## Nutrition and the Little Person

Dr. Judith G. Hall Prof. - Medical Genetics University of British Columbia LPBCA Inc. Medical Resource

In the past, many little people were massively overweight. This seemed to stem from two problems: the first, a lack of information about nutrition for little people; and second, the hope that by eating more that one would grow.

With more knowledge about various types of short stature and, in particular, disproportionate short stature due to bone problems, there has been a realization that the reason that bones don't grow is not from a lack of calories. There are many, many different types of disproportionate short stature, but none of them are related to nutritional deficiencies, it is always proportionate short stature, and the individuals are relatively markedly underweight. This has not been the problem for little people with disproportionate short stature.

Some types of disproportionate short stature seem to have more problems with weight than others. For instance, individuals with achondroplasia seem to have a greater difficulty. Medical scientists think that this has something to do with the underlying metabolic disturbance in the achondroplasia. However, they also know that it is just as important for a person with achondroplasia to keep their weight under control as it is for anyone else tall or short. It simply means that individuals with achondroplasia have to work a little bit harder at keeping their weight under control.

What is an ideal weight at various ages? Unfortunately, there are not good 'normal' weight charts for little people at various ages. Some types of short stature have much broader bones and heavier bones than others and all people with disproportionate short stature can be expected to weigh more than an average sized child of the same height. Thus, we must resort to other means of telling whether someone is overweight. Nutritionists have devised the 'pinch' test for average sized people and in many ways, this works for a person with short stature as well. What this means is that you pick up the skin on your trunk overlying your abdomen or your ribs. If, when you pick up the skin, you pick up more than half inch of tissue, the individual is overweight. Many little people are overweight and have been for many years and are very frustrated about it.

Why should one bother to try and lose weight and are there any better ways to lose weight than one has been trying for years? There are indeed many reasons to lose weight but probably the most important one is for future health. It is very clear that in average sized individuals as well as short statured individuals that being overweight leads to strain on joints, on the heart and on the whole system. People who are overweight die 10 to 20 years earlier than they should. But there are a number of other reasons to try to reach a more ideal weight and these include self-esteem, more attractive appearance and a feeling of well-being. The problem for many little people is that they have tried for many years to lose weight and they have not been able to.

What can we do to help lose weight? In the average sized individual, one recommends a balanced, nutritious diet with a decreased number of calories and an increased exercise program. Unfortunately for most little people, increased exercise means wear and tear on joints that really can't take that wear and tear very well. Consequently, we have to rely on decreased calories. This is not to say that some exercise is not good for all little people and some people can tolerate more exercise than others. Activities such as bike riding and swimming can be very good exercise and does not lead to wear and tear on joints. It is important for every person to develop some kind of regular exercise for muscle toning, range of motion of joints, and a sense of well-being.

For the little person who is trying to cut back on calories, there are some helpful guidelines. The first is that most little people will have to eat half of what an average sized person eats in order to maintain their weight in a normal range. Thus, in order to lose weight, they may have to go below half of a normal intake. What is important here is to have a variety of foods so that one gets vitamins and minerals. Most little people, unless they are very active, have a maintenance diet of some place between 1,000 and 1,400 calories. In order to lose weight, they need to go 200 to 400 calories below this. It's important on a diet to drink lots of fluids and it's probably important as well to consult some nutritional list to help finds foods that will give a variety of nutrition.

What does this mean for children? Most children are very active and therefore will burn off more calories but they need to get in the habit of eating less than an average sized sibling during childhood to develop good habits for adulthood.