

# The Crofter: Sustainable Communications

SECTION EDITOR



Kimi Uegaki  
kimi@iwrite.nu

## Editorial

Greetings from the croft. I've been trying out some carbon footprint calculators and there was something about seeing how flying "affected my numbers" that reinforced my decision to limit my travel within Europe to train/boat/car, and be very selective as to future air travel. According to the United Nations Framework Convention on Climate Change Lifestyle Calculator,<sup>1</sup> my carbon footprint was 6.60 tonnes CO<sub>2</sub>e and family-related inter-continental travel accounted for a quarter of this. When I used the UN carbon footprint calculator<sup>2</sup> to estimate the footprint of my family of four, air travel accounted for more than half. (My next step is looking into the various carbon offset options as I can't avoid air travel when visiting family and friends in Canada. But more on offset options at another time.)

Getting back to reinforcement, I appreciate this issue's contribution by Egid van Bree, MD, who was also a speaker during our Expert Seminar Series on Sustainability in November 2022. In his article, Dr van Bree expands on the complementary concept of the handprint, in which actions that increase our handprint increase the health of our planet. I found it motivating to see how we can increase our handprint on different levels and how medical and scientific writers are well-equipped to have impact. This issue of the Crofter also includes a follow-up interview with Dr van Bree to learn more about his volunteer work with the Dutch Green Health Alliance, which is a thriving non-for-profit network that aims to make the healthcare system in the Netherlands sustainable through sharing knowledge and advocacy. Coincidentally, since he currently

works in Leiden, which is a short bike ride away from where I live, we were able to meet and talk over lunch – a fun bonus in the process!

And now speaking of food, please check out this issue's recipe. It's quick to prepare so it's a great workday dinner idea and can help convince people that tofu can be tasty 😊.

Best, Kimi

1. Lifestyle Calculator [cited 2023 July 3]. Available from: <https://lifestylecalculator.doconomy.com/unfccc/>
2. UN Carbon Footprint Calculator [cited 2023 July 3]. Available from: <https://offset.climateutralnow.org/footprintcalc>

## Why environmental sustainability requires us to focus on our handprint – and write about it

### Egid van Bree

The Dutch Green Health Alliance  
egid\_van\_bree@live.nl

doi: 10.56012/avhf1452

**E**nvironmental sustainability has gained increasing attention in the healthcare sector – and likewise, in medical journals. Historically, September 2021 marked an interesting event as over 200 medical journals jointly published a call for emergency action to limit global temperature increase.<sup>1</sup> Much has continued to happen since then, with major medical journals frequently publishing on the health effects of environmental change and growth of dedicated daughter journals such as the *Lancet Planetary Health*. Why has this interest been growing so rapidly and how might medical writers positively shape its development?

### Threatening our health

Human-induced environmental change, such as climate change, is one of the biggest threats to global health. Annual reviews by the Lancet Countdown Commission on health and climate change clearly summarise the consequences of the increased frequency of heatwaves, increased likelihood of extreme weather events, increased spread of infectious disease, and corresponding economic losses.<sup>2</sup> These pressing findings are consistently paired with an overview of the potential health benefits of coordinated climate action and climate justice. Especially the vulnerabilities of minorities and populations in the Global South need to be considered. According to the authors of many published comments and editorials, the gravity of the health effects, and the opportunity to still improve health outcomes, serve as an urgent call to action for healthcare professionals to raise their voice.

Meanwhile, the healthcare sector itself contributes to environmental change by

constituting around 4% to 5% of the global carbon footprint and frequently larger shares in high-income countries.<sup>3</sup> Research in the Netherlands, for example, indicates that the Dutch healthcare sector accounts for 7% of the annual carbon footprint and 13% of raw material extraction<sup>4</sup> – a stark contradiction when considering healthcare's all-time mission to heal and prevent harm. Not surprisingly, many countries have a growing movement of bottom-up healthcare initiatives that strive to make healthcare delivery more sustainable. In addition, multiple European governments have made an explicit pledge since the 2021 UN Climate Change Conference in Glasgow to ambitiously reduce healthcare's negative impact on the environment, in line with the European Green Deal.

### Reducing carbon footprint

A quickly expanding body of literature focuses on more detailed examinations of the carbon

footprint of healthcare and ways to reduce its impact. Especially in the acute care sector, evidence is starting to accumulate of the environmental impacts of single-use medical items, medication such as anaesthetic gasses, and energy usage of highly demanding heating, ventilation, and air conditioning systems.<sup>5</sup> Where possible, recommendations to reduce the carbon footprint are made based on life cycle assessments of products or care pathways – an extensive methodology for environmental impact quantification. Generally, one can rank the expected environmental benefit of choices using the “R-levels” of circularity: to Refuse or Reduce usage of a product or service (largest benefit) or to Recycle or Recover once disposing (smallest benefit).<sup>6</sup> The higher the level, the more environmentally friendly the choice is (see Figure 1). Much work remains to be done, however, to make underlying research data findable, accessible, interoperable, and reusable.

Carbon footprint thinking, however, might be limited in its reductionist perspective on the impact of healthcare. Essentially, the focus of carbon footprint research is to quantify and minimise the negative effects of regular care delivery – a type of environmental efficiency, in a way. The healthcare sector is therein framed as an isolated service, which needs to transition to a more environmentally sustainable way of operating. In order to do so, suggestions have been made previously to make environmental sustainability an integrated characteristic of healthcare quality assessment.<sup>7</sup> Yet in daily practice, this frequently raises discussions regarding compatibility with patient safety, maintenance of high-quality care, and sectoral challenges such as financial and staffing issues. Moreover, focusing on the carbon footprint of healthcare might downplay concern for other environmental impacts such as water usage and ecotoxicity.

### A positive alternative

Handprint-thinking can be a positive and activating addition to further develop our engagement with environmental sustainability. Unlike footprint-thinking, it requires us to think about ways to consciously *increase* our impact in contributing to a healthy life on this



Figure 1. The R levels of circularity

## Increasing positive environmental impact (the handprint)



Figure 2. The handprint levels of positive environmental impact

planet.<sup>8</sup> We can have an impact on a micro, meso, or macro level (Figure 2). For example, by making food choices that benefit both our health and the environment (micro), by partaking in local initiatives for more vegetation in the places we live (meso), and by advocating for policies that address health inequities which would be enlarged due to climate change (macro). In medicine, this coincides with a transition to prevention of disease through healthy behaviour and healing environments, which frequently overlaps with climate-friendly measures.<sup>9</sup> In literature, these environmentally friendly and health promoting options are frequently referred to using the term “co-benefits”.

The healthcare sector could be one of the

**Especially in the acute care sector, evidence is starting to accumulate of the environmental impacts of single-use medical items**

leading voices in a regenerative movement that strives to safeguard planetary health. On an individual level, healthcare professionals are regarded as a trusted source for personal advice and healthy behaviours. On a societal level, they have the authority – and quite possibly the responsibility – to represent public interests in health and wellbeing. This also became apparent during the last coronavirus pandemic, as health professionals took a leading role in vaccination campaigns and media debates regarding preventive measures. A recent review of physicians’ perspectives to prescribe interventions or behaviours which benefit both the patient’s and the planet’s health, however, pointed out that understanding and guiding policy statements to

be able to do so are frequently missing.<sup>10</sup>

### Picking up the pen

Medical writers and communicators are naturally in a strategic position to pick up the pen to lead and inspire action for planetary health. As previously written in this journal: “Sustainability is not just a lifestyle choice – it is a professional responsibility.”<sup>11</sup> Communication regarding the co-benefits for planetary and human health is crucial to drive conversation and knowledge attainment regarding the benefits of handprint-thinking. Education of healthcare professionals, and related industries, should be one of the key focus areas to get the message of planetary health across.<sup>12</sup> In addition, medical writers can engage their readers to consider implications of research and healthcare policies for both the planet and the individual, and aid in valorisation of findings in environmentally inclusive policies. The audience of these writings can vary: a small group



in one's network (micro), a larger company or organisation (meso), or an institute for policymaking on a national and international (macro) level.

The urgency of the global climate and environmental crises requires each of us to act on a level that suits our (professional) interests and capabilities. Possibilities to make a positive contribution to planetary health are plenty, including the way medical writing is practiced and the content of the writing itself. The choice really lies with each and every individual to make. Kindly do ask yourself: "How am I part of the solution today?"

### Disclaimers

The opinions expressed in this article are the author's own and not necessarily shared by the Leiden University Medical Centre (LUMC) or EMWA.

### Disclosures and conflicts of interest

The author declares no conflicts of interest.

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### Author information

**Egid van Bree, MD**, is an early-career researcher at the Leiden University Medical Centre (LUMC) and board member at the Dutch Green Health Alliance (Groene Zorg Alliantie). He focuses on environmental sustainability in healthcare – specifically environmental impact assessment of care pathways – and on awareness and education regarding Planetary Health in the healthcare sector.

## Sustainability spotlight: Egid van Bree, MD

**Kimi Uegaki**  
kimi@iwrite.nu

doi: 10.56012/cpaw5777

**Medical Writing (MEW):** Hi Egid, thank you for taking the time to speak with us to tell us about how to integrate sustainability in your work as a medical doctor and researcher. To start, can you tell us how your involvement with sustainability began and how you came to be involved with the Dutch Green Health Alliance (Groene Zorg Alliantie)?

**EvB:** When I was a medical student, I was a member of Dutch Medical Student Union and there was a specific working group looking at sustainability issues in healthcare. I served in this working group and through this, I met other like-minded healthcare professionals and groups that aimed to make healthcare more sustainable; some were also focussed on international/global health and planetary health. Around two years ago (during the peak of the COVID pandemic), our working group and these other groups (about 11 or so) organised an online meeting to see how we could support each other by collaborating and sharing knowledge. This online meeting was the start of the Green Health Alliance.

Our association is now a thriving network of 40+ so-called “national commissions” and 100+

“Planting seeds” and grassroots action are ways to overcome resistance and facilitate change.

“green teams”. National commissions are groups organised at the level of national healthcare professional associations (e.g., gastroenterologists, general practitioners, nurses). Green teams are local groups, for example, a given department in a hospital, that try to do things on a daily basis. Our two key pillars are 1. to help connect people and groups so they can collaborate and share knowledge; and 2. to act as a voice for change through advocacy and involvement in the political discussion and debate in the Netherlands.

**MEW:** In speaking with others involved in sustainability endeavours, it seems that a common challenge that they encounter is overcoming the resistance in others. Have you encountered “resistance”? If so, in what form and can you share how you overcame this resistance? Can you share a “success story” with us?

**EvB:** This past May, I was involved as a reporter during the Green Week of the Royal Dutch Medical Association (Koninklijke Nederlandse Maatschappij tot bevordering der Geneeskunst, [KNMG]). I think this is a nice example of how “planting seeds” and grassroots





# Szechuan Eggplant with Tofu

Makes 4 servings

Adapted from the Vancouver Sun Six O'Clock Solutions

Pacific Press Books, 1995 (my go-to for workday dinners)

## Ingredients

- 350 g aubergines or Japanese eggplants, trimmed and cut into 5 x 1 cm pieces
- 90 ml vegetable oil
- 15 ml chopped garlic
- 15 ml chopped fresh ginger
- 20 ml hot bean sauce
- 125 ml vegetable stock
- 25 ml dark soy sauce
- 5 ml sugar
- 170 g packaged fried tofu, diced
- 7 ml sesame oil
- 7 ml Chinese brown vinegar or rice vinegar
- 45 ml chopped green onions, divided

## Directions

- In a wok or large heavy frying pan, heat vegetable oil over high heat. Add aubergine/eggplant, reduce heat to medium-low; stir-fry until soft and golden (about 5 min). Remove and set aside.
- Add garlic, ginger, and bean sauce to the wok/frypan. Stir-fry for 10 seconds. Add stock, soy sauce, sugar; bring to boil over medium-heat. Add tofu; cook for 1 minute.
- Then return eggplant to the frypan and cook for 2 minutes or until the sauce has been absorbed. Add sesame oil, vinegar, and 30 ml green onions. Stir until heated through.



- Place in a serving dish and sprinkle with remaining 15 ml green onions.
- Serve with rice.

## Tips

- If you don't have fried tofu on hand, you can use pressed firm tofu instead.
- Press tofu by wrapping the tofu between a cheese cloth or tea towel, placing it on a plate, and putting cutting board on top. Let sit for about 30 minutes to get the moisture out.
- Hot bean sauce is also known as "chilli bean paste", "spicy broad bean paste", "broadbean, chilli sauce" or "tobanjan" to name a few.

action is a way to overcome resistance and facilitate change.

Going back to the Dutch Medical Student Union, this union is a branch of the KNMG, and our working group pushed to get sustainability onto the KNMG's agenda. However, at the time, there was little recognition from the top to make this a priority. But now, 2 to 3 years later, the KNMG started hearing how local groups of their membership wanted to organise local activities simultaneously to raise awareness and promote sustainability. Thus, they realised that their members are interested in sustainability and got involved as the coordinating entity, and the Green Week event was born. Parallel to this, draft policies on healthcare and sustainability from the EU were being created and the KNMG needed support from someone with this expertise during the review process. The board members, who knew me from the time I was a part of the student working group, consulted me as an expert to advise on these policies. This eventually led them to hire me as a reporter during the Green Week to report on the different activities. In one district, they showed films on sustainability, another held activities in an edible forest, and others held lectures and discussions. During the week, I also worked together with a colleague who acted as a cameraman, and at the end of each day, we created short videos to summarise the highlights to upload onto the KNMG website.

**MEW:** It sounds like it was a fun, intense week as a reporter. And this is indeed interesting and encouraging to hear how your earlier work and efforts and grassroots activity led the KNMG to embrace sustainability. Do you have any other last tips to share, especially to get governing bodies to act?

**EvB:** Yes, when dealing with entities that are slower to change, be patient and persistent while pushing as many buttons as possible. Repeat arguments. And when you invite them to participate, make it easy for them to participate. Do you know that train analogy? It's like you do the work to get the train moving and then invite the others to jump on. And plant as many seeds as possible.