Thyroid, Weight, and Metabolism
Brian Chicoine, MD
Medical Director

We were sent a question about thyroid, weight, and metabolism in people with Down syndrome.

People with Down syndrome more commonly have hypothyroidism (underactive thyroid), one symptom of which is weight gain or obesity. People with Down syndrome have a higher incidence of obesity. People with Down syndrome have a lower basal metabolic rate (at least as demonstrated in children with Down syndrome). Basil metabolic rate (BMR) is the rate of calorie burning while resting.

While having hypothyroidism can contribute to obesity, many people who have normal thyroid function are obese nevertheless. In other words, we can pretty easily “out eat our thyroid.” We screen our patients annually for thyroid function with blood testing and treat the underactive thyroid in an effort to minimize the effect of hypothyroidism on obesity (among many reasons).

Also, more information is coming out about raising metabolic rate but more study needs to be done to improve our understanding in the population without Down syndrome and I am not aware of any data proving these methods in people with Down syndrome. Nevertheless, there are some data that suggest ways to increase metabolism and lose weight.

- Add high intensity training into the regimen (short spurts of high intensity activity with short times of slower pace or rest in between).
- Drink plenty of water.
- Eat more protein and less processed foods (many of which are high in carbohydrates).
- Do more weight lifting as part of your exercise regimen.
- Get enough sleep.

In addition to considering these recommendations, our advice is generally to limit sugar, processed foods, and starches (rice, potatoes, pasta, bread); avoid calories in liquids (especially pop) except for a serving or two of milk if desired; limit or avoid artificial sweeteners; overall reduce carbohydrates (we don’t recommend one of the low carbohydrate diets but many of our patients are “carb cravers” and even reducing their carbohydrate intake by 50% won’t put them in the low carbohydrate range) and instead focus on eating healthy protein instead (such as chicken, lean meat, eggs, beans, yogurt); limit processed foods; and exercise (at least) 30 minutes per day.
Review this information with your health care provider or dietician to make sure it is appropriate for your circumstances.

For more information on metabolism and Down syndrome, see Joan Medlen’s article on Dr. Len Leshin’s page: http://www.ds-health.com/metab.htm. Additional information about nutrition can be found on Joan’s webpage: http://www.joanmedlenrd.com.

**References**