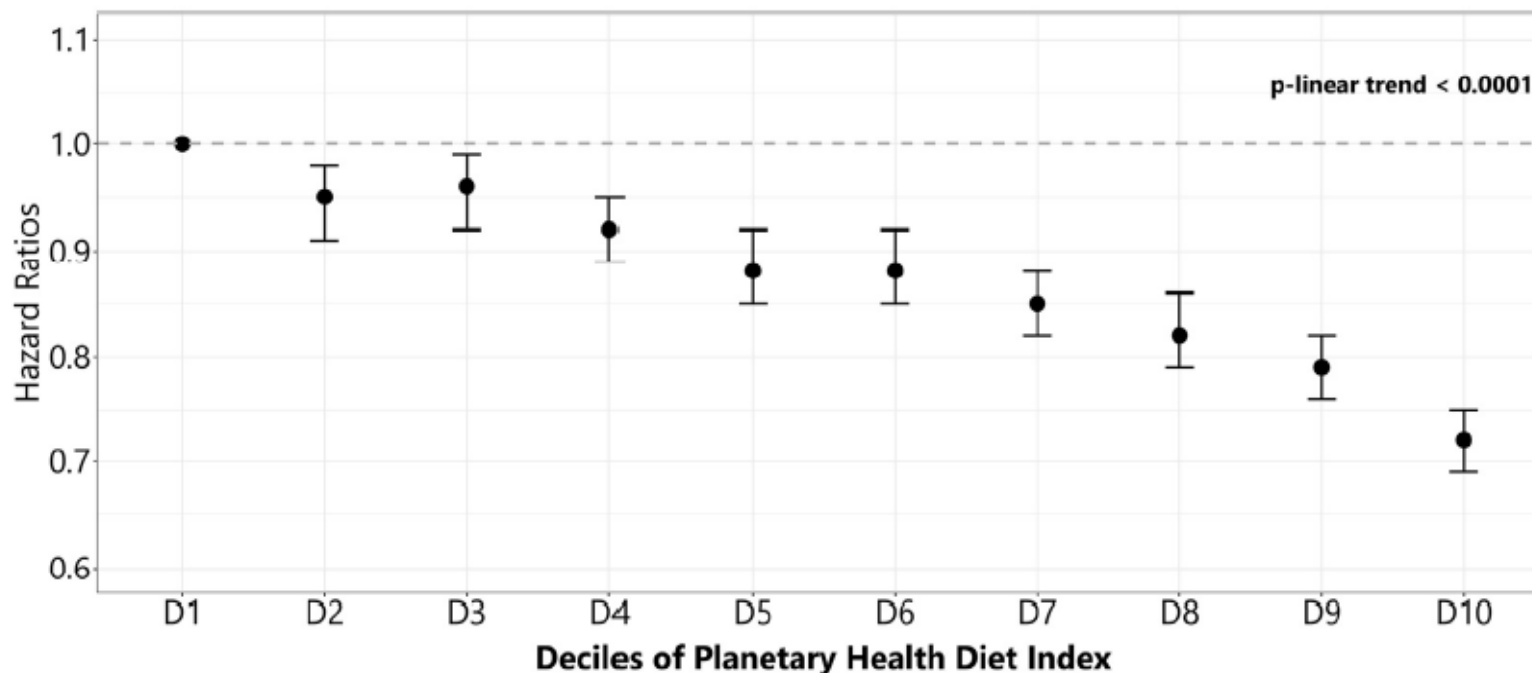
<https://www.optimumhealth.org/blog/mindful-eating-part-2>

Share your passion for <sup>real</sup> food



[www.realfoodnetwork.com.au](http://www.realfoodnetwork.com.au)





PHDI = Planetary Health Diet Index

Pooled HRs (95% CIs) for deciles of the PHDI in relation to total mortality among 206,404 males and females (54,536 deaths).

>30 years of prospective cohort observation in Nurses Health Study and Health Professionals Follow-up Study

Bui LP, Pham TT, Wang F, ..... Willett W. Planetary Health Diet Index and risk of total and cause-specific mortality in three prospective cohorts. *The American Journal of Clinical Nutrition*. 2024

Willett W, Rockstrom J, Loken B, et al. Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems. *Lancet*. 2019;393(10170):447-492.



# Movement – mindful walking

## STEP UP TO MINDFUL WALKING

Walk your way to a calmer state of mind.

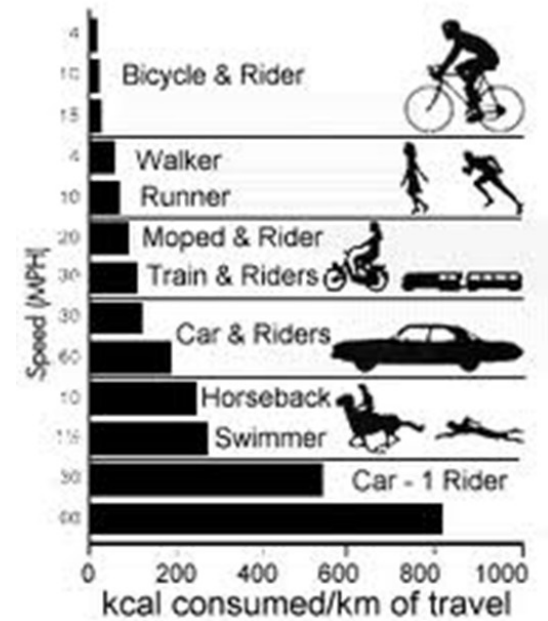
- Pick a time in your daily routine to practice mindful walking for at least five minutes.
- Concentrate on the physical sensations of walking - the sights, sounds and feelings of each step.
- If your mind wanders, gently return your focus by repeating "left, right" as you walk.



**DE STRESS MONDAY**



[www.flickr.com](http://www.flickr.com)



[www.theoildrum.com](http://www.theoildrum.com)

<https://confidentqueengenny.com/tag/mindful-walking/>

# Drive less, Walk & Bike More!

## Avoid air travel, use buses & trains

### REDUCE YOUR TRANSPORT CARBON FOOTPRINT

AVOID SHORT CAR JOURNEYS & OFFER YOUR RIDE AS CARPOOL



EXPLORE ALTERNATIVES & AVOID SHORT DISTANCES BY PLANE



KEEP YOUR CAR WELL TUNED, GET AN ELECTRIC OR HYBRID CAR, IF YOU'RE REPLACING IT



USE PUBLIC TRANSPORT



WALK OR CYCLE



TRAVEL BY TRAIN

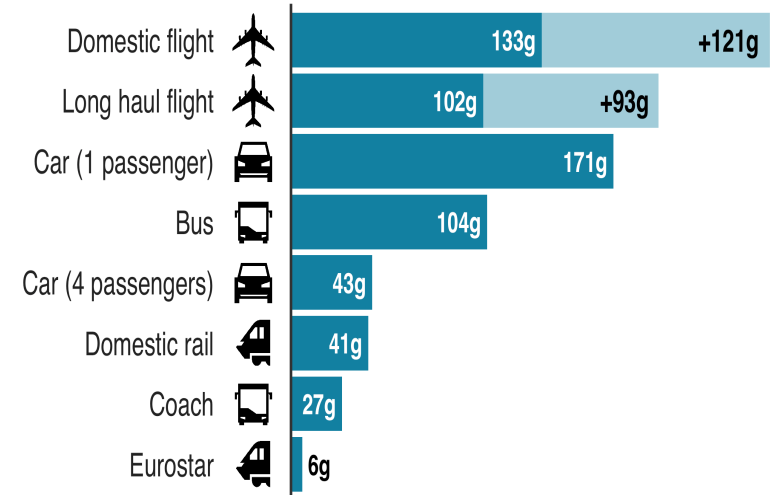
AVOID PEAK TRAVEL TIMES



### Emissions from different modes of transport

Emissions per passenger per km travelled

■ CO2 emissions ■ Secondary effects from high altitude, non-CO2 emissions



Note: Car refers to average diesel car

Source: BEIS/Defra Greenhouse Gas Conversion Factors 2019



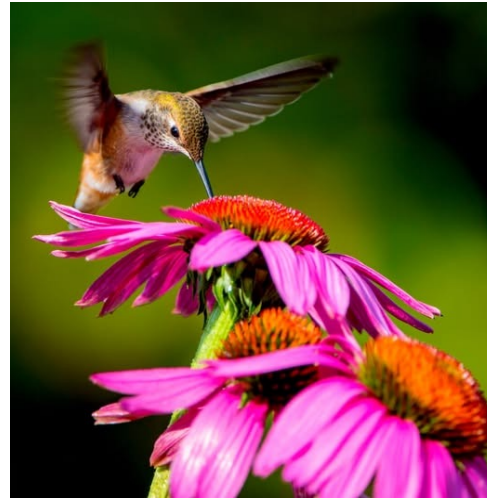
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<https://images.squarespace-cdn.com/content/v1/5788b7b16a4963f2a542d038/1631176348807-NNG3H37JCJ8EO5VUADG2/transport-carbon-footprint.jpg>

# Nature – nature immersion, forest bathing



<http://kevingaston.com/heritability-of-nature-experience/>



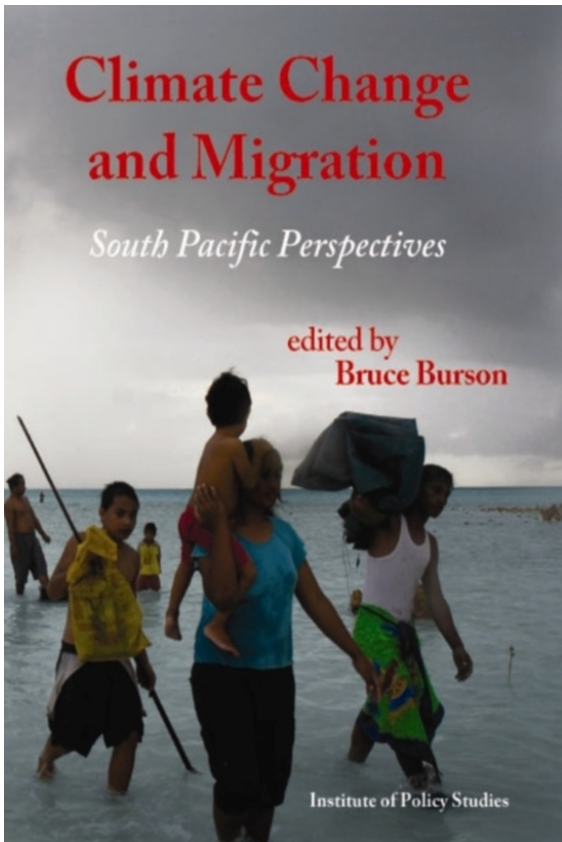
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<https://unsplash.com/photos/a-beach-with-waves-and-mountains-in-the-background-P72N1EjOQOw>



[www.nathab.com/blog/rain-forest-ecotourism-adventures/](http://www.nathab.com/blog/rain-forest-ecotourism-adventures/)

# Ethics and Values

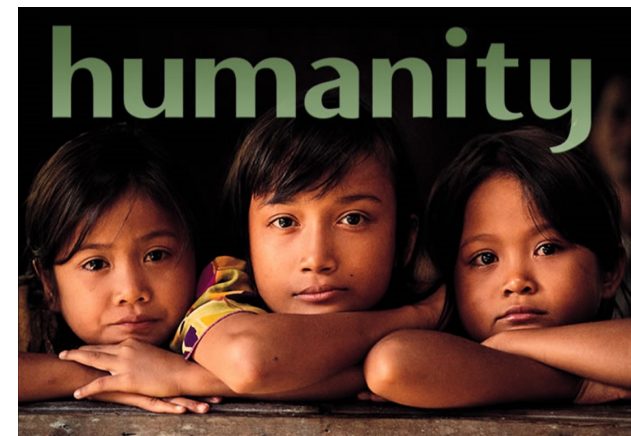


[https://valuesofthewise.com/  
what-does-moral-values-mean/](https://valuesofthewise.com/what-does-moral-values-mean/)

<https://snydermediations.com/how-to-balance-the-scales-of-justice/>



<http://www.humanity.org/>



# Mindful Eco-Wellness: Steps Towards Healthier Living

