

Bakary J. Sonko, Ph.D.

Assistant Professor
Department of Pediatrics
University of Colorado Health Science Center

Research Interests

My area of research interest is human energy metabolism, especially in the area of obesity. I am interested in understanding how macronutrients are handled in the body and the relationship of this to the question of the etiology of obesity and its prevention. Obesity is commonly associated with insulin resistance, and my current research project examines how insulin resistance affects the utilization of fat (both dietary and endogenous fat) *in vivo*. I am also interested in the topic of how exercise influences daily energy expenditure and how this knowledge could be used to improve the effectiveness of exercise programs in preventing obesity. The techniques I use in these studies are generally noninvasive. I use breath $^{13}\text{CO}_2$ production to investigate ingested (dietary) fat oxidation and nonprotein respiratory quotient values to estimate total fat oxidation. The stable isotopes ^2H and ^{18}O are used for estimating total energy expenditure. The instruments used in my research include isotope ratio mass spectrometry and whole-body indirect calorimetry.

[Back to Membership Directory](#)

Last updated 9/16/04