MCH and MCV

by Adult Down Syndrome Clinic on Thursday, September 30, 2010

We were sent a question about MCH and MCV.

MCH is mean corpuscular hemoglobin (the average amount of hemoglobin in the red blood cells). MCV is mean corpuscular volume (the average size of the red blood cells).

I refer you to our book, The Guide to Good Health (http://www.woodbinehouse.com/main.asp_Q_product_id_E_978-1-890627-89-8) for more information on these in people with Down syndrome. In people with DS, they are commonly elevated and this may have to do with the way people with Down syndrome metabolize folic acid or perhaps more rapid turn-over of red blood cells.

The individual in question has a high MCV and MCH. As addressed in our book, this is a common finding in people with DS.

If the individual in the question had a low MCV and MCH: Low MCV and MCH are associated with iron deficiency anemia, anemia of chronic illnesses, and thalassemia. In people with Down syndrome, one must consider celiac disease as a possible cause of iron deficiency anemia.

Further work-up by your practitioner is warranted when a low MCH and/or MCV is found. With a normal hemoglobin and hematocrit (blood count), an elevated MCV and MCH are generally considered normal variants in people with DS.