

Healthy bones and joints are the building blocks of a healthy body. With childhood obesity on the rise and a global epidemic declared, the U.S. Bone and Joint Initiative points out that obesity can have a devastating impact on a child's musculoskeletal system.

Extra weight adds extra stress to growing bones causing pain and interfering with normal childhood growth and development. Public awareness and education about this growing health issue is the goal of National Action Week, Oct. 12 – 20.

"Families seem to have a better understanding that obesity in children can contribute to heart problems or lead to diabetes, but we fear they're overlooking the potential impact on their child's joints, muscles and bones," said Paul Esposito, MD\*, orthopaedic surgeon at Children's Hospital & Medical Center in Omaha. "Children are continually growing and their skeletal systems developing. The issues that can result cause significant pain and a risk of disability. In severe cases, surgery may be needed."

Samantha Stuefer of Lincoln is an active and healthy 12-year-old. Her mom describes her as a "good student who loves art, music and singing." As a young child, Samantha spent months in a cast and wheelchairs after developing complications related to weight.

"We noticed the lower part of her leg seemed to bow slightly. Her doctor didn't think it was anything major but as time went on it seemed to get worse. One day I noticed she was dragging her leg," remembered Brenda Stuefer, Samantha's mom.

"Samantha developed Blount's disease which is a severe bowing of the legs. In her case, it progressed very rapidly," said Dr. Esposito.

Although bracing the bone can be an effective treatment, Samantha required extensive surgery.

"Without treatment, walking is difficult and debilitating arthritis can result. Nationally, we are

seeing more muscle and joint disorders like Blount's disease in children," Dr. Esposito shared. "It is more common and requires more invasive therapies in significantly overweight children."

A few years later, at the age of six, Samantha developed hip problems. She was diagnosed with slipped capital femoral epiphysis (SCFE) in which the ball part of the hip bone disconnects from the shaft of the thigh bone.

"We would normally see this condition in overweight children during early adolescence. Not only has the incidence doubled over the past 20 years in some parts of the U.S. and the world, but it is occurring at a much younger age than in the past," said Dr. Esposito.

Samantha needed surgery first in one hip, and then the other. Treatment involves placing screws across the growth plate to stabilize the bone and prevent further deformity. The younger the child is, the more likely the screws can interfere with development of the hips.

"Dr. Esposito worried that one of Samantha's legs might be shorter than the other," said Brenda. "But everything turned out fine. We haven't noticed any lasting effects."

Today, Samantha is at a healthy weight. Her mom says she loves to walk and that she makes good decisions about food.

Dr. Esposito says Samantha's bone health has improved dramatically.

"Despite severe problems as a toddler and child, Samantha has shown that healthy choices pay dividends physically, socially and psychologically. She is now set for many years of good musculoskeletal health," he said.

National Action Week is observed annually by the U.S. Bone and Joint Initiative, previously known as the U.S. Bone and Joint Decade.

