



News & Views

The Scoop

January 2005

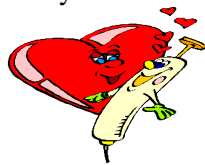
Volume 8

Food for Thought

Insulin Resistance Syndrome

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Today we are increasingly aware that the majority of North American's are following a diet that is designed for disaster, resulting in a deadly quartet of interrelated conditions that if ignored will have a profound impact on future mortality and ultimate profitability.



When we evaluate an applicant's medical evidence and find the following, what underwriting action are we prepared to take?

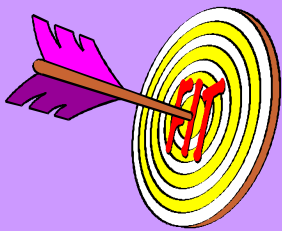
If a 40 year old male applicant is 5' 10" 209 lbs - then this by it self may not indicate a rating. However, what if you knew his waist was 40 inches and his BMI was 30; what action would you take?

What if the same applicant had an average blood pressure readings of 146/98; would this by itself indicate a rating? Also, what would you do if the blood pressure was treated to a normal level? What action would you take?

What if the applicant had a glucose reading of 115mg/dL? This by it self would not indicate a rating. However, what action would you take? Some of you might reflex to a Hemoglobin A1C while others might ignore the reading as borderline. Are there more cost effective accurate screening methods available such as AGP?

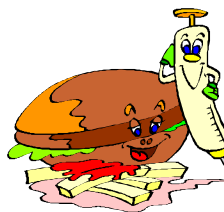
What about the cholesterol? What if the HDL was 40 mg/dl? This is right on the line. What action would you take? What if all of his cholesterol readings were medicated to a normal level? What if the triglyceride serum level was 170 mg/dl? Would this prompt any concern?

It's hard to know what underwriting action a company would take with an applicant demonstrating these medical characteristics, many, of which, are borderline or medicated to normal. Until recently, an applicant with these characteristics may indeed qualify for a standard contract, or at worst, a limited rating and yet what we are looking at is an applicant whose profile clearly points to an individual suffering from **Insulin Resistance Syndrome**. Today 10 to 25 percent of our adult population may be resistant to insulin and that percentage is even higher in our older population. Some studies estimate that 43% of those age 60 to 69 are at risk and the results are even worse in some of our ethnic communities.



What is *Insulin Resistance Syndrome*? This syndrome was identified in response to explaining why some men with high blood pressure, although treated appropriately, were still having heart attacks at an unexpectedly high rate. Most of these individuals had profiles very similar to what is described above.

Individuals who are *Insulin Resistant* have fat, muscle and liver cells that are unable to respond to insulin properly and their pancreas compensates by churning out more and more of the hormone. This abnormal increase in insulin does eventually allow for the blood glucose levels to drop into a normal range. However, ultimately many, if not the majority, of these same individuals pancreas's ultimately cannot keep up with the demand for insulin; as such, glucose builds up in the bloodstream with the result being that the individual ultimately becomes a Type II diabetic. Insulin resistance and pre-diabetes usually have no symptoms until the condition deteriorates.



In a study of 2,754 men aged 40 – 65 the results showed the presence of diabetes or high blood pressure alone increased the risk of heart attack by 2.5 times. When both diabetes and high blood pressure were present, the risk increased 8 times. An abnormal lipid profile increased the risk 16 times and when abnormal lipid levels were present with high blood pressure and / or diabetes, the risk was 20 times higher. While we recognize the seriousness of the combined risk factors; are we recognizing them early enough in the disease process? Are we prepared to take action on individual abnormalities, that by them selves, seem borderline; but, in combination, are the precursors of significant additional mortality?

Does anyone specifically rate for *Insulin Resistance Syndrome*, or do we wait until the individual has demonstrated a major medical event? Are we vigilant enough in our gathering of evidence in looking at the applicant's waist size and BMI, or is over weight acceptable in any form other than extreme obesity? Should we single out individuals with these profiles for more in depth laboratory testing so as to make sure we completely understand their current glucose status and kidney function etc? Are we designing evidence requirement profiles to help focus on individuals who are at greatest risk, or do we just hope the routine evidence will yield enough information to make an informed decision?

CRL is currently developing some new methods to address this growing crisis. We think there are smarter cost effective ways to make the evidence requirements more specific. First, how concerned are you about the problems related to our over weight sedentary stressful society and the ultimate impact on our companies financial results? Are you starting to develop ratings or more specific testing and methodology for those individuals who have borderline abnormalities? Do over weight applicants with medicated normal results really represent a normal risk profile? Certainly, within this grouping there are some very serious risks. To address this issue, we at CRL have introduced a *Refined Glucose Test* that is more specific and if used will identify more applicants who are in the initial stages of their diabetes. In addition, we are currently working on developing a method to more clearly and specifically identify applicants who demonstrate this risk profile.

Insulin Resistance Syndrome has other names, such as, the *Deadly Quartet, Metabolic Syndrome and Syndrome X*. There are some additional markers that have not been listed in this article but are equally important in the review process.

The above is just *Food For Thought*. We welcome your thoughts on how we can work together to address this syndrome. We will share ideas with you, over the coming months, as we continue to research and develop creative approaches to accurately identify this risk. If you have other questions or would like to discuss further, feel free to call your CRL sales representative at:

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