MyQuest™

GABAY,YORAM

DOB: 04/20/1969
Sex: M
Phone: (203) 918-6434
Patient ID: YG69

Age: 55
Fasting: Y

Specimen: WC991466B
Requisition: 0000410
Report Status: FINAL / SEE REPORT

Collected: 12/09/2024 07:37
Received: 12/09/2024 07:41
Reported: 12/17/2024 21:54

Client #: 49703339
WAPLES,KURT
BLUESTONE HEALTH GRP
47 OAK ST
STAMFORD, CT 06905-5316
Phone: (203) 220-6488
Fax: (203) 433-0523

FASTING:YES ; AN UPDATE OR CORRECTION HAS BEEN MADE TO NAME

⚠ TESTOSTERONE, FREE, BIOVAILABLE AND TOTAL, MALES (ADULT), IMMUNOASSAY

TESTOSTERONE, TOTAL, MALES (ADULT), IA
Reference Range: 250-827
ng/dL

690

250 — 827
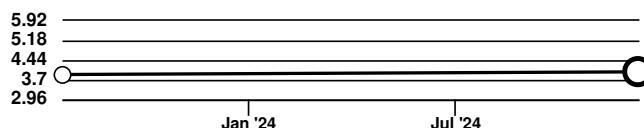
*No Historical Data*

ALBUMIN
Reference Range: 3.6-5.1
g/dL

4.0

3.6 — 5.1

From 07/20/2023 To 12/10/2024

5.92
5.18
4.44
3.7
2.96
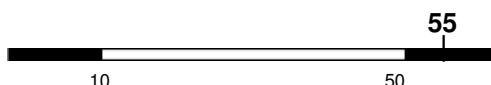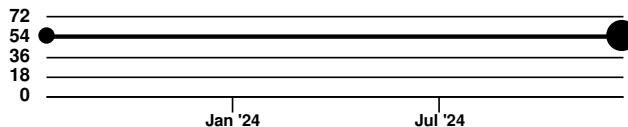
Jan '24   Jul '24

⚠ SEX HORMONE BINDING GLOBULIN
Reference Range: 10-50
nmol/L

55

10 — 50

From 07/20/2023 To 12/10/2024

72
54
36
18
0

Jan '24   Jul '24

TESTOSTERONE, FREE

TESTOSTERONE, FREE
Reference Range: 46.0-224.0
pg/mL

63.6

46.0 — 224.0
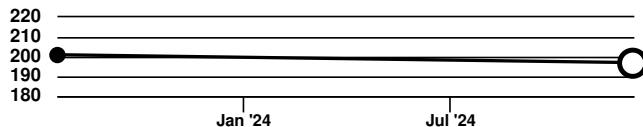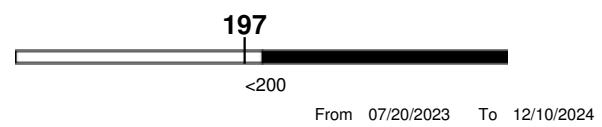
No Historical Data

TESTOSTERONE,BIOAVAILABLE
Reference Range:
110.0-575.0 ng/dL

116.9

110.0 — 575.0
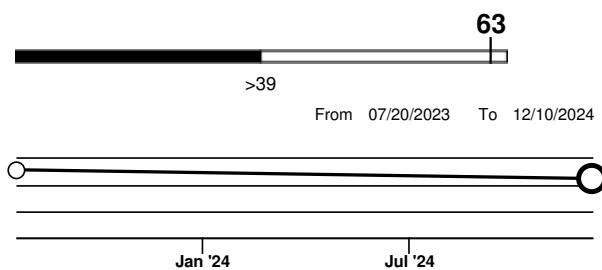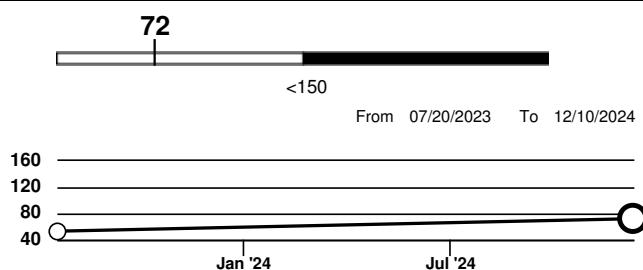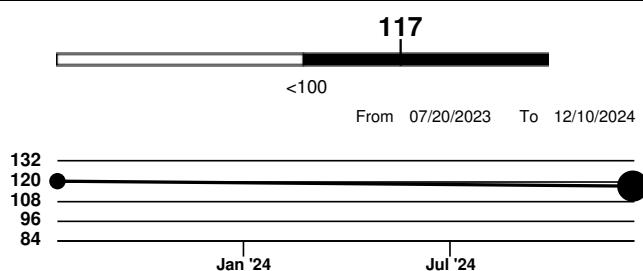
No Historical Data

⚠ ADVANCED LIPID PNL W/INFLAMMATION, CARDIO IQ ®

CARDIO IQ® CHOLESTEROL, TOTAL

CHOLESTEROL, TOTAL

Reference Range: <200
mg/dL

197

<200

From 07/20/2023 To 12/10/2024

220	
210	
200 ●	○
190	
180	

Jan '24   Jul '24

CARDIO IQ® HDL CHOLESTEROL

HDL CHOLESTEROL

Reference Range: >39 mg/dL

63

>39

From 07/20/2023 To 12/10/2024

72	
60 ○	○
48	
36	

Jan '24   Jul '24
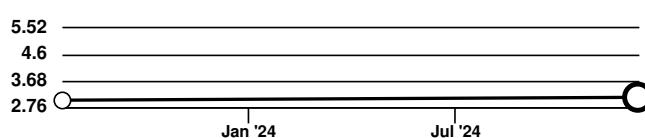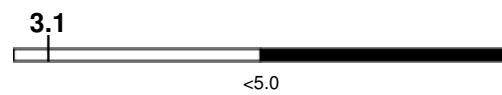
Reference range varies across results

CARDIO IQ® TRIGLYCERIDES

TRIGLYCERIDES

Reference Range: <150
mg/dL

72

<150

From 07/20/2023 To 12/10/2024

160	
120	
80	○
40 ○	

Jan '24   Jul '24

⚠ CARDIO IQ® NON-HDL AND CALCULATED COMPONENTS

⚠ LDL-CHOLESTEROL

Reference Range: <100
mg/dL (calc)

117

<100

From 07/20/2023 To 12/10/2024

132	
120 ●	●
108	
96	
84	

Jan '24   Jul '24

Reference range varies across results

Desirable range <100 mg/dL for primary prevention; <70 mg/dL for patients with CHD or diabetic
patients with>= 2 CHD risk factors. LDL-C is now calculated using the Martin-Hopkins calculation,
which is a validated novel method providing better accuracy than the Friedewald equation in the
estimation of LDL-C. Martin SS et al. JAMA. 2013;310(19): 2061-2068
(http://education.QuestDiagnostics.com/faq/FAQ164)
LDL-C is now calculated using the Martin-Hopkins calculation, which is a validated novel method
providing better accuracy than the Friedewald equation in the estimation of LDL-C. Martin SS et al.
JAMA. 2013;310(19): 2061-2068 (http://education.QuestDiagnostics.com/faq/FAQ164)

CHOL/HDLC RATIO

3.1

Reference Range: <5.0 calc

<5.0

From 07/20/2023 To 12/10/2024

```
5.52  ────────────────────────────────
4.6   ────────────────────────────────
3.68  ○────────────────────────────────○
2.76  ○────────────────────────────────○
         Jan '24            Jul '24
```
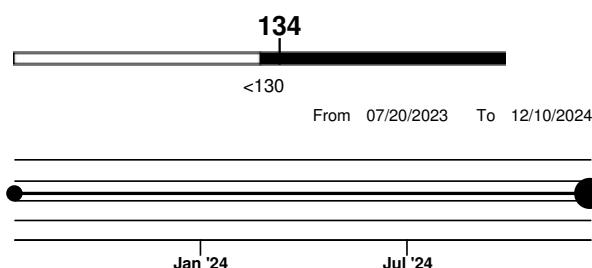
Reference range varies across results

⚠ NON HDL CHOLESTEROL

134

Reference Range: <130
mg/dL (calc)
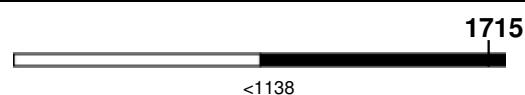
<130

From 07/20/2023 To 12/10/2024

```
144  ────────────────────────────────
138  ────────────────────────────────
132  ●────────────────────────────────●
126  ────────────────────────────────
120  ────────────────────────────────
        Jan '24            Jul '24
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For patients with diabetes plus 1 major ASCVD risk factor, treating to a non-HDL-C goal of <100 mg/dL
(LDL-C of <70 mg/dL) is considered a therapeutic option.
For patients with diabetes plus 1 major ASCVD risk factor, treating to a non-HDL-C goal of <100 mg/dL
(LDL-C of <70 mg/dL) is considered a therapeutic option.

⚠ LIPOPROTEIN FRACTIONATION ION MOBILITY

⚠ LDL PARTICLE NUMBER

1715

Reference Range: <1138
nmol/L

<1138

*No Historical Data*

Relative Risk: Optimal <1138; Moderate 1138-1409; High>1409. Male and Female Reference Range: 1016 to
2185 nmol/L.

⚠ LDL SMALL

346

Reference Range: <142
nmol/L

<142

*No Historical Data*

Relative Risk: Optimal <142; Moderate 142-219; High>219. Male Reference Range: 123 to 441 nmol/L;
Female Reference Range: 115 to 386 nmol/L.

⚠ LDL MEDIUM

483

Reference Range: <215
nmol/L

<215

No Historical Data

Relative Risk: Optimal <215; Moderate 215-301; High>301. Male Reference Range: 167 to 485 nmol/L;
Female Reference Range: 121 to 397 nmol/L.

⚠ HDL LARGE

5520

Reference Range: >6729
nmol/L

>6729

No Historical Data

Relative Risk: Optimal >6729; Moderate 6729-5353; High <5353. Male Reference Range: 4334 to 10815
nmol/L; Female Reference Range: 5038 to 17886 nmol/L.

LDL PATTERN

A

Reference Range: A Pattern
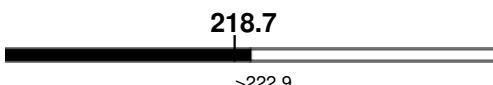
No Historical Data

Relative Risk: Optimal Pattern A; High Pattern B. Reference Range: Pattern A.

⚠ LDL PEAK SIZE

Reference Range: >222.9
Angstrom
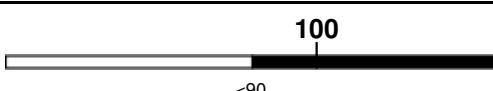
218.7

>222.9

No Historical Data

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Cardiometabolic Center of Excellence at Cleveland HeartLab. It has not been cleared or approved by the U.S. Food and Drug Administration. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes. Relative Risk: Optimal >222.9; Moderate 222.9-217.4; High <217.4. Male and Female Reference Range: 216 to 234.3 Angstrom. Adult cardiovascular event risk category cut points (optimal, moderate, high) are based on an adult U.S. reference population plus two large cohort study populations. Association between lipoprotein subfractions and cardiovascular events is based on Musunuru et al. ATVB.2009;29:1975. For additional information, please refer to http://education.QuestDiagnostics.com/faq/FAQ134 (This link is being provided for informational/educational purposes only.)

⚠ CARDIO IQ® APOLIPOPROTEIN B

⚠ APOLIPOPROTEIN B

Reference Range: <90 mg/dL

100

<90

No Historical Data

Risk: Optimal <90 mg/dL; Moderate 90-119 mg/dL; High >= 120 mg/dL; Cardiovascular event risk category cut points (optimal, moderate, high) are based on National Lipid Association recommendations- Jacobson TA et al. J of Clin Lipid. 2015; 9: 129-169 and Jellinger PS et al. Endocr Pract. 2017;23(Suppl 2):1-87.

CARDIO IQ® LIPOPROTEIN (a)

LIPOPROTEIN (a)

Reference Range: <75 nmol/L

41

<75
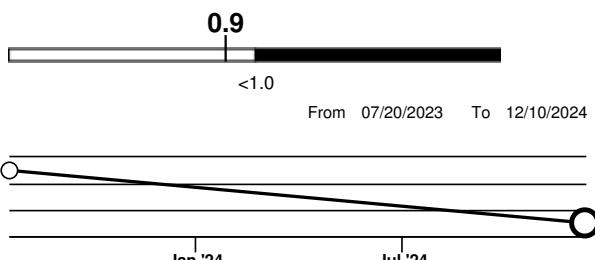
No Historical Data

Risk: Optimal <75 nmol/L; Moderate 75-125 nmol/L; High>125 nmol/L. Cardiovascular event risk category cut points (optimal, moderate, high) are based on Tsimika S. JACC 2017;69:692-711.

CARDIO IQ® HS CRP

HS CRP

Reference Range: <1.0 mg/L

0.9

<1.0

From 07/20/2023 To 12/10/2024

Reference range varies across results

Reference Range: Optimal <1.0 mg/L, according to Jellinger
PS et al. Endocr Pract.2017;23(Suppl 2):1-87. The AHA/CDC
Guidelines recommend hs-CRP ranges for identifying Relative
Cardiovascular Risk in patients ages >17 years: <1.0 mg/L
Lower Relative Cardiovascular Risk; 1.0-3.0 mg/L Average
Relative Cardiovascular Risk; 3.1-10.0 mg/L Higher Relative
Cardiovascular Risk. If result is between 3.1 and 10.0
mg/L, consider retesting in 1-2 weeks to exclude a benign
transient elevation secondary to infection or inflammation
from the baseline CRP value. Persistent elevations of >10.0
mg/L upon retesting may be associated with infection and
inflammation. The AHA/CDC recommendations are based on
Pearson TA, Mensah GA, Alexander RW, et al. Markers of
inflammation and cardiovascular disease: application to
clinical and public health practice: A statement for
healthcare professionals from the Centers for Disease
Control and Prevention and the American Heart Association.
Circulation 2003; 107(3): 499-511.
For ages >17 Years:
hs-CRP mg/L Risk According to AHA/CDC Guidelines
<1.0   Lower relative cardiovascular risk.
1.0-3.0   Average relative cardiovascular risk.
3.1-10.0   Higher relative cardiovascular risk.
             Consider retesting in 1 to 2 weeks to
             exclude a benign transient elevation
             in the baseline CRP value secondary
             to infection or inflammation.
>10.0   Persistent elevation, upon retesting,
             may be associated with infection and
             inflammation.

Pearson TA, Mensah GA, Alexander RW, et al. Markers
of inflammation and cardiovascular disease:
application to clinical and public health practice:
A statement for healthcare professionals from the
Centers for Disease Control and Prevention and the
American Heart Association. Circulation 2003; 107(3):
499-511.

CARDIO IQ® LP PLA2 ACTIVITY

LP PLA2 ACTIVITY

Reference Range: <124
nmol/min/mL

102

<124

No Historical Data

This test was developed and its analytical performance characteristics have been determined by Quest
Diagnostics Cardiometabolic Center of Excellence at Cleveland HeartLab. It has not been cleared or
approved by the U.S. Food and Drug Administration. This assay has been validated pursuant to the CLIA
regulations and is used for clinical purposes. Relative Risk: Optimal <=123 nmol/min/mL; High>123
nmol/min/mL. See Note 1

Note 1
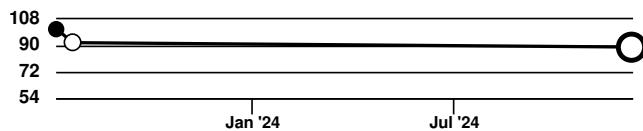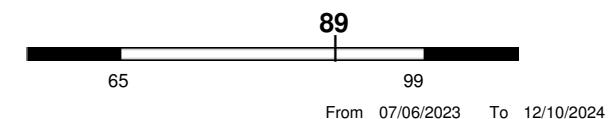
This test was developed and its analytical performance characteristics have been determined by Quest
Diagnostics. It has not been cleared or approved by the FDA. This assay has been validated pursuant
to the CLIA regulations and is used for clinical purposes.

⚠ COMPREHENSIVE METABOLIC PANEL

GLUCOSE
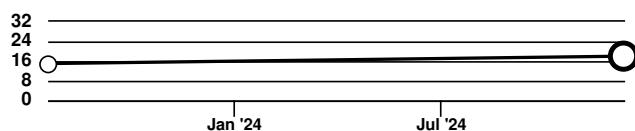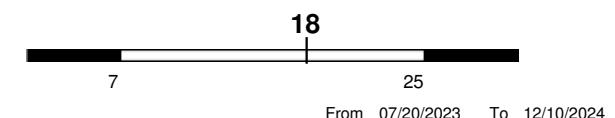
Reference Range: 65-99 mg/dL

89

65   99

From 07/06/2023 To 12/10/2024

108
90
72
54

Jan '24   Jul '24

Fasting reference interval

UREA NITROGEN (BUN)
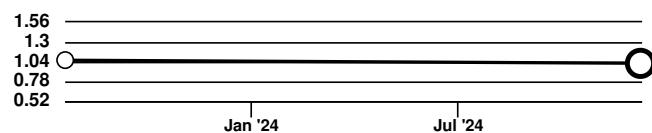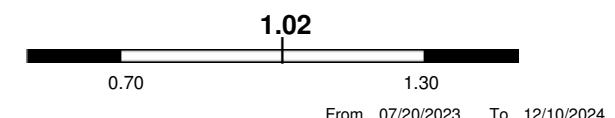
Reference Range: 7-25 mg/dL

18

7   25

From 07/20/2023 To 12/10/2024

32
24
16
8
0

Jan '24   Jul '24
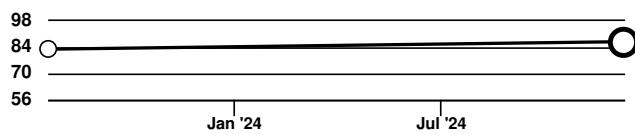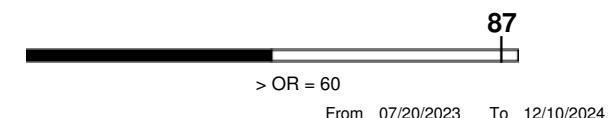
CREATININE

Reference Range: 0.70-1.30 mg/dL

1.02

0.70   1.30

From 07/20/2023 To 12/10/2024

1.56
1.3
1.04
0.78
0.52

Jan '24   Jul '24

EGFR

Reference Range: > OR = 60 mL/min/1.73m2

87

> OR = 60

From 07/20/2023 To 12/10/2024

98
84
70
56

Jan '24   Jul '24

BUN/CREATININE RATIO
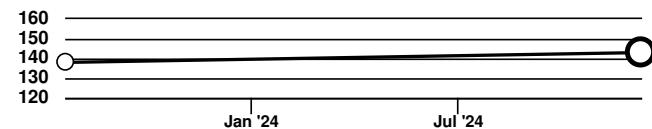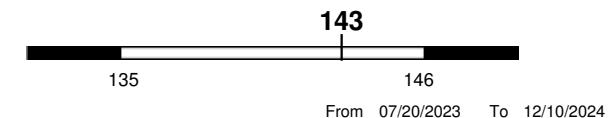
Reference Range: 6-22 (calc)

SEE NOTE:

Not Reported: BUN and Creatinine are within
reference range.
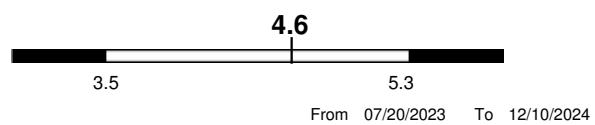
SODIUM

Reference Range: 135-146 mmol/L

143

135   146

From 07/20/2023 To 12/10/2024

160
150
140
130
120

Jan '24   Jul '24
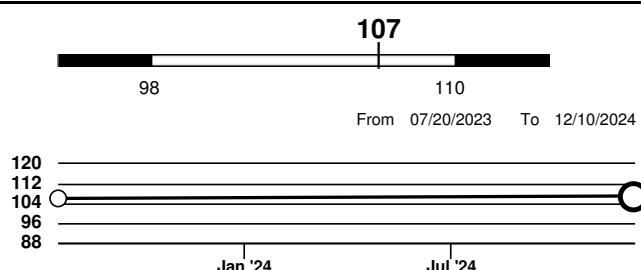
POTASSIUM
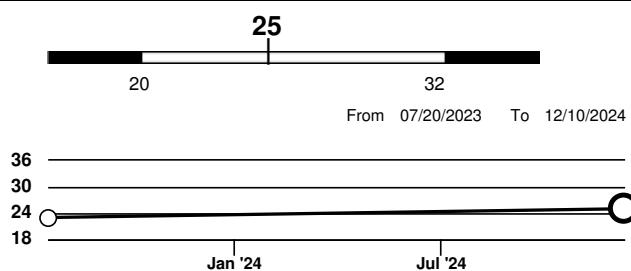
Reference Range: 3.5-5.3 mmol/L

4.6

3.5　　　　　　　5.3

From　07/20/2023　To　12/10/2024

6.02
5.16
4.3
3.44
2.58

Jan '24　　　　Jul '24

CHLORIDE
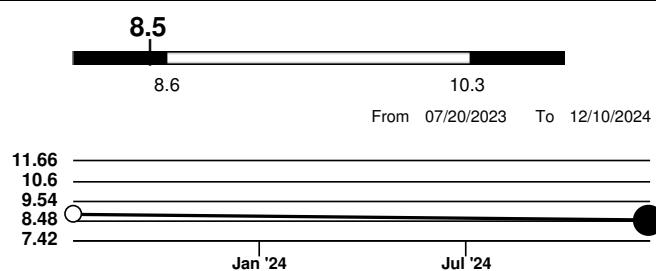
Reference Range: 98-110 mmol/L

107

98　　　　　　　110

From　07/20/2023　To　12/10/2024

120
112
104
96
88

Jan '24　　　　Jul '24

CARBON DIOXIDE
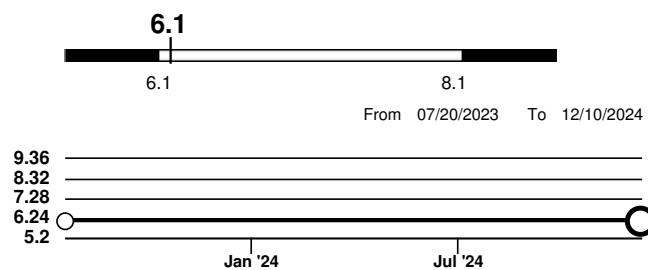
Reference Range: 20-32 mmol/L

25

20　　　　　　　32

From　07/20/2023　To　12/10/2024

36
30
24
18

Jan '24　　　　Jul '24

⚠ CALCIUM

Reference Range: 8.6-10.3 mg/dL

8.5

8.6　　　　　　　10.3

From　07/20/2023　To　12/10/2024

11.66
10.6
9.54
8.48
7.42

Jan '24　　　　Jul '24
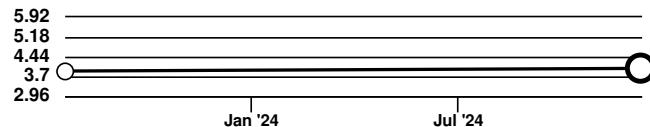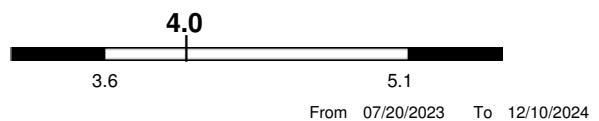
PROTEIN, TOTAL

Reference Range: 6.1-8.1 g/dL

6.1

6.1　　　　　　　8.1

From　07/20/2023　To　12/10/2024

9.36
8.32
7.28
6.24
5.2

Jan '24　　　　Jul '24

ALBUMIN

Reference Range: 3.6-5.1 g/dL

4.0

3.6 — 5.1

From 07/20/2023 To 12/10/2024

5.92
5.18
4.44
3.7
2.96

Jan '24 — Jul '24
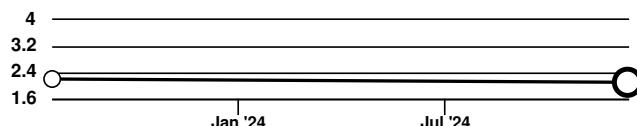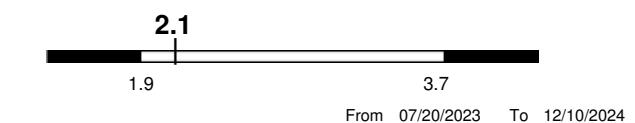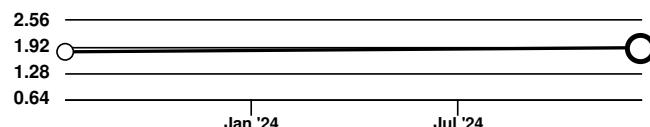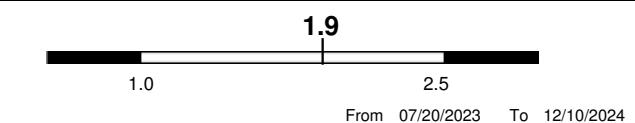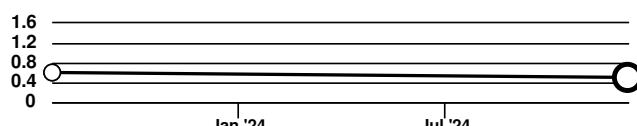
GLOBULIN

Reference Range: 1.9-3.7 g/dL (calc)

2.1

1.9 — 3.7

From 07/20/2023 To 12/10/2024

4
3.2
2.4
1.6

Jan '24 — Jul '24

ALBUMIN/GLOBULIN RATIO
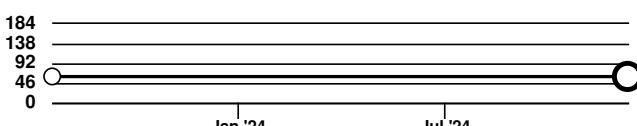
Reference Range: 1.0-2.5 (calc)

1.9

1.0 — 2.5

From 07/20/2023 To 12/10/2024

2.56
1.92
1.28
0.64

Jan '24 — Jul '24

BILIRUBIN, TOTAL

Reference Range: 0.2-1.2 mg/dL

0.5

0.2 — 1.2

From 07/20/2023 To 12/10/2024

1.6
1.2
0.8
0.4
0

Jan '24 — Jul '24

ALKALINE PHOSPHATASE

Reference Range: 35-144 U/L

61

35 — 144

From 07/20/2023 To 12/10/2024

184
138
92
46
0

Jan '24 — Jul '24
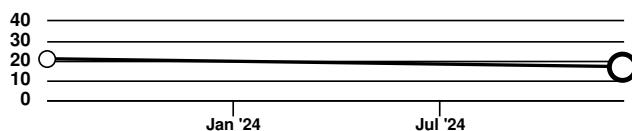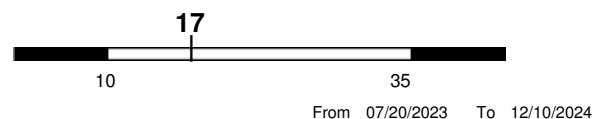
AST

Reference Range: 10-35 U/L

17

| 10 | 35 |

From 07/20/2023 To 12/10/2024

```
40 ─────────────────────────
30 ─────────────────────────
20 ○─────────────────────────
10 ─────────────────────────○
 0 ─────────────────────────
      Jan '24        Jul '24
```
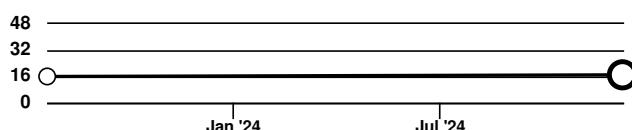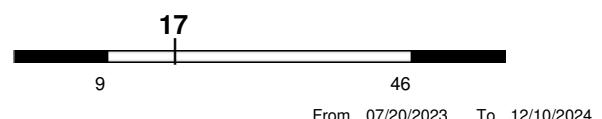
ALT

Reference Range: 9-46 U/L

17

| 9 | 46 |

From 07/20/2023 To 12/10/2024

```
48 ─────────────────────────
32 ─────────────────────────
16 ○─────────────────────────○
 0 ─────────────────────────
      Jan '24        Jul '24
```
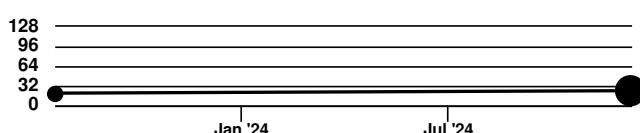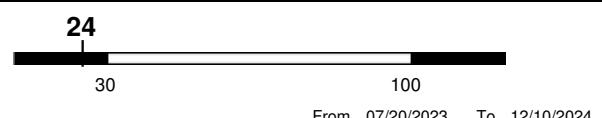
⚠ QUESTASSURED(TM) 25 HYDROXYVITAMIN D(D2,D3)

⚠ VITAMIN D, 25-OH, TOTAL

Reference Range: 30-100 ng/mL

24

| 30 | 100 |

From 07/20/2023 To 12/10/2024

```
128 ─────────────────────────
 96 ─────────────────────────
 64 ─────────────────────────
 32 ●─────────────────────────●
  0 ─────────────────────────
      Jan '24        Jul '24
```

Vitamin D, 25-Hydroxy reports concentrations of two common forms, 25-OHD2 and 25-OHD3. 25-OHD3
indicates both endogenous production and supplementation. 25-OHD2 is an indicator of exogenous sources
such as diet or supplementation. Therapy is based on measurement of Total 25-OHD, with levels <20 ng/mL
indicative of Vitamin D deficiency, while levels between 20 ng/mL and 30 ng/mL suggest insufficiency.
Optimal levels are> or = 30 ng/mL.
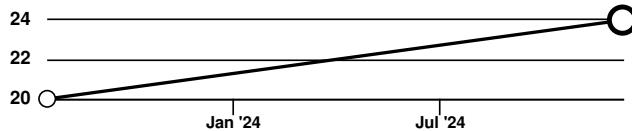
For additional information, please refer to http://education.QuestDiagnostics.com/faq/FAQ199

(This link is being provided for informational/ educational purposes only.)

VITAMIN D, 25-OH, D3

ng/mL See Note 1

24

From 07/20/2023 To 12/10/2024

```
24 ─────────────────────────○
22 ─────────────────────────
20 ○─────────────────────────
      Jan '24        Jul '24
```
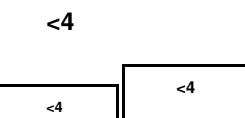
Reference range varies across results

VITAMIN D, 25-OH, D2

ng/mL See Note 1

<4
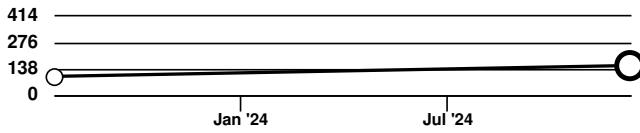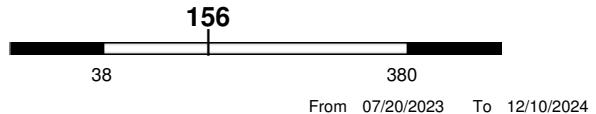
| <4 | <4 |
| 07/21/2023 | 12/09/2024 |

IRON, TIBC AND FERRITIN PANEL

FERRITIN
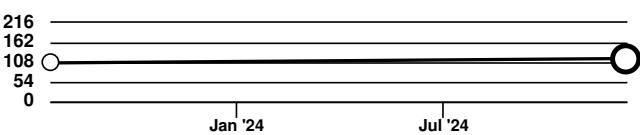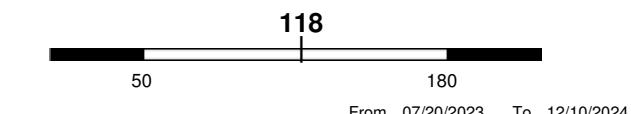
Reference Range: 38-380
ng/mL

156

38	380

From 07/20/2023 To 12/10/2024

```
414 ─────────────────────────────
276 ─────────────────────────────
138 ○───────────────────────────○
  0 ─────────────────────────────
        Jan '24          Jul '24
```

IRON AND TOTAL IRON BINDING CAPACITY
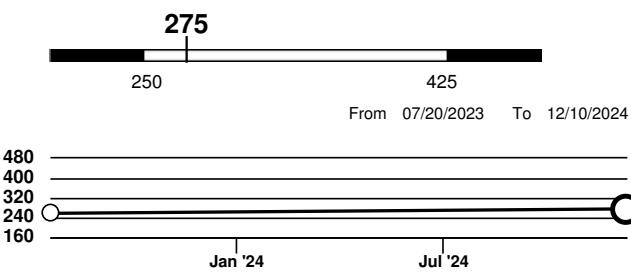
IRON, TOTAL

Reference Range: 50-180
mcg/dL

118

50	180

From 07/20/2023 To 12/10/2024

```
216 ─────────────────────────────
162 ─────────────────────────────
108 ○───────────────────────────○
 54 ─────────────────────────────
  0 ─────────────────────────────
        Jan '24          Jul '24
```
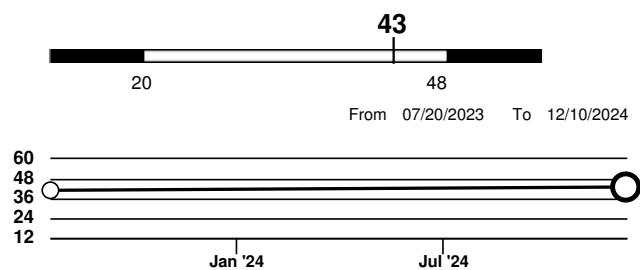
IRON BINDING CAPACITY

Reference Range: 250-425
mcg/dL (calc)

275

250	425

From 07/20/2023 To 12/10/2024

```
480 ─────────────────────────────
400 ─────────────────────────────
320 ─────────────────────────────
240 ○───────────────────────────○
160 ─────────────────────────────
        Jan '24          Jul '24
```

% SATURATION
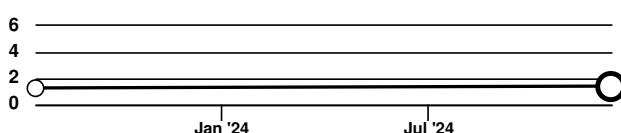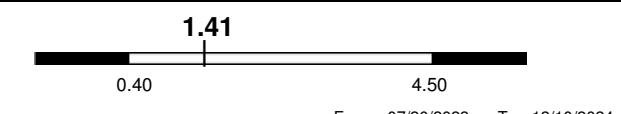
Reference Range: 20-48 %
(calc)

43

20	48

From 07/20/2023 To 12/10/2024

```
60 ─────────────────────────────
48 ─────────────────────────────
36 ○───────────────────────────○
24 ─────────────────────────────
12 ─────────────────────────────
        Jan '24          Jul '24
```

TSH+FREE T4
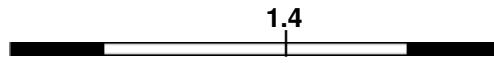
TSH

Reference Range: 0.40-4.50
mIU/L

1.41

0.40	4.50

From 07/20/2023 To 12/10/2024

```
6 ─────────────────────────────
4 ─────────────────────────────
2 ○───────────────────────────○
0 ─────────────────────────────
        Jan '24          Jul '24
```
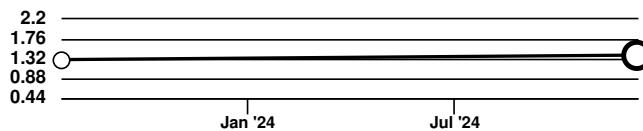
T4, FREE

Reference Range: 0.8-1.8
ng/dL

1.4

0.8   1.8

From 07/20/2023   To 12/10/2024

2.2
1.76
1.32
0.88
0.44

Jan '24   Jul '24

CARDIO IQ® HOMOCYSTEINE

HOMOCYSTEINE

Reference Range: <11.4 umol/L

9.0

<11.4
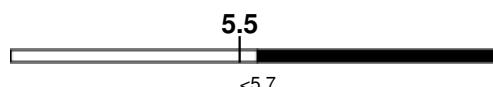
No Historical Data

Homocysteine is increased by functional deficiency of folate or vitamin B12. Testing for methylmalonic acid differentiates between these deficiencies. Other causes of increased homocysteine include renal failure, folate antagonists such as methotrexate and phenytoin, and exposure to nitrous oxide. Selhub J, et al. Ann Intern Med. 1999;131(5):331-9.
Homocysteine is increased by functional deficiency of folate or vitamin B12. Testing for methylmalonic acid differentiates between these deficiencies. Other causes of increased homocysteine include renal failure, folate antagonists such as methotrexate and phenytoin, and exposure to nitrous oxide. Selhub J, et al., Ann Intern Med. 1999;131(5):331-9.

CARDIO IQ® HEMOGLOBIN A1c

HEMOGLOBIN A1c

Reference Range: <5.7 %

5.5

<5.7

From 07/06/2023   To 12/10/2024

6
5.6
5.2
4.8

Jan '24   Jul '24

Reference range varies across results

For the purpose of screening for the presence of diabetes:
<5.7% is consistent with the absence of diabetes;
5.7-6.4% is consistent with increased risk for diabetes (prediabetes); >= 6.5% is consistent with diabetes. This assay result is consistent with a decreased risk of diabetes. Currently, no consensus exists regarding use of hemoglobin A1c for diagnosis of diabetes in children. According to American Diabetes Association (ADA) guidelines, hemoglobin A1c <7.0% represents optimal control in non-pregnant diabetic patients. Different metrics may apply to specific patient populations. Standards of Medical Care in Diabetes (ADA).
This test was performed on the Roche cobas c503 platform. Effective 3/5/2024, a change in test platforms from the Abbott Architect to the Roche cobas c503 may have shifted HbA1c results compared to historical results. Based on laboratory validation testing conducted at Quest, the Roche platform relative to the Abbott platform had an average increase in HbA1c value of <=0.3%. This difference is within accepted variability established by the National Glycohemoglobin Standardization Program. Note that not all individuals will have had a shift in their results and direct comparisons between historical and current results for testing conducted on different platforms is not recommended.
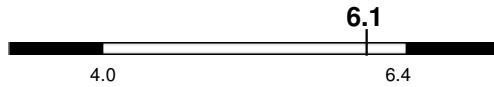
MAGNESIUM, RBC

MAGNESIUM, RBC

Reference Range: 4.0-6.4 mg/dL See Note 1

6.1

4.0   6.4
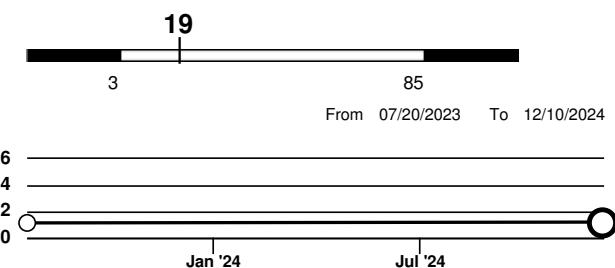
No Historical Data

GGT

GGT

Reference Range: 3-85 U/L

19

3   85

From   07/20/2023   To 12/10/2024

96
64
32
0

Jan '24   Jul '24
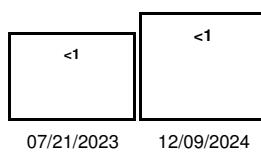
Reference range varies across results

THYROID PEROXIDASE AND THYROGLOBULIN ANTIBODIES

THYROGLOBULIN ANTIBODIES
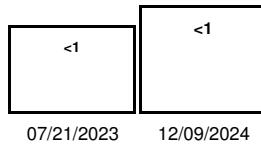
Reference Range: < or = 1
IU/mL

<1

<1	<1

07/21/2023   12/09/2024

THYROID PEROXIDASE ANTIBODIES
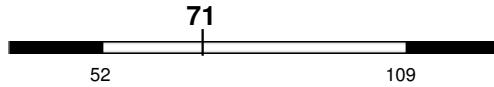
Reference Range: <9 IU/mL

<1

<1	<1

07/21/2023   12/09/2024

IODINE, SERUM/PLASMA

IODINE, SERUM/PLASMA

Reference Range: 52-109 mcg/L See Note 1

71

52   109
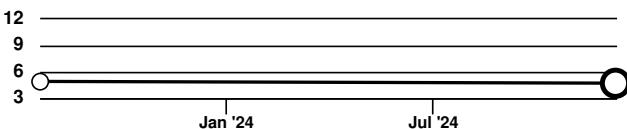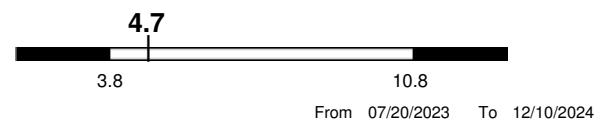
No Historical Data

CBC (INCLUDES DIFF/PLT)

WHITE BLOOD CELL COUNT
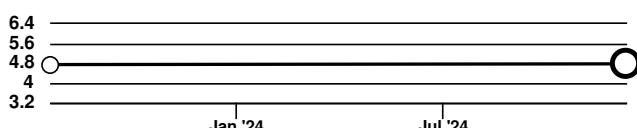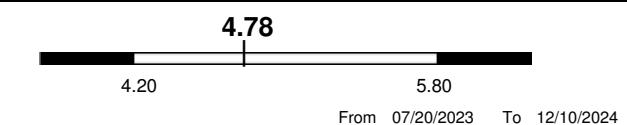
Reference Range: 3.8-10.8 Thousand/uL

4.7

3.8 10.8

From 07/20/2023 To 12/10/2024

12
9
6
3

Jan '24 Jul '24

RED BLOOD CELL COUNT
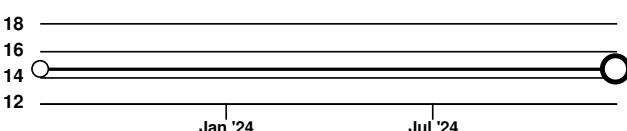
Reference Range: 4.20-5.80 Million/uL

4.78

4.20 5.80

From 07/20/2023 To 12/10/2024

6.4
5.6
4.8
4
3.2

Jan '24 Jul '24

HEMOGLOBIN
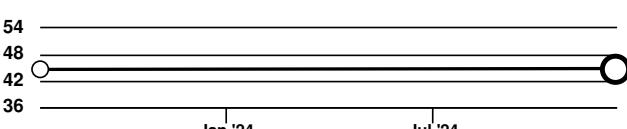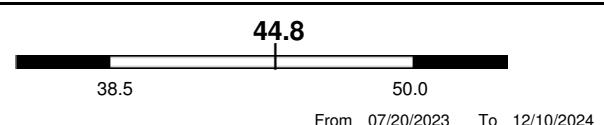
Reference Range: 13.2-17.1 g/dL

14.6

13.2 17.1

From 07/20/2023 To 12/10/2024

18
16
14
12

Jan '24 Jul '24

HEMATOCRIT

Reference Range: 38.5-50.0 %

44.8

38.5 50.0

From 07/20/2023 To 12/10/2024

54
48
42
36

Jan '24 Jul '24
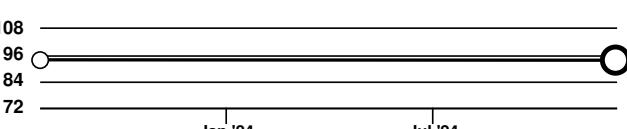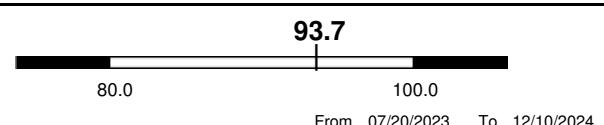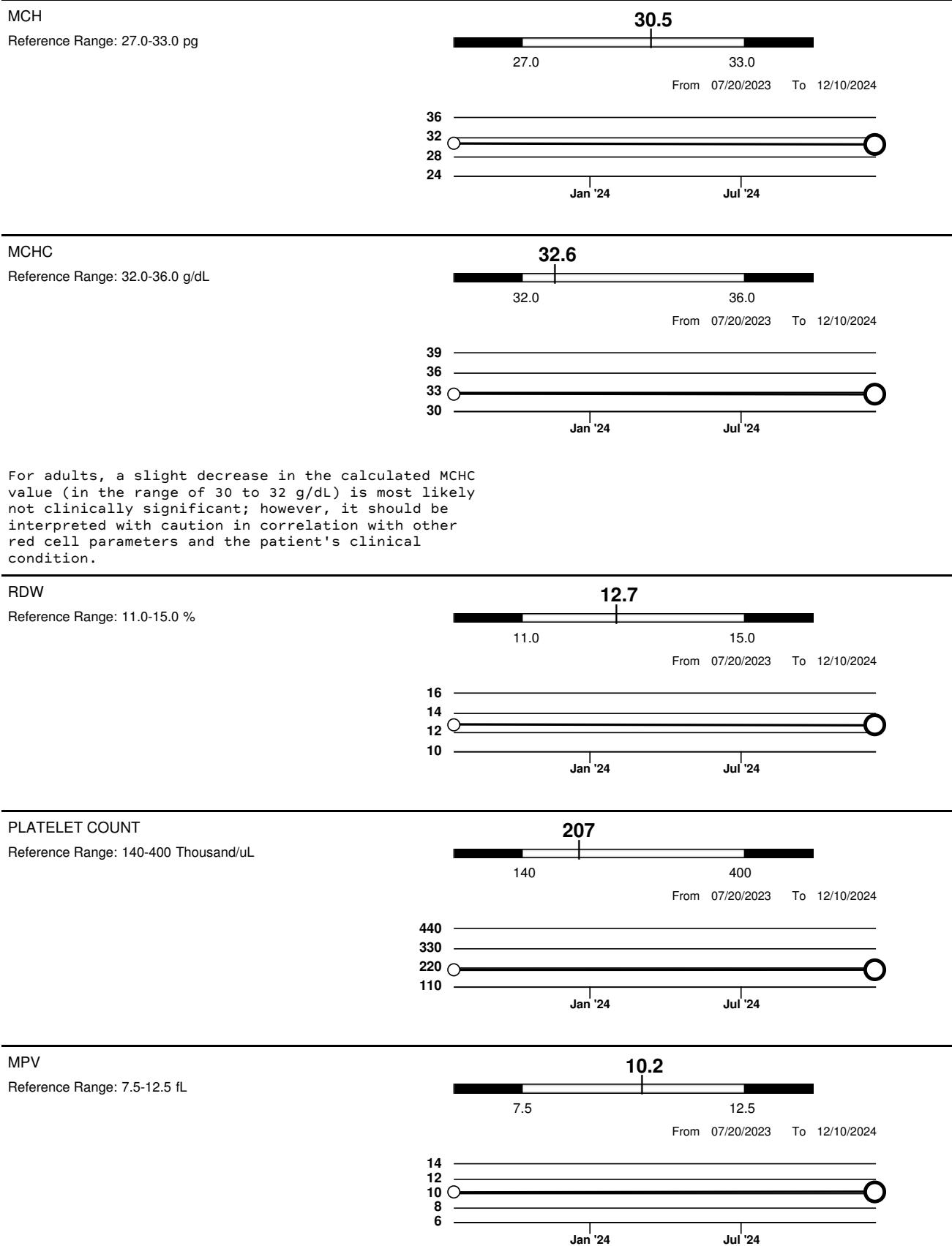
MCV
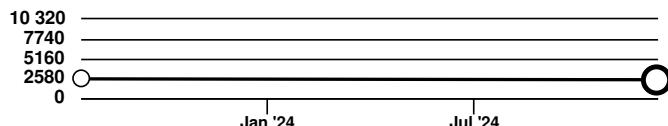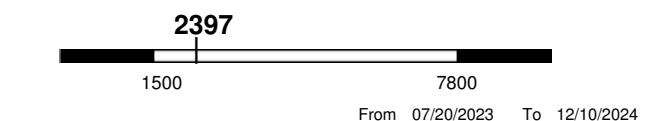
Reference Range: 80.0-100.0 fL

93.7

80.0 100.0

From 07/20/2023 To 12/10/2024

108
96
84
72

Jan '24 Jul '24

MCH

Reference Range: 27.0-33.0 pg

30.5

27.0   33.0

From 07/20/2023   To 12/10/2024

```
36
32
28
24
        Jan '24        Jul '24
```

MCHC

Reference Range: 32.0-36.0 g/dL

32.6

32.0   36.0

From 07/20/2023   To 12/10/2024

```
39
36
33
30
        Jan '24        Jul '24
```

For adults, a slight decrease in the calculated MCHC
value (in the range of 30 to 32 g/dL) is most likely
not clinically significant; however, it should be
interpreted with caution in correlation with other
red cell parameters and the patient's clinical
condition.

RDW

Reference Range: 11.0-15.0 %

12.7

11.0   15.0

From 07/20/2023   To 12/10/2024

```
16
14
12
10
        Jan '24        Jul '24
```

PLATELET COUNT

Reference Range: 140-400 Thousand/uL

207

140   400

From 07/20/2023   To 12/10/2024

```
440
330
220
110
        Jan '24        Jul '24
```

MPV

Reference Range: 7.5-12.5 fL

10.2

7.5   12.5

From 07/20/2023   To 12/10/2024

```
14
12
10
8
6
        Jan '24        Jul '24
```

ABSOLUTE NEUTROPHILS

Reference Range: 1500-7800 cells/uL

2397

1500　　　　　　　7800

From 07/20/2023　To 12/10/2024

10 320
7740
5160
2580
0

Jan '24　　　Jul '24
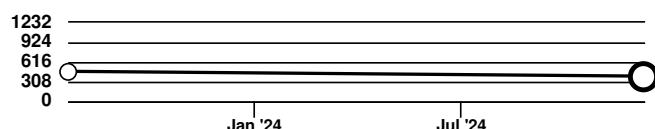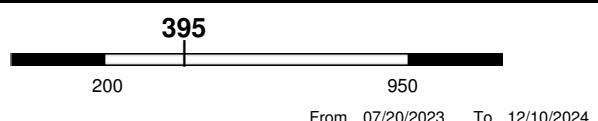
ABSOLUTE LYMPHOCYTES

Reference Range: 850-3900 cells/uL

1810

850　　　　　　　3900

From 07/20/2023　To 12/10/2024

5016
3762
2508
1254
0

Jan '24　　　Jul '24
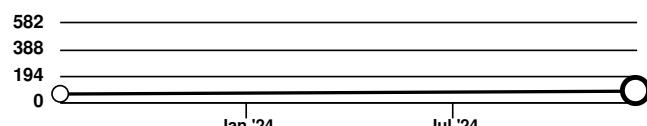
ABSOLUTE MONOCYTES

Reference Range: 200-950 cells/uL

395

200　　　　　　　950

From 07/20/2023　To 12/10/2024

1232
924
616
308
0

Jan '24　　　Jul '24

ABSOLUTE EOSINOPHILS
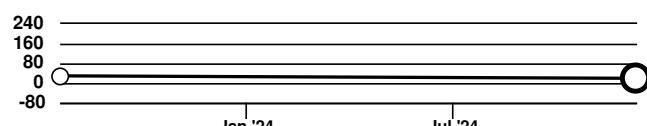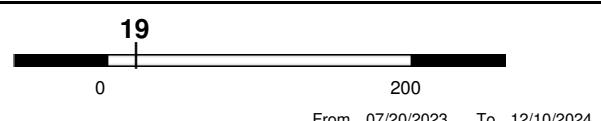
Reference Range: 15-500 cells/uL

80

15　　　　　　　500

From 07/20/2023　To 12/10/2024

582
388
194
0

Jan '24　　　Jul '24

ABSOLUTE BASOPHILS

Reference Range: 0-200 cells/uL

19

0　　　　　　　200

From 07/20/2023　To 12/10/2024

240
160
80
0
-80

Jan '24　　　Jul '24

NEUTROPHILS

%

51

54

51

Jan '24   Jul '24

Reference range varies across results

LYMPHOCYTES

%

38.5

From 07/20/2023   To 12/10/2024

40

38

36

Jan '24   Jul '24

Reference range varies across results

MONOCYTES

%

8.4

From 07/20/2023   To 12/10/2024

9.6
9.12
8.64
8.16

Jan '24   Jul '24

Reference range varies across results

EOSINOPHILS

%

1.7

From 07/20/2023   To 12/10/2024

1.8
1.6
1.4
1.2
1

Jan '24   Jul '24

Reference range varies across results

BASOPHILS

%

0.4

From 07/20/2023   To 12/10/2024

0.64
0.56
0.48
0.4

Jan '24   Jul '24

Reference range varies across results

CORTISOL, FREE AND TOTAL, LC/MS

CORTISOL, TOTAL, LC/MS   **13.1**

mcg/dL   *No Historical Data*

```
Adult Reference Ranges for Cortisol, Total:

   Males and Females
   8-10 AM  4.6-20.6 mcg/dL
   4-6  PM  1.8-13.6 mcg/dL

   Cortisol Response to ACTH
   Adult Males and Females
   Peak  >20.0 mcg/dL
   Peak  >16.0 mcg/dL after IM injection
```

CORTISOL,FREE,LC/MS,S   **0.80**

mcg/dL   *No Historical Data*

```
Adult Reference Ranges for Cortisol, MS, Free:

    8:00 - 10:00 AM      0.07-0.93 mcg/dL
    4:00 -  6:00 PM      0.04-0.45 mcg/dL
   10:00 - 11:00 PM      0.04-0.35 mcg/dL
```

```
This test was developed and its analytical performance
characteristics have been determined by Quest Diagnostics.
It has not been cleared or approved by FDA. This assay has
been validated pursuant to the CLIA regulations and is used
for clinical purposes.
```

DHEA SULFATE

DHEA SULFATE

Reference Range: 32-279 mcg/dL

124

| 32 | 279 |

No Historical Data

PROLACTIN

PROLACTIN

Reference Range: 2.0-18.0 ng/mL

11.4

| 2.0 | 18.0 |

No Historical Data

ESTRADIOL

ESTRADIOL

Reference Range: < OR = 39 pg/mL

37

< OR = 39

No Historical Data
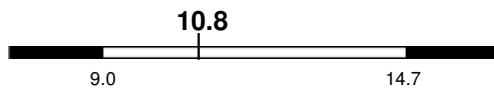
```
Reference range established on post-pubertal patient
population. No pre-pubertal reference range
established using this assay. For any patients for
whom low Estradiol levels are anticipated (e.g. males,
pre-pubertal children and hypogonadal/post-menopausal
females), the Quest Diagnostics Nichols Institute
Estradiol, Ultrasensitive, LCMSMS assay is recommended
(order code 30289).

Please note: patients being treated with the drug
fulvestrant (Faslodex(R)) have demonstrated significant
interference in immunoassay methods for estradiol
measurement. The cross reactivity could lead to falsely
elevated estradiol test results leading to an
inappropriate clinical assessment of estrogen status.
Quest Diagnostics order code 30289-Estradiol,
Ultrasensitive LC/MS/MS demonstrates negligible cross
reactivity with fulvestrant.
```

ZINC, RBC

| ZINC, RBC	**10.8**
Reference Range: 9.0-14.7 mg/L	9.0 — 14.7

No Historical Data

```
(Note)
This test was developed and its analytical performance
characteristics have been determined by Quest Diagnostics.
It has not been cleared or approved by the FDA. This
assay has been validated pursuant to the CLIA regulations
and is used for clinical purposes.

MDF
med fusion
2501 South State Highway 121,Suite 1100
Lewisville TX 75067
972-966-7300
Ithiel James L. Frame, MD, PhD
```

Note 1   This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute Chantilly, VA. It has not been cleared or approved by the U.S. Food and Drug Administration. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

Performing Sites

AMD Quest Diagnostics/Nichols Chantilly-Chantilly VA, 14225 Newbrook Dr, Chantilly, VA 20151-2228 Laboratory Director: Patrick W Mason M.D.,PhD

EZ Quest Diagnostics/Nichols SJC-San Juan Capistrano,, 33608 Ortega Hwy, San Juan Capistrano, CA 92675-2042 Laboratory Director: Irina Maramica MD,PhD,MBA

NL1 Quest Diagnostics LLC-Quest Diagnostics LLC, 200 Forest St, Marlborough, MA 01752-3023 Laboratory Director: Salim E Kabawat M.D.

Z3E MedFusion-MedFusion, 2501 South State Highway 121, Suite 1100, Lewisville, TX 75067-8188 Laboratory Director: Ithiel James L Frame MD,PhD

Z4M Cleveland HeartLab Inc.-Cleveland HeartLab Inc., 6701 Carnegie Ave, Suite 500, Cleveland, OH 44103-4623 Laboratory Director: Sami Albeiroti PhD,DABCC

Key

⬢ Priority Out of Range   ⚠ Out of Range

Report Insights

CARDIO IQ® CHOLESTEROL, TOTAL

What is Heart Disease?

There are many kinds of heart disease. Some of these are atherosclerosis, heart failure, heart valve problems, heart rhythm problems, and heart problems that a child can be born with. Atherosclerosis is a common type of coronary heart disease. This type of heart disease affects the blood vessels of the heart. It happens when lipids (eg, cholesterol) build up in the arteries of the heart and form a plaque. When a plaque ruptures, it can cause a blood clot. The blood clot can block the flow of blood to the heart, causing a heart attack. Coronary heart disease is the leading cause of death in the United States. It caused about a third of all deaths in 2010. Many of these occurred without warning or symptoms.

What are the basic risk factors for coronary heart disease?

These things increase your risk of developing heart disease:
- Age (older than 45 for men, older than 55 for women)
- High blood pressure
- High levels of bad cholesterol (LDL-cholesterol)
- Low levels of good cholesterol (HDL-cholesterol)
- Smoking
- Diabetes
- Being overweight
- Lack of physical activity
- Family history of early coronary heart disease

What other risk factors are there?

There are many other things that might affect your risk of heart disease. These can be as important or more important than the basic risk factors.

They include:
- The types, size, and number of HDL and LDL cholesterol particles you have
- The amount of proteins that carry cholesterol in the body
- The amount of inflammation in your arteries
- Your genetic makeup

How will my doctor determine my risk?

Your doctor will ask questions to find out how old you are, whether you smoke, and how physically active you are. He or she will take your blood pressure and find out how much you weigh. Your doctor will also order some blood tests to learn about your cholesterol levels. Once the results are back, your doctor can put it all together and let you know your risk.

What else might my doctor do?

Your doctor might ask if anyone in your family has had heart disease. If you answer yes, your doctor might order more blood tests. These tests can find out if the DNA in your genes increases your risk of heart disease. If you have certain risk factors, like diabetes or being overweight, your doctor might also order more blood tests. These tests can give your doctor a more complete picture of your risk. If you have an increased risk of heart disease, your doctor may suggest treatment. Once your treatment has begun, your doctor might order more blood tests to see if the treatment is working. Some blood tests can tell if you are still at risk after being treated. That is, they can determine your residual risk.

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- Find out how well the treatment is working
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- Determine whether family members may be at risk and could benefit from testing

What can I do to reduce my risk and/or keep it low?

These things can help you be healthy and lower your risk of heart disease:
- Eat a healthy diet.
- Get to or stay at a healthy weight.
- Stop smoking (if you smoke).
- Get plenty of exercise.
- Manage your stress.

What else can I do?

- Talk with your doctor about your risk factors.
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Omega-3 Fatty Acids: Benefits and Supplements (webmd.com):
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Atherosclerotic Cardiovascular Disease (ASCVD) Risk Calculator
This Risk Estimator enables health care providers and patients to estimate 10-year and lifetime risks for atherosclerotic cardiovascular disease (ASCVD), defined as coronary death or nonfatal myocardial infarction, or fatal or nonfatal stroke, based on the Pooled Cohort Equations and lifetime risk prediction tools. This Risk Estimator is provided by the American College of Cardiology (ACC) and the American Heart Association (AHA).
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Learn More: https://www.questdiagnostics.com/healthcare-professionals/clinical-education-center/faq/faq22v1

CARDIO IQ® HDL CHOLESTEROL

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What are the basic risk factors for coronary heart disease?

These things increase your risk of developing heart disease:
• Age (older than 45 for men, older than 55 for women)
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• High levels of bad cholesterol (LDL-cholesterol)
• Low levels of good cholesterol (HDL-cholesterol)
• Smoking
• Diabetes
• Being overweight
• Lack of physical activity
• Family history of early coronary heart disease

What other risk factors are there?

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How will my doctor determine my risk?

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What else can I do?

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CARDIO IQ® TRIGLYCERIDES

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What are the basic risk factors for coronary heart disease?

These things increase your risk of developing heart disease:
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- High blood pressure
- High levels of bad cholesterol (LDL-cholesterol)
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- Smoking
- Diabetes
- Being overweight
- Lack of physical activity
- Family history of early coronary heart disease

What other risk factors are there?

There are many other things that might affect your risk of heart disease. These can be as important or more important than the basic risk factors. They include:
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How will my doctor determine my risk?

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•   Get to or stay at a healthy weight.
•   Stop smoking (if you smoke).
•   Get plenty of exercise.
•   Manage your stress.

What else can I do?

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LIPOPROTEIN FRACTIONATION ION MOBILITY
Which therapeutic agents have an impact on lipoprotein subclasses?

Therapeutic Goal	Therapy
Increase number of large, cardio-protective HDL particles	• Restrict simple carbohydrates in the diet • Exercise (associated with fat weight loss • Body fat weight loss • Nicotinic acid • Fish oil supplements (particularly when triglycerides are elevated) • Fibrates (particularly when triglycerides are elevated)
Lower number of small or medium atherogenic LDL particles	• Restrict simple carbohydrates in the diet • Exercise (associated with fat weight loss • Body fat weight loss • Nicotinic acid • Fish oil supplements (particularly when triglycerides are elevated) • Fibrates (particularly when triglycerides are elevated) • Niacin plus gemfibrozil[9,10]

Statins tend to reduce the entire LDL spectrum, large and small alike.

Cardio IQ® Advanced Cardiovascular Testing

Heart disease is complex. Let Quest Diagnostics and Cardio IQ help you and your doctor determine your cardiovascular risk profile. Learn more from this publication provided by Quest Diagnostics.

View more: https://questdiagnostics.com/dms/Documents/cardio/PT04-AdvancedCardiovascularTests.pdf

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CARDIO IQ® APOLIPOPROTEIN B

What is Heart Disease?

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What are the basic risk factors for coronary heart disease?

These things increase your risk of developing heart disease:
• Age (older than 45 for men, older than 55 for women)
• High blood pressure
• High levels of bad cholesterol (LDL-cholesterol)
• Low levels of good cholesterol (HDL-cholesterol)
• Smoking
• Diabetes
• Being overweight
• Lack of physical activity
• Family history of early coronary heart disease

What other risk factors are there?

There are many other things that might affect your risk of heart disease. These can be as important or more important than the basic risk factors. They include:
• The types, size, and number of HDL and LDL cholesterol particles you have
• The amount of proteins that carry cholesterol in the body
• The amount of inflammation in your arteries
• Your genetic makeup

How will my doctor determine my risk?

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What else might my doctor do?

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•   Get to or stay at a healthy weight.
•   Stop smoking (if you smoke).
•   Get plenty of exercise.
•   Manage your stress.

What else can I do?

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What is Apo B?

Apo B 91726(X) is the predominant apoprotein attached to low-density lipoproteins (LDL), intermediate-density lipoproteins (IDL), and very low-density lipoproteins (VLDL).

Why is Apo B important?

Several decades of scientific literature support the measurement of Apo B for monitoring response to statin therapy. Elevated Apo B is associated with a 2.0-2.5x increased CVD risk.

CARDIO IQ® LIPOPROTEIN (A)

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•   Being overweight
•   Lack of physical activity
•   Family history of early coronary heart disease

What other risk factors are there?

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CARDIO IQ® HS CRP

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COMPREHENSIVE METABOLIC PANEL

Comprehensive Metabolic Panel Result: What does it mean?

A CMP refers to a broad screening tool that includes 14 tests that evaluate the functioning of a person's liver and kidneys, as well as the body's fluid balance and general metabolism. The results additionally provide a general indicator of your overall health; a CMP is often ordered in your yearly physical exam.

In a CMP, levels of liver enzymes, waste products of the kidneys (BUN and creatinine), electrolytes (calcium, sodium, potassium), and glucose, among other indicators of general body function are detected. The test results of a CMP are useful to examine for conditions, such as diabetes, liver disease, and kidney disease and also to monitor present conditions, such as hypertension.

QUESTASSURED(TM) 25 HYDROXYVITAMIN D(D2,D3)

What is vitamin D?

Vitamin D is a fat-soluble vitamin that occurs in 2 forms: vitamin D 3 and vitamin D2. Vitamin D3, the more common form, is made in the skin after exposure to sunlight. Vitamin D2, on the other hand, comes mostly from food and over-the-counter supplements. It may also be used in the pharmacological treatment of vitamin D deficiency.

Vitamin D is rapidly metabolized in the liver to 25-hydroxyvitamin D (25[OH]D). This inactive form is then converted in the kidneys to the active 1,25-dihydroxyvitamin D form.

What does vitamin D do in the body?

Vitamin D helps maintain healthy levels of calcium and phosphorus by aiding in their absorption from the gut. This helps the body form and maintain strong bones. Vitamin D also modulates neuromuscular, immune, and other cellular functions. Vitamin D deficiency has been associated with a wide range of medical conditions including heart disease, hypertension, diabetes, and cancer.

Who should have 25-hydroxyvitamin D testing?

The Endocrine Society recommends screening individuals at risk for deficiency. These include those with [1]:

- Rickets
- Osteomalacia
- Osteoporosis
- Chronic kidney disease
- Hepatic failure
- Malabsorption syndromes
- Hyperparathyroidism
- Medications (anti-seizure medications, glucocorticoids, AIDS medications, antifungals, cholestyramine)

The Society also recommends screening[1]:

- African-American and Hispanic children and adults
- Pregnant and lactating women
- Older adults with history of falls
- Older adults with history of nontraumatic fractures
- Obese children and adults

The Endocrine Society also recommends monitoring patients with granuloma-forming disorders and some lymphomas by testing 25(OH)D and serum calcium.[1] Some physicians may wish to monitor people receiving vitamin D therapy to evaluate for compliance and expected change in concentration.

How much vitamin D do people need?

To maximize bone health, the Endocrine Society suggests a dietary intake of at least 400 IU/day for **infants <1 year** and at least 600 IU/day for **children 1 year and older** .[1] Whether these levels are enough to provide all the nonskeletal benefits of vitamin D is not known. At least 1000 IU/day may be needed to raise the blood level consistently above 30 ng/mL (cut point for vitamin D sufficiency).[1]

To maximize bone health and muscle function in **adults 19 to 70 years of age**, the Endocrine Society suggests a dietary intake of at least 600 IU/day.[1] Whether these levels are enough to provide all the nonskeletal benefits of vitamin D is not known. At least 1500–2000 IU/day may be needed to achieve a blood level of 30 ng/mL.[1]

To maximize bone health and muscle function in **adults over 70 years**, the Endocrine Society suggests a dietary intake of at least 800 IU/day.[1] Whether these levels are enough to provide all the nonskeletal benefits of vitamin D is not known. At least 1500–2000 IU/day may be needed to achieve a blood level of 30 ng/mL.[1]

Obese children and adults and those on certain medications may need at least 2 to 3 times the suggested dietary intake for their age group.[1] Relevant medications include anticonvulsants, glucocorticoids, AIDS medications, and antifungals such as ketoconazole.

For people who are vitamin D insufficient or deficient, supplementation or a therapeutic prescription may be needed to correct the deficiency. Refer to the Endocrine Society guidelines[1] for treatment recommendations.

What are the sources of vitamin D?

Vitamin D can be obtained from exposure to sunlight. However, sun exposure can be affected by season of the year, latitude, time of day, skin pigmentation, use of sunscreens, and age. These variables may necessitate alternative sources for some people.

One alternative source is the diet. Some foods are naturally high in vitamin D; these include oil-rich fish such as salmon, mackerel, and herring. For example, fresh farmed salmon may have approximately 100-250 IU in 3.5 ounces, whereas fresh, wild caught salmon may have approximately 600-1000 IU in a 3.5 ounce serving. Shiitake mushrooms, especially sun-dried, are also high in vitamin D. Other foods are fortified with vitamin D; these include milk and other dairy products, orange juice, and some grain products.

Multivitamin and other supplements are another alternative source.

None of these sources may be adequate for people with liver or kidney disease as they may be unable to produce sufficient amounts of the active form of vitamin D. This is because vitamin D metabolism to the active form requires the liver and kidney. These people may need supplementation with the active form (1,25-dihydroxyvitamin D).

What is the impact of seasons on vitamin D?

25(OH)D concentrations are typically at their lowest at the end of February and at their highest at the end of August. This seasonal effect is more notable in northern latitudes than in southern latitudes where the sun is out for more of the year. Thus, there may be more of a need to supplement, or to supplement with higher doses of vitamin D, in the winter months than in the summer months.

Quest Diagnostics data show that the percentage of patients who are deficient in vitamin D vary seasonally from 21% at the end of summer and 48% at the end of winter.

How common is vitamin D deficiency?

Based on a sample of patients throughout the United States, Quest Diagnostics observed that 33% of patients were deficient in vitamin D, and 60% were either deficient or suboptimal.

What does vitamin D testing measure?

Vitamin D tests generally measure the total concentration of 25(OH)D, which is the main form of vitamin D circulating in blood and the best

indicator of vitamin D deficiency or excess. Vitamin D tests using liquid chromatography, tandem mass spectrometry (LC/MS/MS) may also provide the concentration of vitamin D2 and D3 which, when added together, equal the total vitamin D concentration. For detection of vitamin D deficiency, measurement of 1,25-dihydroxyvitamin D is not recommended, as levels may be misleadingly normal in patients with significant vitamin D deficiency.

Why do physicians test for vitamin D?

A physician generally will order a test to determine the level of vitamin D in a patient's body. A physician would typically evaluate the test result in connection with several other factors affecting a patient's health such as medical history, gender, and age.

What are vitamin D2 and vitamin D3?

Vitamin D2 is derived from fungal and plant sources and is commonly found in supplements, such as multivitamins, in the United States. Vitamin D2 may also be used in the pharmacological treatment of vitamin D deficiency. Vitamin D 3 is derived from animal sources and is made in the skin following exposure to sunlight. The LC/MS/MS technique is able to directly quantify vitamin D2 and vitamin D3. By comparison, immunoassay-based vitamin D tests can only indirectly measure vitamin D2 and vitamin D3; therefore, only the total vitamin D is reported.

Reference

1. Holick MF, Binkley NC, Bischoff-Ferrari HA, et al. Evaluation, treatment, and prevention of vitamin D deficiency: an Endocrine Society clinical practice guideline. *J Clin Endocrin Metab*. 2011;96:1911-1930.https://www.endocrine.org/~/media/endosociety/Files/Publications/Clinical%20Practice%20Guidelines/FINAL-Standalone-Vitamin-D-Guideline.pdf: https://www.endocrine.org/~/media/endosociety/Files/Publications/Clinical%20Practice%20Guidelines/FINAL-Standalone-Vitamin-D-Guideline.pdf

â This FAQ is provided for informational purposes only and is not intended as medical advice. A physician's test selection and interpretation, diagnosis, and patient management decisions should be based on his/her education, clinical expertise, and assessment of the patient.
Document FAQS.163 Version: 1

Version 1 effective 05/04/2015 to present

Version 0 effective 04/10/2015 to 05/03/2015: http://education.questdiagnostics.com/faq/FAQ163-retired0

IRON AND TOTAL IRON BINDING CAPACITY

Iron is an essential micronutrient in the body, where it plays an important role in the production of healthy red blood cells. It also is an important constituent of proteins, such as hemoglobin (the protein in red blood cells that carry oxygen), myoglobin (the protein in the musclea that binds to oxygen), and enzymes (proteins that enable the metabolic processes to occur).

In regards to performance, since iron is a key micronutrient important for your body's ability to transport oxygen so that you can breathe, deficiencies in iron may result in the impairment of your ability to transport oxygen, which may result in fatigue, weakness and keeping you from reaching your full potential in your sport.

IRON, TIBC AND FERRITIN PANEL

Iron, TIBC (total iron-binding capacity), Ferritin

Levels of iron, TIBC, and ferritin in the blood are measured when iron-deficiency anemia is suspected. Iron is an important component of red blood cells and it plays a major role in transporting oxygen throughout the body. Iron-deficiency anemia is very common, especially among younger women. It can lead to symptoms of tiredness, shortness of breath, and sometimes chest pain.

If you are diagnosed with iron-deficiency anemia you may be asked to adhere to a healthy diet and take iron supplements. More on iron-deficiency anemia can be found by clicking here: https://www.nhlbi.nih.gov/health-topics/iron-deficiency-anemia to move to the health topics website of the National Heart, Lung, and Blood Institute.

T4, FREE

Thyroxine (T4) and triiodothyronine (T3) are the two major hormones produced by the thyroid gland. The majority of T4 is found in the body bound to proteins, with a smaller portion not bound to proteins, or "free." Free (unbound) T4 is secreted by the thyroid gland as the biologically active form, which plays a role in controlling the rate of metabolism and growth. Most of the T4 secreted is converted to T3 by the liver and other tissues. Once converted, T3 plays a role in metabolic rate, ATP production, protein breakdown, and glucose transport in muscle cells.

TSH+FREE T4

Thyroid Function Tests

The blood tests that are most widely used to evaluate thyroid function include those that measure TSH, T4, T3, free T4, and thyroid antibody levels. Read more about these tests in the brochure provided by the American Thyroid Association (ATA).

Download the brochure from the ATA website: http://www.thyroid.org/wp-content/uploads/patients/brochures/FunctionTests_brochure.pdf

CARDIO IQ® HOMOCYSTEINE

What is Heart Disease?

There are many kinds of heart disease. Some of these are atherosclerosis, heart failure, heart valve problems, heart rhythm problems, and heart problems that a child can be born with. Atherosclerosis is a common type of coronary heart disease. This type of heart disease affects the blood vessels of the heart. It happens when lipids (eg, cholesterol) build up in the arteries of the heart and form a plaque. When a plaque ruptures, it can cause a blood clot. The blood clot can block the flow of blood to the heart, causing a heart attack. Coronary heart disease is the leading cause of death in the United States. It caused about a third of all deaths in 2010. Many of these occurred without warning or symptoms.

What are the basic risk factors for coronary heart disease?

These things increase your risk of developing heart disease:
• Age (older than 45 for men, older than 55 for women)
• High blood pressure
• High levels of bad cholesterol (LDL-cholesterol)
• Low levels of good cholesterol (HDL-cholesterol)
• Smoking
• Diabetes
• Being overweight
• Lack of physical activity
• Family history of early coronary heart disease

What other risk factors are there?

There are many other things that might affect your risk of heart disease. These can be as important or more important than the basic risk factors. They include:
• The types, size, and number of HDL and LDL cholesterol particles you have
• The amount of proteins that carry cholesterol in the body
• The amount of inflammation in your arteries
• Your genetic makeup

How will my doctor determine my risk?

Your doctor will ask questions to find out how old you are, whether you smoke, and how physically active you are. He or she will take your blood pressure and find out how much you weigh. Your doctor will also order some blood tests to learn about your cholesterol levels. Once the results are back, your doctor can put it all together and let you know your risk.

What else might my doctor do?

Your doctor might ask if anyone in your family has had heart disease. If you answer yes, your doctor might order more blood tests. These tests can find out if the DNA in your genes increases your risk of heart disease. If you have certain risk factors, like diabetes or being overweight, your doctor might also order more blood tests. These tests can give your doctor a more complete picture of your risk. If you have an increased risk of heart disease, your doctor may suggest treatment. Once your treatment has begun, your doctor might order more blood tests to see if the treatment is working. Some blood tests can tell if you are still at risk after being treated. That is, they can determine your residual risk.

How can the laboratory help?

The laboratory does all the blood testing for your doctor. If your doctor orders Cardio IQ™ tests from Quest Diagnostics, the laboratory will send a special report. This report can help you and your doctor better understand your results and what they mean. It can also help your doctor:
• Get a better idea of your risk of coronary heart disease
• Decide whether you need treatment
• Decide what is the best treatment for you
• Find out how well the treatment is working
• Decide whether changes need to be made to your treatment
• Determine whether family members may be at risk and could benefit from testing

What can I do to reduce my risk and/or keep it low?

These things can help you be healthy and lower your risk of heart disease:
• Eat a healthy diet.
• Get to or stay at a healthy weight.
• Stop smoking (if you smoke).
• Get plenty of exercise.
• Manage your stress.

What else can I do?

- Talk with your doctor about your risk factors.
- Ask if there are other tests you should have to get a more complete picture of your risk.
- Make sure you follow all your doctor's instructions for lifestyle changes and drug treatment.

Omega-3 Fatty Acids: Benefits and Supplements (webmd.com):
https://www.webmd.com/healthy-aging/omega-3-fatty-acids-fact-sheet

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High Homocysteine Level: How it Affects Your Blood Vessels

High homocysteine levels in the blood can damage the lining of the arteries and may make blood clot more easily than it should. Learn more about homocysteine at FamilyDoctor.org, the website of the American Academy of Family Physicians.

Go to FamilyDoctor.org.:
http://familydoctor.org/familydoctor/en/diseases-conditions/coronary-artery-disease/causes-risk-factors/high-homocysteine-level-how-it-affects-your-blood-vessels.html

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CARDIO IQ® HEMOGLOBIN A1C

What is Heart Disease?

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What other risk factors are there?

There are many other things that might affect your risk of heart disease. These can be as important or more important than the basic risk factors. They include:
- The types, size, and number of HDL and LDL cholesterol particles you have
- The amount of proteins that carry cholesterol in the body
- The amount of inflammation in your arteries
- Your genetic makeup

How will my doctor determine my risk?

Your doctor will ask questions to find out how old you are, whether you smoke, and how physically active you are. He or she will take your blood pressure and find out how much you weigh. Your doctor will also order some blood tests to learn about your cholesterol levels. Once the results are back, your doctor can put it all together and let you know your risk.

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- Decide whether you need treatment
- Decide what is the best treatment for you
- Find out how well the treatment is working

- Decide whether changes need to be made to your treatment
- Determine whether family members may be at risk and could benefit from testing

What can I do to reduce my risk and/or keep it low?

These things can help you be healthy and lower your risk of heart disease:
- Eat a healthy diet.
- Get to or stay at a healthy weight.
- Stop smoking (if you smoke).
- Get plenty of exercise.
- Manage your stress.

What else can I do?

- Talk with your doctor about your risk factors.
- Ask if there are other tests you should have to get a more complete picture of your risk.
- Make sure you follow all your doctor's instructions for lifestyle changes and drug treatment.

HbA1c and eAG

The A1c is a blood test that tells you what your average blood glucose levels have been for the past 2 to 3 months. It may also be reported as estimated average blood glucose (eAG).

To interpret your result, first find your A1C number on the left. Then read across to learn your average blood glucose for the past 2 to 3 months			
6%	126 mg/dL	8.5%	197 mg/dL
6.5%	140 mg/dL	9%	212 mg/dL
7%	154 mg/dL	9.5%	226 mg/dL
7.5%	169 mg/dL	10%	240 mg/dL
8%	183 mg/dL	10.5%	255 mg/dL

MAGNESIUM, RBC

Magnesium Fact Sheet

Magnesium is a nutrient that is important for many processes in the body, including regulating muscle and nerve function, blood sugar levels, and blood pressure and making protein, bone, and DNA. Learn more about magesium from this fact sheet provided by the NIH's Office of Dietary Supplements (ODS).

Go to the ODS website: https://ods.od.nih.gov/factsheets/Magnesium-Consumer/

GGT

Gamma-Glutamyl Transferase (GGT) Test

The liver is the main source of gamma-glutamyl transferase (GGT), an enzyme that is sometimes used to help detect liver disease and bile duct obstructions. Learn more at the American Association for Clinical Chemistry's (AACC) Lab Tests Online website.

Go to the Lab Tests Online website: https://labtestsonline.org/understanding/analytes/ggt/tab/test

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THYROID PEROXIDASE AND THYROGLOBULIN ANTIBODIES

Thyroid Function Tests

The blood tests that are most widely used to evaluate thyroid function include those that measure TSH, T4, T3, free T4, and thyroid antibody levels. Read more about these tests in the brochure provided by the American Thyroid Association (ATA).

Download the brochure from the ATA website: http://www.thyroid.org/wp-content/uploads/patients/brochures/FunctionTests_brochure.pdf

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CBC (INCLUDES DIFF/PLT)

Blood Test Results: CBC Explained

A complete blood count (CBC) with differential measures the essential components of the blood including white blood cells, red blood cells, and platelets. Learn more about the various components of a CBC by clicking here.: https://www.sonoraquest.com/patients/knowledge-center/knowledge-pages/understanding-the-complete-blood-count-cbc/

Complete Blood Count (CBC)

A CBC is a commonly ordered blood test that may be helpful to diagnose a variety of health conditions, such as an infection, anemia, or bleeding disorder. It is also a general indicator of overall health. A CBC test screens for many blood components, including red and white blood cells, platelets, and hemoglobin. Learn more about the various components of a CBC by clicking here.: https://www.sonoraquest.com/patients/knowledge-center/knowledge-pages/understanding-the-complete-blood-count-cbc/

DHEA SULFATE

Dehydroepiandrosterone (DHEA)

DHEA is an important precursor hormone, and is the most abundant circulating steroid present in the human body. Learn more about DHEA at You & Your Hormones, the public information website of the Society for Endocrinology.

Go to the You & Your Hormones website : http://www.yourhormones.info/hormones/dehydroepiandrosterone.aspx

ESTRADIOL

Estrogen Blood Tests

Estrogen tests are used to detect a deficiency or excess in women and a hormone excess in men to help diagnose a variety of conditions associated with this imbalance.

Quest Diagnostics Patient Service Centers

Use our online scheduling service to make an appointment at a Quest Diagnostics Patient Service Center.

Schedule an Appointment: https://appointment.questdiagnostics.com/schedule-appointment/as-reason-for-visit