



ILLUSTRATION III

Cholesterol Diagram

Dr. Donna F. Smith

Your **"Blood Chemistry Results"** Report is Dr. Smith's Clinical Nutrition Analysis of your Laboratory Report.

This document represents a third illustration for Cholesterol to provide updated research for my article titled, **"Preventative Healthcare and Management of Disease,"** published in the February/March issue of the **"Wichita Falls Parent Newsmagazine"** in 1995.

Illustrations I and II, in the above-published article, represent how this client's test number of 190 related to the Cholesterol research of 1995.

Illustrations III #1 and #2, in this document, however, represent how this client's test number of 190 now relates to the latest Cholesterol research since 1995. Based on the latest research, 190 is a healthy test number.

In other words, in Illustrations I and II from the 1995 article, the client's Cholesterol test result number of 190 was within the Lab's Reference Range of 133-200, indicating no disease or life-threatening test result number. However, it was not a healthy number because it was outside the range for Homeostasis (150-180). In 1995, a Cholesterol of 190 was unhealthy enough to produce symptoms, but not so severely unhealthy that was life-threatening or disease-related (yet).

However, in Illustrations #1 and #2 of this document, which represents Cholesterol research since 1995, a Cholesterol test number of 190 is a healthy Cholesterol number because it is within both the Lab's Reference Range of 0-200 (Disease Free) and the ranges for Homeostasis of $220 (\leq 64y)$ or $299 (65y \geq)$.

Illustrations III #3 represents the latest research for a different client's test result number of _____ to illustrate what this diagram looks like when Cholesterol is unhealthy, outside the range for Homeostasis, but not yet disease-related or life-threatening because _____ is still within the Lab's range.

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Summary:

The bottom line is that Cholesterol may be Normal on a Laboratory Report viewed by the physician to diagnose a disease and life-threatening state; however, on the **Blood Chemistry Results Report**, i.e., the Clinical Nutrition Analysis of your Laboratory Report, Cholesterol may actually be unhealthy (not normal) because it is outside the range for Homeostasis.



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REFERENCE RANGES - LAB AND CLINICAL NUTRITION REPORTS

- **C** represents the Client's Results number on the Laboratory's Report and the Client's Value number on the Blood Chemistry Results Report, the Clinical Nutrition Analysis of the client's blood chemistry tests.
- **L** represents the Lab's "Reference Ranges" of 0 – 200 on a Quest Laboratory Report.
 - LL = Lab's Lowest Range of 0
 - LH = Lab's Highest Range of 200
 - When the Client's test Results number is outside the Lab's range, either lower than 0 or higher than 200, this means their physician will diagnose 1) Disease and/or 2) that the blood test that is outside the Lab's range, is life-threatening.
- **H1** = Homeostasis Range of 180 – 220 for Ages 20 to 64
 - H1-L = Lowest Range of 180 for Homeostasis
 - H1-H = Highest Range of 220 for Homeostasis
 - **Explanation:** When the test Value number for a client between the age of 20 and 64 is outside the range for Homeostasis, either lower than 180 or higher than 220, this means that the Clinical Nutrition Analysis (CNA) of that blood test indicates it is abnormal, or unhealthy. Though this abnormal test number is not life-threatening or disease-related, unless it is also outside the Lab's Reference Ranges, it is unhealthy because it is outside the range for Homeostasis and may be producing symptoms, depending upon how far it is outside the Homeostasis range or someone 64y or younger.
- **H2** = Homeostasis Range of 180 – 299 for Ages 65 & Older
 - H1-L = Lowest Range of 180 for Homeostasis
 - H1-H = Highest Range of 299 for Homeostasis
 - The **Explanation** for these ranges is the same as H1, however, H2 relates to the Homeostasis range for clients 65 or older.

COLOR CODES (Page 3)

- **Black** represents the client's Test Results, refer to "C."
- **Green** represents Homeostasis Range [Healthy] - H1-L (All Ages) to H1-H ($\leq 64y$) or H2-H ($\geq 65y$).
- **Purple** represents the Lab's Reference Range for Quest Diagnostics – LL to LH. As you can see in the above article, the Lab we used in 1995 showed 133 to 200 as the optimal Lab's Reference Range.

Though this document illustrates Clients' Blood Cholesterol Test Results or Values, the above Color Code applies to the optimal reference ranges for any Blood Chemistry or Routine Urinalysis test.



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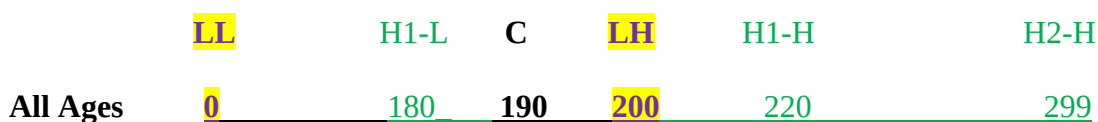
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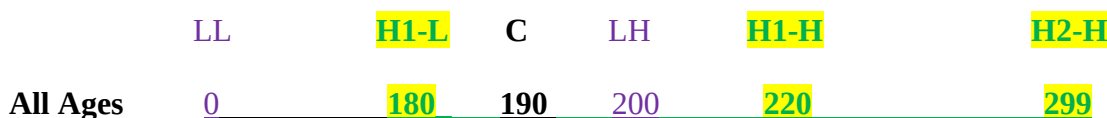
ILLUSTRATION III = Latest Research

Illustrations #1 and #2 show how the latest research affects a Client's Cholesterol of 190 (ex: 1995 article). Illustrations #3 to #5 complete this education regarding various differences from a medical interpretation

#1 - Client Test Result of 190 is within the Lab's Range



#2 - Client Test Result of 190 is within the Homeostasis Range, also.



#3 – Cholesterol of 210 for a Client (20 to 64y) is flagged as High on the Lab Report, yet within Homeostasis Range (i.e., Healthy) on the Blood Chemistry Results Report.



#4 – Cholesterol of 245 for Clients is flagged as High on the Lab Report and the Blood Chemistry Results Report for clients Age ≤ 64 years.



#5 – Cholesterol of 245 is flagged as High on the Lab Report, yet within Homeostasis Range (i.e., Healthy) on the Blood Chemistry Results Report for Clients 65y≥, according to the latest research.

