



## Assessment Report

### PATIENT DETAILS

Name **Daan Willems**  
Gender **Male**  
Age **33 years**  
Date of birth **17-05-1992**

### TEST DETAILS

Test Date **16-06-2026**  
Report date **19-06-2026**  
Location **Amsterdam Noord**  
Laboratory **Star-SHL**

## OVERALL ASSESSMENT

This is a strong profile. Testosterone, IGF-1, HbA1c and fasting insulin all sit in the upper part of their range or comfortably within it, consistent with steady training and good metabolic conditioning.

Two values need attention: your hsCRP is slightly raised and your ferritin is low. In an athlete at your training volume those two often travel together and are rarely a sign of disease — but they do determine whether you keep progressing or stall.

## KEY FINDINGS

### hsCRP slightly raised (3.9 mg/L)

ATTENTION

Above the 3.0 limit. In an athlete the most likely explanation is a hard training stimulus in the days before the draw. hsCRP rises after intense exercise and settles within a few days.

### Ferritin low (24 µg/L)

ATTENTION

Below the 30 lower limit. Endurance athletes lose iron through sweat, foot-strike haemolysis and the gut. Below a ferritin of 30, oxygen transport measurably declines even while hemoglobin is still normal.

### Metabolic conditioning is excellent

GOOD

HbA1c 32 mmol/mol and fasting insulin 4.1 mU/L. This combination indicates high insulin sensitivity and is better than the average 33-year-old's.

### Testosterone and IGF-1 in the upper part of their range

GOOD

Testosterone 22.4 nmol/L and IGF-1 28.6 nmol/L. There is no hormonal indication of overtraining or insufficient recovery.

## DETAILED ANALYSIS

### Hormones

NORMAL

Testosterone 22.4 nmol/L and IGF-1 28.6 nmol/L. Both sit in the upper part of their reference range.

This is the pattern you want under heavy training: a falling testosterone or IGF-1 is one of the first hormonal signals of chronically insufficient recovery. There is no sign of that here.

### Metabolic

NORMAL

Your HbA1c is 32 mmol/mol, reflecting an average blood glucose over the past two to three months well below the upper limit. Your fasting insulin of 4.1 mU/L is low-normal.

A low HbA1c combined with a low fasting insulin indicates high insulin sensitivity. That is precisely what training acts on.

### Inflammation

ATTENTION

Your hsCRP is 3.9 mg/L, above the 3.0 limit. This test measures low-grade inflammation and is sensitive enough to pick up a single hard training session.

A single raised value in an athlete is therefore often training-related. If it stays raised after a few days of rest, it warrants further investigation.

## Minerals

ATTENTION

Your ferritin is 24 µg/L, below the lower limit of 30. For the general population 20 is often used as the floor, but 30 applies to endurance athletes because performance starts to suffer below that.

Your hemoglobin of 9.1 mmol/L is still normal. That is the usual picture: the store runs down before transport is affected.

## Liver

NORMAL

Your ALT is 41 U/L, just within range. In strength athletes a mildly raised ALT is often of muscle rather than liver origin; a CK measurement distinguishes the two when in doubt.

## RECOMMENDATIONS

### 1 Repeat hsCRP after three rest days

Schedule the repeat after at least three days without intense training. If the value normalises it was training-related. If it stays above 3.0, discuss it with your GP.

### 2 Get ferritin above 40

Raise iron intake through diet and combine it with vitamin C. Do not take an iron supplement without advice: with a normal ferritin, supplementing does more harm than good, and in endurance athletes the cause of the loss is usually investigated first.

### 3 Retest after eight to twelve weeks

Ferritin responds slowly. Retest ferritin and hemoglobin after eight to twelve weeks, at a point with a comparable training load to now.

## NEXT STEPS

Schedule the hsCRP repeat after a short rest period and the ferritin check in eight to twelve weeks. Keep the training load around the draw comparable, or you will be comparing two different situations.

Contact your GP if the hsCRP stays raised, or if fatigue persists despite a normal ferritin. This report does not replace a consultation.

# TEST RESULTS

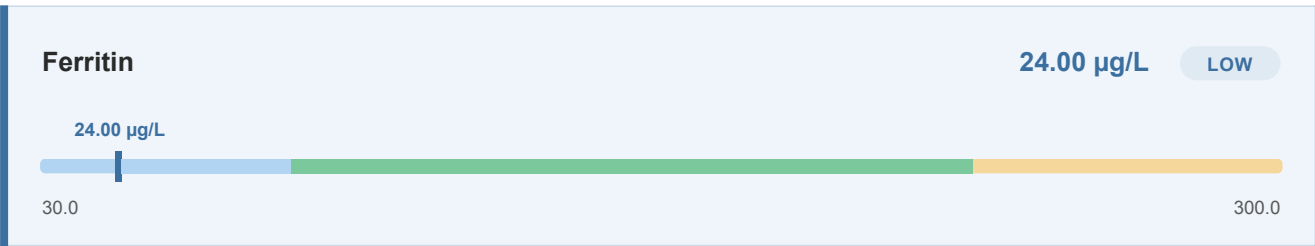
## Results Overview

10 results tested

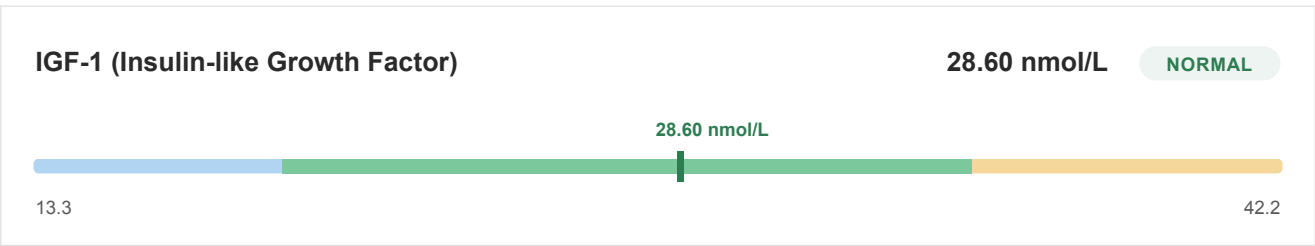
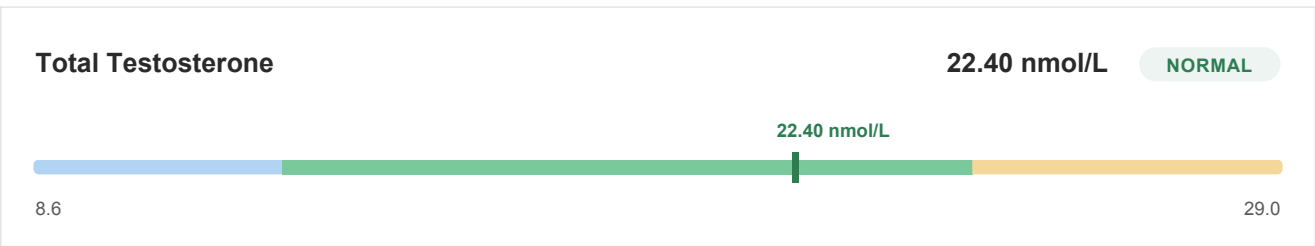
2 of 10 results outside reference range

| MARKER                        | RESULT     | REFERENCE           | ASSESSMENT |
|-------------------------------|------------|---------------------|------------|
| hs-CRP (High Sensitivity CRP) | 3.90 mg/L  | — - 3.00 mg/L       | HIGH       |
| Ferritin                      | 24.00 µg/L | 30.00 - 300.00 µg/L | LOW        |

## Points of attention (2)



## Within reference (8)



HbA1c (Glycated Hemoglobin)

32.00 mmol/mol

NORMAL



Insulin (Fasting)

4.10 mU/L

NORMAL



Vitamin D (25-OH)

88.00 nmol/L

NORMAL



Hemoglobin

9.10 mmol/L

NORMAL



ALT (Alanine Aminotransferase)

41.00 U/L

NORMAL



eGFR (Estimated Glomerular Filtration Rate)

104.00 mL/min/1.73m<sup>2</sup>

NORMAL



**SAMPLE REPORT — FICTIONAL VALUES FOR A PERSON WHO DOES NOT EXIST. NOT MEDICAL ADVICE.**

#### **DISCLAIMER**

This report was prepared by a BIG-registered doctor. It does not replace a personal medical consultation. Always consult your general practitioner if you have questions.

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