According to a report by the United Nations Food and Agriculture Organization (FAO, 2021), advances in artificial intelligence are poised to revolutionize global nutrition by addressing critical environmental and health challenges. According to the United Nations Food and Agriculture Organization (FAO, 2021), traditional food manufacturing methods often pose environmental and health risks, but AI-driven solutions offer promising alternatives. However, such challenges could be dealt effectively with by utilizing a range of artificial intelligence-driven solutions. Imagine processed meat sometimes vacuum-packed with Nutri-cuisine elements so that these are ingredients for a dish, rather than cardinal vegetables or proteins, which refer to meat. There is more to the food design system than throwing together recipes to achieve a meat-like taste. AI generates design by looking at compounds and how they fit into molecular taste receptor and nutrition profiles to make something that looks good, tastes good, and serves a purpose with sapphire-grade accuracy. In the event of certain diseases, food allergies, or a lack of certain nutrients, AI can create food solutions that conventional food science cannot. For example, a project by Impossible Foods uses machine learning to engineer plant-based meat alternatives that mimic the taste and nutritional profile of traditional meat, catering to both health and environmental sustainability (Brown, 2019). Besides food processing and nutrition, diagnostics represent another critical arena where AI might potentially impact health care. Machine learning algorithms are indeed in the verge of transforming medical diagnostics. For example, a study by Rajpurkar et al. (2017) demonstrated that CheXNet, a deep-learning algorithm, achieved radiologist-level accuracy in detecting pneumonia from chest X-rays. This highlights the potential of AI to catch diseases that might escape human observation. These systems can analyze huge amounts of medical data to detect subtle patterns and risk factors that a single clinician may overlook. AI-based tools like IBM Watson Health analyze genetic data and patient histories to offer personalized treatment plans. For instance, Watson successfully identified a rare form of leukemia in a Japanese patient by analyzing mutations overlooked by human experts (Topol, 2019). When we think about predictive health, for instance, an intelligent system may combine factors such as a patient’s genetic information, ART and environmental risk factors, lifestyle characteristics, and the corresponding medical records to foresee health threats several years into the future accurately. It is not designed to replace medical professionals but rather to give them incredibly powerful advanced predicting capabilities. A complete picture of a risk profile could be available to the physician, allowing him to remotely influence the health trajectory and prevent the full-blown illness from occurring ages before its expected onset. Health promotion, besides diagnostics, is perhaps the field that will most positively embrace AI innovations in the future time. For long decades, concerns about accessibility and complexity made it impossible to imagine an easy regular medical education or even a proper dissemination of health information. Learning software based on AI can now adjust to different learning types and even difficult medical notions can be simplified and sorted in a personalized understandable way. For example, Anatomage, an AI-powered educational tool, creates detailed, interactive anatomical simulations that enhance comprehension through visual aids (Anatomage, 2021). There can be a medical student who understands every aspect of the body except for the complex anatomy of other body parts. Hence, this student will be given progressive elaboration explaining the anatomical concepts in such elaborate and pictorial ways a person can understand. Likewise, concerned patients would receive advanced knowledge on health issues aligned with their level of education and specific medical problems. Furthermore, mental health is one of the most complicated frontiers of AI applications. 'Stanford researchers have been developing AI-based screening tools that will be able to help in the identification of early signs of mental health conditions and the in-between category of human professionals replacing these screening tools as complements. AI-powered chatbots, such as Woebot, provide round-the-clock support for individuals experiencing mental health challenges. These systems can screen for early signs of conditions like anxiety and depression, offering immediate emotional support and guiding users toward professional help when necessary (Stanford AI Lab, 2022). The best applications indicate initial forms of screening, identification of those who could use professional intervention, and resources for initial support. AI chatbots can also provide access to mental health care at any time of the day, which presently includes screening some patients, providing emotional support, and guiding, which may help plug some missing parts in accessing mental healthcare. These systems can provide early, gentle intervention without stigma, facilitating a response to the mental health needs of those in the early stages of their mental well-being and referring them to professionals when appropriate.