Advances in digital technologies impact several aspects of nutrition and healthcare science and practice. During the COVID-19 pandemic, the NNEdPro Nutrition and COVID-19 task force, supported by the BMJ Nutrition Prevention and Health journal, produced and curated evidence-based digital repositories of nutrition-related resources and educational nutrition-related materials for healthcare professionals, policymakers and the public, tailored to different geographical regions. International research collaborations increasingly use virtual platforms to link and analyse multiple sources of data from across sectors (relating to food, nutrition, and health) with potential to gain important insights into health impact and risk prediction. National and international nutrition education initiatives based on virtual networks, including the CAN DReaM (Creating Alliances Nationally to Address Disease-Related Malnutrition) project in Canada, and the Education and Research in Medical Nutrition Network (ERIMNN) in the UK, have the potential to make nutrition education more accessible across wide geographical regions.

The rise of digital social media platforms allows for rapid dissemination of information at an unprecedented scale. Whilst this has been used to have a positive impact, it also carries a risk of harm through targeted misinformation and exploitative practice. For example, the recent WHO report into the digital marketing of breast milk substitute products revealed the predatory tactics that target vulnerable women and exploit parental health anxieties to promote a multi-billion dollar industry. On this topic, discussion in the Middle East and Pan-Africa regional networks satellite event of the Summit highlighted the need for health professionals to employ ‘traffic control on the digital information highway’.

Perhaps one of the more tangible examples of digital technology empowering healthcare practice is the proliferation of digital smart phone apps, particularly as tools in the management of chronic health conditions. Diet and lifestyle management support apps have entered the chronic disease management space. Some that utilise artificial intelligence are in development, and in some cases in clinical trials, and clinical practice. One such app designed by Diabetes Digital Media has been integrated into some NHS weight management services in the UK. These technologies aim to better understand behaviour and lifestyle change, improve patient engagement and the sustainability of lifestyle changes, and allow granular data collection and remote monitoring of outcome variables.

In developed countries, digital data platforms have been used to explore the intersection at which social determinants of health meet nutrition-related genomics and health outcomes. The challenge of severe health inequities relates closely to societal frictions and conflicts, economic market forces, and the health of education and food systems. To have the greatest impact on nutrition globally, digital technologies must account for and address health inequities that underlie the risk of malnutrition and poor health of millions of people. Furthermore, health systems do not operate in isolation. Empowering individuals and populations to live healthier lives requires a collective buy-in from the education sector. Therefore, at the Summit, several digitally-assisted educational schemes based in primary schools, community settings, medical schools, and healthcare systems in various global regions were showcased. Measuring and validating the safety and efficacy of novel digital technologies for better nutrition and health is essential for ensuring positive impacts.