



This is a repository copy of *Task force greener gastroenterology: towards eco-friendly practices in healthcare*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/198841/>

Version: Published Version

Article:

Duijvestein, M. orcid.org/0000-0003-4814-9376, Sidhu, R., Hann, A. et al. (2 more authors) (2023) Task force greener gastroenterology: towards eco-friendly practices in healthcare. United European Gastroenterology Journal. ISSN 2050-6406

<https://doi.org/10.1002/ueg2.12391>

Reuse

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: <https://creativecommons.org/licenses/>

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

Task force greener gastroenterology: Towards eco-friendly practices in healthcare

“We are living on this planet as if we had another one to go to.”

Terry Swearingen, Nurse & Winner of the Goldman Environmental Prize in 1997.

Climate change presents a significant obstacle for the global community as rising levels of carbon dioxide in the atmosphere are contributing to environmental shifts, including extreme weather patterns, floods, and the spread of infectious diseases. These changes have a negative impact on human health.¹ Remarkably, the healthcare industry is one of the major contributors to environmental pollution, generating a significant amount of waste, greenhouse gas emissions and consuming a high amount of energy and natural resources,² which paradoxically has an adverse effect on public health. The use of medical equipment and medications, daily commutes by healthcare providers and patients, and waste processing all contribute to these emissions.³ Previous research has shown that the gastrointestinal endoscopy department generates the second highest amount of waste from procedural-related activities, with 0.50–2.1 kg generated per endoscopic procedure, the majority of which is incinerated.⁴

With increasing concerns over climate change and environmental degradation, it is becoming more important than ever to ensure that our society is doing its part to reduce its carbon footprint. Within our strategic plan 2023–2026, the United European Gastroenterology (UEG) Council clearly defines its core values (including integrity, quality, diversity, independence, respect, accountability, transparency, and sustainability) as an inclusive concept for all strategic drivers. Furthermore, we demonstrate our commitment to offset our ecological impact.⁵ For example, we strive to reduce the environmental impact of the UEG Week by reducing to the minimum the use of plastic (catering, packaging), working with suppliers who are “green” oriented, choosing venues which are easily accessible by public transportation, reducing single-use giveaways, providing pocket programme and lanyards made from recycled material and attempting to recycle them after the congress. Furthermore, we advise the industry (in the brochure and guidelines) to keep the

environment in mind when preparing their booths or ordering sponsored items. In order to uphold these commitments, a Task Force for Greener Gastroenterology has been established. In the coming months, the task force will work on a white paper highlighting how these climate change challenges not only affect our clinical work but also the work and activities of our scientific organization, and we will provide concrete actions and recommendations to apply in both professional life and practice of our community members in hospitals, research institutes, etc. In November, an accredited UEG webinar on “Sustainability in Gastroenterology” will be provided. Furthermore, we advocate for more research on this timely topic in order to evaluate the impact of our interventions aiming to guide adaptation to low carbon alternatives. Such research will also help to identify areas where innovation is needed to promote sustainability in Gastroenterology.


Meanwhile, awaiting all these developments, daily choices can be made to lower our ecological footprint. A recent article by Siau et al. as well as the latest ESGE-European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) position statement propose several easily implementable interventions to accomplish a more sustainable practice in accordance with the classic sustainability principle of “reduce, reuse, recycle”.^{6,7} First, reducing the number of unnecessary or incorrect interventions will decrease our carbon footprint tremendously. Second, the ESGE suggests against routine use of single-use devices and proposes the use of reusable alternatives instead of disposables, such as personal protection equipment.⁸ Finally, waste that is still generated, such as packaging material, should be recycled. Sustainable waste management is relatively easy to implement in daily practice and is immediately visible in the department. This may in return motivate other employees and increase awareness of sustainability. In addition, individuals can make conscious choices to reduce their environmental impact, such as reevaluating their travel habits, reducing meat consumption,⁹ and being mindful of how their financial decisions (choosing bank and insurance providers) affect climate change.

Greener gastroenterology is an important movement that has the potential to make a real difference in reducing the impact of

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2023 The Authors. United European Gastroenterology Journal published by Wiley Periodicals LLC on behalf of United European Gastroenterology.

healthcare on the environment. By taking steps to reduce our carbon footprint, promote sustainable practices, adapt low carbon alternatives, gastroenterologists can help to build a more sustainable future for all. There is no ego in greener gastroenterology; through the combined efforts of healthcare providers, governments, and individuals, we can work towards a healthier, more sustainable future for generations to come.

Marjolijn Duijvestein¹ 
 Reena Sidhu^{2,3}
 Alexander Hann⁴
 Jeanin van Hooft⁵
 Martina Müller-Schilling⁶

¹*Department of Gastroenterology and Hepatology, Radboud university medical center, Nijmegen, the Netherlands*

²*Academic Department of Gastroenterology, Royal Hallamshire Hospital, Sheffield Teaching Hospitals NHS Trust, Sheffield, UK*

³*Department of Infection, Immunity and Cardiovascular Diseases, University of Sheffield, Sheffield, UK*

⁴*Interventional and Experimental Endoscopy (InExEn), Department of Internal Medicine II, University Hospital Würzburg, Würzburg, Germany*

⁵*Department of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, the Netherlands*

⁶*Department of Internal Medicine I, Gastroenterology, Hepatology, Endocrinology, Rheumatology and Infectious Diseases, University Medical Center Regensburg, Regensburg, Germany*

Correspondence

Marjolijn Duijvestein, Department of Gastroenterology and Hepatology, Radboud university medical center, Nijmegen, the Netherlands.
 Email: Marjolijn.Duijvestein@radboudumc.nl

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

ORCID

Marjolijn Duijvestein  <https://orcid.org/0000-0003-4814-9376>

REFERENCES

1. Watts N, Amann M, Arnell N, Ayeb-Karlsson S, Belesova K, Berry H, et al. The 2018 report of the Lancet Countdown on health and climate change: shaping the health of nations for centuries to come. *Lancet*. 2018;392(10163):2479–514. [https://doi.org/10.1016/s0140-6736\(18\)32594-7](https://doi.org/10.1016/s0140-6736(18)32594-7)
2. Karliner J, Slotterback S. Health care's climate footprint: how the health sector contributes to the global climate crisis and opportunities for action. *Health Care Without Harm*; 2019.
3. de Bruin JHT, Merkus K. Een stuur voor de transitie naar duurzame gezondheidszorg. *Gupta Strategists*; 2019.
4. Namburam S, von Renteln D, Damianos J, Bradish L, Barrett J, Aguilera-Fish A, et al. Estimating the environmental impact of disposable endoscopic equipment and endoscopes. *Gut*. 2022;71(7):1326–31. <https://doi.org/10.1136/gutjnl-2021-324729>
5. Cortez-Pinto H, van Hooft J, Koletzko B, Lühr JM. UEG's prospects for the future: strategic plan 2023-2026. *United Eur Gastroenterol J*. 2022;10(10):1202–4. <https://doi.org/10.1002/ueg.2.12335>
6. Siau K, Hayee BH, Gayam S. Endoscopy's current carbon footprint. *Tech Innov Gastrointest Endosc*. 2021;23(4):344–52. <https://doi.org/10.1016/j.tige.2021.06.005>
7. Rodriguez de Santiago E, Dinis-Ribeiro M, Pohl H, Agrawal D, Arvanitakis M, Baddeley R, et al. Reducing the environmental footprint of gastrointestinal endoscopy: European society of gastrointestinal endoscopy (ESGE) and European society of gastroenterology and endoscopy Nurses and Associates (ESGENA) position statement. *Endoscopy*. 2022;54(8):797–826. <https://doi.org/10.1055/a-1859-3726>
8. Vozzola E, Overcash M, Griffing E. Environmental considerations in the selection of isolation gowns: a life cycle assessment of reusable and disposable alternatives. *Am J Infect Control*. 2018;46(8):881–6. <https://doi.org/10.1016/j.ajic.2018.02.002>
9. How to Reduce Your Carbon Footprint. A year of living better guides. *The New York Times*. [nytimes.com](https://www.nytimes.com)