How are advanced lipid tests different from regular cholesterol tests?
Cholesterol is carried in lipoprotein particles. Advanced lipid tests can be useful because some people do not have a lot of LDL cholesterol, but they have a lot of LDL particles. This can occur when they have mostly small particles or, alternatively, particles that contain less cholesterol per particle. A higher number of these lipoprotein particles make it easier for them to invade the walls of the arteries and induce a series of events that can lead to plaque formation.

The LDL particle number measures the actual number of LDL particles that carry LDL cholesterol per liter of plasma. In addition to the number of LDL particles, advanced lipid tests report the size of these LDL particles, which may help your provider diagnose the cause of your cholesterol abnormality. For example, increased numbers of small, dense LDL particles can be caused by insulin resistance, a condition that raises your risk for developing diabetes. Understanding this information will help your healthcare provider utilize the right combination of diet and drug therapy to prevent onset or progression of disease.

The apoB test measures the concentration of lipoprotein particles that have an apolipoprotein B on their surface. All of the particles that have the potential to cause disease are labeled with one molecule of apoB. ApoB, like LDL-P, can be a better measure of risk than LDL cholesterol in certain people.