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**Environmental impact of single-use versus reusable gastroscopes**

*Pioche M, Pohl H, Cunha Neves J, et al. Environmental impact of single-use versus reusable gastroscopes. Gut 2024; 73(11): 1816-1822. doi: 10.1136/gutjnl-2024-332293.*

Gastrointestinal endoscopy has been identified as a significant contributor to healthcare waste, prompting increased focus on sustainable practices. The concept of ‘green endoscopy’ refers to the process of making endoscopic procedures more environmentally sustainable by reducing waste and energy consumption. In recent years, single-use (SU) endoscopes have been marketed as a potential solution particularly around immediate availability and contamination risks. However, concern has been raised about their environment impact. In this article, Pioche *et al.,* conducted a life cycle assessment (LCA) on the use of SU versus reusable (RU) gastroscopes. An LCA describes a method of measuring the environmental impact of a product at every stage of its ‘life’ from production to disposal. Their primary aim was to compare the carbon footprint of the SU aBox system (Ambu, Ballerup, Denmark) and RU EVIS X1 system (Olympus, Tokyo, Japan).

By considering a series of environmental impact predictors (e.g., Freshwater ecotoxicity) across different components of the LCA (e.g., scope production, decontamination), they were able to show that, per procedure, SU endoscopes were associated with an added carbon footprint equivalent to 28 km of travel by fuel car. Unsurprisingly, the greatest contribution to emissions for RU gastroscopes was decontamination (2.1 kg CO2 eq (carbon dioxide equivalent), 44.7%) and for SU gastroscopes it was production (6.6 kg CO2 eq, 56.0%). When considering the collective carbon footprint of the system, inflator and washer over an estimated 10-year life expectancy, they were able to show, assuming similar patient travel patterns, RU endoscopies became more environmentally sustainable after 213 procedures per year. Pioche *et al.,* conclude that SU endoscopes are not environmentally sustainable, but they may still have a role in low-volume, remote centres to reduce patient travel where access to RU systems are limited or impractical.