Exercise in People with Down Syndrome
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In the United States, obesity is on the rise. This is also true for individuals with Down syndrome. Individuals with Down syndrome are at a higher risk of becoming obese compared to the general population. This is partially due to the low levels of physical activity. Also, people with Down syndrome have a higher prevalence of muscle weakness, low bone density, and structural cardiac abnormalities. Obesity is important in this population because it is associated with a variety of health conditions such as sleep apnea and Type 2 diabetes. For this reason, encouraging activities such as walking is vital in the health of individuals with Down syndrome (1).

Individuals with intellectual disabilities have low levels of peak oxygen consumption (VO2 max) and work capacity (measures of exercise capability). These are even lower in individuals with Down syndrome. Studies show adolescents and young adults with Down syndrome have reduced aerobic capacities comparable to an adult over 60 years old without disability (3). Therefore, exercise is important in individuals with Down syndrome for numerous physiological benefits. One of the most important is an increase in the function and efficiency of the myocardium (heart muscle). Other benefits of exercise are lower insulin resistance (which some studies suggest may be related to Alzheimer disease), lower cholesterol, and lower fat storages. Through these benefits there is a decrease in risk of diabetes mellitus and heart disease (1).

As important as exercise is in the role of obesity, diet is just as important. Exercise alone will not make you lose weight. In general, individuals with Down syndrome often eat more calories than are required to maintain their weight. Strategies for treating and preventing obesity involve: decreasing portion sizes, avoiding snacks, increasing fiber, fruits and vegetables, encouraging individuals to monitor their weight, not using food as a reward, and preparing food at home (2). We find having the person with Down syndrome participate in the food preparation process is beneficial.

With a proper diet and exercise, individuals with Down syndrome can overcome obesity. Exercise is not only beneficial for weight control but it also has numerous physiological benefits. So next time you are sitting around with nothing to do, get up and go exercise!
References

