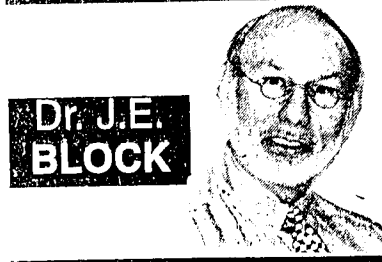


All Things Medical



Normal is not optimal

Normal values are derived from testing a large number of presumably healthy individuals and plotting their laboratory results in a bell shape curve. Values within two standard deviations of the mean area are accepted as "normal". This is a statistical term in which 90 percent of the population talk, more importantly though, a value is considered not optimal as soon as it reaches any level where risk starts to increase.

This is quite different than just being in the envelope of a normal range that most doctors use as their normal.

Laboratory examinations have been available to patients since the ancient days of medicine. Not very sophisticated in their earliest forms, they consisted of diagnosing diabetes by tasting a patient's urine to determine the presence of sugar. Today, there are thousands of technologically advanced laboratory tests, ranging from basic bacterial cultures, to routine chemistry panels to highly complex immunologic derived processes. All are intended to determine the presence or

absence of an underlying disease state.

For example, in the early days of measuring cholesterol, we were willing to accept total values as high as 300 mg/dl as "normal". Once we achieved the ability to measure fractions of cholesterol, however, we began thinking of an LDL level of 160 mg/dl as normal. As we learn more and more about heart disease, we know that we should strive to attain levels much lower than these to decrease cardiovascular risk.

Many physicians have adjusted their interpretation of lab results to reflect optimal values. For example, an LDL level of less than 100 mg/dl is considered to be most efficacious in decreasing cardiovascular risk.

A complete cardiovascular risk panel — including homocysteine, folate, B12, c-reactive protein and clotting factors — provides the physician with a comprehensive picture of the patient's cardiovascular health.

These results should reflect optimal values that provide a basis for prescribing dietary supplements, antioxidants, hormones and pharmaceuticals. This approach provides the knowledgeable physician with more effective tools for establishing health goals and managing the patient's individual health program. Do not be resistant to discuss optimal vs. normal values with your doctor.