



4-Hour Kraft Prediabetes Profile (Serum)

<i>Doctor ID</i>		<i>Patient Name</i>			
<i>Age</i>	<i>Sex</i>	<i>Date of Birth</i>	<i>Accession #</i>	<i>Test Code</i>	
<i>Date Collected</i>		<i>Date Received</i>	<i>Date Reported</i>		<i>Tech</i>
<i>Comments</i>					

Doctor Name and Address:

Patient Order

X axis	Y axis	
	Insulin (uIU/mL)	Glucose (mg/dL)
Fasting:	6.68	88
1/2 hour:	29.83	140
1 hour:	110.18	175
2 hour:	84.37 ^H	120
3 hour:	32.75	99
4 hour:	3.64	55
2nd + 3rd hr:	117.12	

Associated Reference Ranges

Fasting Insulin

0-10: Normal

Fasting Glucose

65 - 99: Normal

100 - 125: Impaired Glucose Tolerance

> 126: Diabetes Mellitus

Oral Glucose Tolerance Test

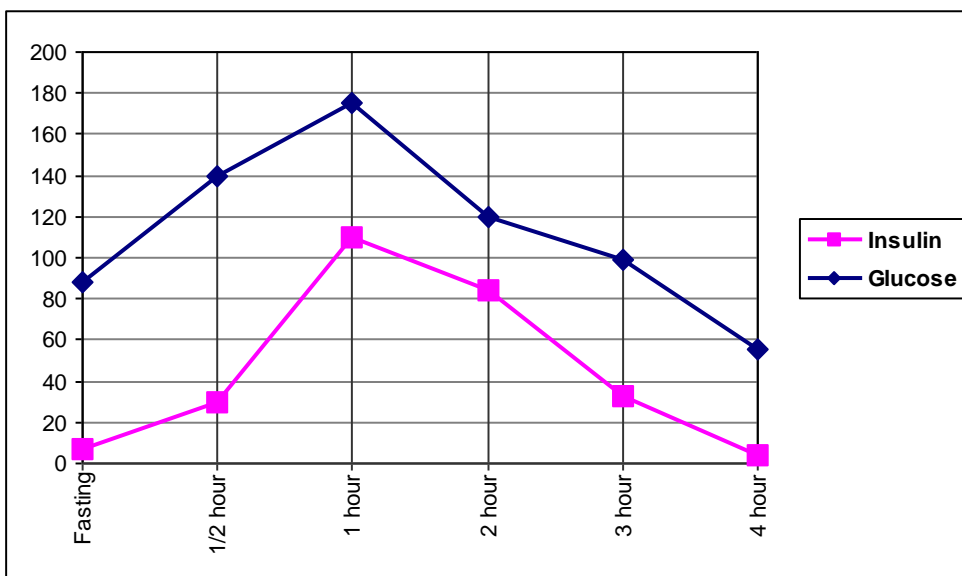
At 2 Hours:

< 50: Normal

< 140: Normal

140 -199: Impaired Glucose Tolerance

> 199: Diabetes Mellitus



Kraft's Criteria for interpretation of Glucose-Insulin Tolerance

Pattern I - Normal

1. Normal Fasting Insulin between 0-10
2. Insulin peaks at 1/2 or 1 hour
3. 2nd hour is less than 50
4. 3rd hour is less than 2nd hour
5. 2nd hour plus 3rd hour is less than 60
6. Subsequent hour values at fasting range (0-10)

Pattern II - Peak at 1/2 to 1 hour with delayed return to normal

1. Normal Fasting Insulin between 0-10
2. Insulin peaks at 1/2 or 1 hour
3. 2nd and 3rd hour total > 60 and <100 = Borderline for Insulin Resistance
4. 2nd and 3rd hour total >100 = Considered definite Insulin Resistance

Pattern III - A Considered diagnostic for Insulin Resistance

1. Normal Fasting Insulin between 0-10
2. Insulin peaks at 2nd hour

Pattern III - B Considered diagnostic for Insulin Resistance

1. Normal Fasting Insulin between 0-10
2. Insulin peaks at 3rd hour

Pattern IV Considered Positive for Insulin Resistance

1. Fasting Insulin greater than 10

Pattern V Insulinopenic Pattern

1. Low Insulin Response; All Values < 30
2. If glucose values are elevated; Considered to be the 'juvenile' pattern of Diabetes. In effect insulin deficiency, probably because of dead or near dead islet cells.
3. If normal or borderline glucose tolerance; may be due to a low carbohydrate diet

References:

1. Detection of Diabetes Mellitus, In Situ(occult diabetes), Kraft, Joseph R. Laboratory Medicine, Volume VI, #2, pages 10-22, February 1975.
2. Neurobiology of Hypoglycemia Syndrome, Hudspeth, W.J. Et Al, Journal of Holistic Medicine, Volume III, #1, pages 60-71, Spring/Summer, 1981.
3. Classification of Diabetes: Not All Hyperglycemia is the Same, Fowler, Michael J. Clinical Diabetes, Volume 25, pages 74-76, 2007.
4. Standards of Medical Care in Diabetes. Diabetes Care. 2013. Jan;36 Suppl 1: S4-10