

fitness(539). In individuals living with obesity, exercise promotes health benefits like weight loss, reduced blood pressure, improved physical function, enhanced lipid profile, lower fasting glucose levels, improved mental health, and better overall quality of life(540, 541, 542). Such studies also have shown that the risk of all-cause mortality can be reduced by 16-30% in moderately active individuals, relative to those who are sedentary, irrespective of their BMI and waist circumference. When the BMI is above 30kg/m², it can be responsible for twice as many deaths as obesity to any degree(543).

b. Recommendations for Exercise Programs

Training programs must follow the basic principles of specificity, progression, overload, reversibility, and biological individuality (as defined in Table 5-2)(544). In addition, they need to be comprehensive, regardless of a person's body weight, including activities that improve their cardiorespiratory and neuromotor function and flexibility. Such assessments must include anthropometric measurements — like the person's weight, height, and BMI — and information regarding that person's demographic characteristics, physical limitations, cardiometabolic status, emotional issues, personal preferences, and pre-existing daily physical activity habits (Table 5-3). They also need to focus on identifying exercises that each given patient will be both capable of doing and willing to do, to increase program adherence and effectiveness(539, 541, 542, 545).

Aerobic exercises — like running and walking — improve a person's general physical fitness, mental health, and cardiometabolic status, among other advantages. Strength training — also known as resistance training and including activities like lifting weights, functional training (which consists of exercises aimed at facilitating activities of daily living), and certain types of fitness class — either reduce the amount of muscle mass that is lost or actually increase muscle mass (hypertrophy). Strength training also can improve someone's posture, physical function, and bone density and reduce their risk of injury.

Neuromotor exercises that involve balance, proprioception, agility, motor coordination, and gait improvement are especially relevant for patients undergoing some surgical intervention for obesity, due to sudden changes in their centre of gravity caused by rapid weight loss.

Flexibility exercises maintain or improve joint range, are linked to body function, and seem to decrease bodily pain either caused or exacerbated by excess weight.