



## TOEFL iBT® Online Prep Course | Activity 4 Reading Reading > Lesson 4: Purpose/Method/Opinion Questions > Exercise 4.2 DIRECTIONS: Read the passage. Then click on the answer choice that best answers the question. Continue Hide Time 00:19:39 Strength is a basic component of fitness and wellness. It is necessary for optimal performance in daily activities such as sitting, walking, running, lifting and carrying objects, and doing housework or recreational activities. Strength also is of great value in improving posture, personal appearance, and self-image as it is in developing sports skills, promoting joint stability, and meeting certain emergencies in life. From a health standpoint, increasing strength helps to increase or maintain muscle and a higher resting <u>metabolic</u> rate, encourages weight loss and maintenance, lessens the risk for injury, and prevents the weakening and fragility of bones in osteoporosis. Improving strength can help reduce chronic low-back pain, alleviate arthritic pain, aid in childbearing, improve cholesterol levels, promote psychological well-being, and possibly help lower blood pressure and control blood sugar. An important effect of strength training is that the body adapts. With time, the heart rate and blood pressure response to lifting a heavy weight decreases. This reduces the demands on the cardiovascular system when performing activities such as carrying a child or a suitcase. Regular strength training also helps control blood sugar. Much of the blood glucose from food consumption goes to the muscles, where it is converted to glycogen, a chemical that stores carbohydrates in the body. When muscles are not used, muscle cells become <u>insulin</u> resistant and glucose cannot enter the cells, thus increasing the risk for diabetes. Following sixteen weeks of strength-training, a group of diabetic men and women improved their blood sugar control, gained strength, increased lean body mass, lost body fat, and lowered blood pressure. In the older adult population, muscular strength may be the most important health-related component of physical fitness. Though proper cardiorespiratory endurance is necessary to help maintain a healthy heart, good strength contributes more to independent living than any other fitness component. Older adults with good strength levels can perform most activities of daily living such as doing laundry and lifting groceries. Sarcopenia, or loss of lean body mass, strength, and function, commonly occurs as people age. How much of this loss is related to the aging process or to physical inactivity and faulty nutrition is unknown. And while thinning of the bones from osteoporosis renders the bones prone to fractures, the gradual loss of muscle mass and ensuing frailty is what leads to falls and subsequent loss of function in older adults. Strength training helps to slow the age-related loss of muscle function. Protein deficiency, seen in some older adults, also contributes to loss of lean tissue. More than anything else, older adults want to enjoy good health and to function independently, but many must live in nursing homes to receive daily care from physicians because they lack sufficient strength to move about. They cannot walk very far, and many have to be helped in and out of beds, chairs, and tubs. A strength-training program can enhance quality of life tremendously. Nearly everyone can benefit from it. Only people with advanced heart disease are advised to refrain from strength training. Inactive adults between the ages of 56 and 86 who participated in a twelve-week strength-training program increased their lean body mass by about three pounds, lost about four pounds of fat, and increased their resting metabolic rate by almost 7 percent. In other research, leg strength improved by as much as 200 percent in previously inactive adults over age 90. As strength improves, so does the ability to move about, the capacity for independent living, and enjoyment of life during the "golden years." More specifically, good strength enhances quality of life by improving balance and restoring mobility; making lifting and reaching easier;

decreasing the risk for injuries and falls; and stressing the bones and preserving bone mineral density, thus decreasing

the risk for osteoporosis.









