Food as Prevention: The Future of Food Prescription Programs

Figure 1: Food packages containing nutritious foods including various fruits, vegetables, and eggs, as frequently prescribed in Food Prescription Programs



Food insecurity is defined by the Food and Agriculture Organisation of the United Nations as the 'lack of regular access to safe and nutritious food for normal growth and development and an active and healthy life' (FAO, 2023). It can be manifested as severe, moderate, or mild, and it disproportionately affects individuals with low income and low socioeconomic status (PROOF, 2023). Food insecurity leads to the reduced consumption of fruits and vegetables and is often associated with an increased risk for various chronic health conditions, such as type II diabetes, coronary heart disease, hypertension, and mental health problems (PROOF, 2023; USDA, 2017). In 2021, 15.9% of households in Canada were food insecure and were thus vulnerable to poor health outcomes (PROOF, 2023). Considering this data along with the World Health Organization's declaration that health is a fundamental human right suggests the need for incentives that improve health by targeting food insecurity (WHO, 1946).

Food Prescription Programs are a branch of the 'Food is Medicine' initiative that focus on the intersection of nutrition and healthcare (<u>Donohue et al, 2021</u>). These programs are on the uprise in the USA and are slowly beginning to gain traction in Canada. Food Prescription Programs aim to target food insecurity in populations that are affected by chronic health conditions since increasing the consumption of fruits and vegetables can not only lower the risk of developing such conditions, but also help mitigate negative health outcomes (<u>Donohue et al, 2021</u>). Participants are offered prescriptions for healthy foods (predominantly fruits and vegetables) at subsidized costs and are thus incentivised to make healthy food choices (<u>Cavanagh et al, 2016</u>). These prescriptions can be in the form of coupons for healthy foods or pre-packaged food boxes and are often coupled with a form of nutrition-related education.

Food Prescription Programs have shown promising results in lowering food insecurity, increasing fruit and vegetable consumption, improving mood, lowering HbA1c levels in individuals with Type II diabetes, lowering blood pressure in hypertensive patients, and improving BMI (Kerr et al, 2020; Saxe-Custack et al, 2019; Bryce et al, 2017; Cavanagh et al, 2016). Thus, they prove to be an innovative method to target chronic health conditions by (i) raising awareness about the critical role that our diet plays in our health outcomes and (ii) incentivising the purchase of healthy foods. Although these programs have various positive impacts on health, they are currently implemented in the later stages of disease progression and are downstream solutions that do not target the onset of disease. Thus, future initiatives may seek to integrate Food Prescription Programs upstream in the healthcare system, prior to disease onset, to use them as a preventative measure to educate individuals on the benefits of healthy eating, while improving their access to nutritious food.



SDG1- No Poverty **SDG2**- Zero Hunger

SDG3- Good Health and Well-Being