In Italy the prevalence of obesity and overweight among people in detention (87%) was found to be higher than in the general population (55%) (1). US-based studies point to higher values, with obesity (including severe obesity) and overweight comprising 74% of the prison population (2). Evidence from the United Kingdom points to a prevalence of obesity at admission of 16%, rising to 24% six months after incarceration (3).

Eating disorders are highly prevalent in women living in prison in high-income countries; these may lead to them having overweight and obesity or underweight, thereby undermining physical and mental health (6). A study in a female prison showed a very high prevalence of daily consumption of ultra-processed foods, including hot-dog bread (87%), sweetened beverages (68%) and sweets/ candies (77%) (7). Evidence from 2006 suggested that nutritional practices among people living in prisons were poor, with frequent low fruit and vegetable consumption (8).

Comparing obesity at admission and during incarceration, a French study found an increase in prevalence of 3%, suggesting the negative impact of incarceration (4).

One key aspect to consider when developing physical activity and nutritional interventions for people in prison is that, in many situations and settings, people may have limited (or no) options.

Data from a systematic review including 11 studies reported an average weight gain of 0.2 kg (0.43 lb) per week following incarceration (5).

Existing knowledge suggests that many people gain excessive weight while in prison and that weight-related health problems are common in correctional settings (6).

Supporting good nutritional habits by promoting consumption of fruits and vegetables, while limiting intake of salt, free sugars and certain types of fat, can enhance the quality of life of people living in prisons and prevent various NCDs. Innovative ways of promoting good eating behaviours include nutritional education, self-catering, gardening, inclusion of healthy choices in the prison shop inventory and culinary training (6). However, evidence suggests the design of nutritional interventions in prisons needs to be improved (8).

A systematic review of prison-based exercise training programmes found that 10 out of the 11 studies identified reported significant changes in physical and mental health-related variables (11). If people living in prisons are given the opportunity to increase their physical activity, there will generally be short- and long-term benefits, affecting their life choices both in prison and following release. Therefore, the interventions that are developed will need to help people in prison to consider both immediate changes that are feasible in the current prison setting and longer-term changes that may be sustained upon release from prison.