Annex 4: What are the consequences of being underweight?

Each individual will be different in their ability to tolerate the impact of starvation and the subsequent low weight. Being underweight in the context of food deprivation will trigger physical, emotional, social and cognitive changes. Studies in previously healthy, normal weight individuals who were placed on restrictive diets and subsequently lost weight report the following changes; physically, individuals will experience gastro intestinal discomfort, reduced need for sleep, dizziness and headaches, hypersensitivity to noise and light, reduced strength, oedema, hair loss, reduced tolerance for cold temperatures and tiredness and weakness. Weight loss leading to cessation of menstruation will impact on fertility and increase the risk of developing osteoporosis. Further, in young girls and boys not yet physically mature, a reduced intake will disrupt normal growth and development. As an approximate guide, females with a body mass index (BMI) 17.5-19 may experience irregular or absent menstruation and ovulation failure; BMI 15-17.5 may experience amenorrhea and loss of substance from all body organs and structure; BMI 13.5-15 all organ systems are compromised – brain, heart, lungs, bones and metabolism is reduced by 50%; BMI 12-13.5 all organs begin to fail and below BMI 12 the situation is life threatening.

Individuals may experience emotional changes including depression, irritability, anxiety and apathy. Cognitive changes include impaired concentration, alertness, comprehension and judgement, whilst socially, they may experience withdrawal, feelings of social inadequacy, may neglect personal hygiene, be more isolated, suffer strained relationships and decreased libido.

Further, if individuals are striving to lose weight or maintain an unnaturally low weight through the mechanism of dieting or other weight control behaviour, the long term consequences must be considered, given that these are significant risk factors for development of an eating disorder.