Healthy BMI

Elevated BMI

Risk for type 2 diabetes, hypertension, Dyslipidaemia, cIMT

↓ Risk for hypertension & dyslipidaemia,

Diabetes prevention

Reduction in cIMT

Ideal lifecourse

Childhood

Adolescence

Adulthood
Figure title: BMI trajectory and cardiovascular risk factors.
Increased exposure to elevated body mass index (BMI) from childhood to adulthood is associated with increased risk for type 2 diabetes, hypertension, dyslipidemia and carotid intima media thickness (cIMT) in adulthood. Losing weight at any time during lifecourse (small arrows), it reduces adiposity exposure (pink dotted line) and has a positive impact on blood pressure and dyslipidemia in adulthood. Reducing or normalizing BMI in adulthood (big arrow) is likely to have more of an impact for type 2 diabetes prevention whereas effective atherosclerotic disease prevention as assessed by surrogate markers (carotid intima media thickness cIMT) will require preventative strategies to start early in life from childhood.