Understanding Your NMR LipoProfile Test Results.

The Science Behind the Test.

Scientists know that heart disease is caused by particles in the blood called low-density lipoproteins, or LDL. But without the tools to measure these LDL particles directly, doctors have traditionally estimated their number by measuring the cholesterol they contain. This measure is known as LDL cholesterol, or LDL-C.

While useful for some patients, knowing the amount of cholesterol in these particles is not as important as knowing the actual number of LDL particles. When high numbers of LDL particles are in the blood, they build up in the arteries and cause heart disease. So a higher number of LDL particles (LDL-P) indicates a higher risk of heart disease.

High number of small LDL particles Cholesterol LDL Particle Low number of large LDL particles Low number of large LDL particles Low number of large LDL particles Low Risk Low number of large LDL particles Low Risk

Your LDL-P Number

Your LDL-P number is the most important part of the NMR LipoProfile report. The lower this number is, the less risk you face. In the sample diagram shown below, the relative risk of the LDL-P score is indicated by the highlighted box. The higher your LDL-P number is, the boxes further to the right will be highlighted. As risk goes down, the highlighted box

LDL-P (LDL Particle

1473 nmol/L UNDER 1000 Optimal

1000 1000 - 1299 Near or Above Optimal will shift to the left. Your LDL-P number can range from less than 1000 to more than 2000. Based on this number, your doctor can advise you on a treatment plan designed to lower your score to a low-risk level. Your LDL-P goal will depend on your medical history. For example, you may have diabetes or have had a past cardiac event.

1300 - 1599 Borderline-High Risk

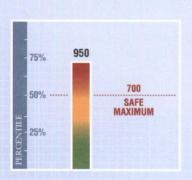
1600 - 2000 High Risk OVER 2000 Very High Risk

Your Small LDL-P Number

Your Small LDL-P number is a measure of the number of small LDL particles in your blood. These particles are associated with an increased risk of heart disease; more of these small particles lead to greater risk. Your Small LDL particle score can vary widely, with a lower score being much better. Patients are generally at lower risk for heart disease if their Small LDL-P is less than 700. Patients are at the lowest risk when both their LDL-P number and their Small LDL-P number are low. Your doctor will look at both of these numbers to determine your heart disease risk and to develop a treatment plan for you.



950 nmol/L



Treatment Considerations

Your doctor will help you interpret your NMR LipoProfile test results. If your test results show an increased risk of heart disease, then your doctor may discuss various options with you to lower your risk. These options often include lifestyle changes, such as increased exercise and changes in diet. In some cases your doctor may recommend one or more medications, which may be effective in lowering your LDL-P and Small LDL-P numbers.

Your doctor may choose from these commonly prescribed medications to lower your LDL-P and Small LDL-P numbers:

Class of Drug	Brand Names
Statins	Crestor [®] , Pravachol [®] , Lescol XL [®] , Lipitor [®] , Zocor [®]
Niacin	Niaspan®, Niaspan ER®
Fibrates	TriCor®, Lopid®
Cholesterol Absorption Inhibitors	Zetia [®]