

FREE GUIDE

Strength and gym

Weightlifting and gym training: muscle, liver, kidneys and heart.

Blood tests for strength training and the gym

Heavy lifting changes some results for days, and a lot of muscle changes how others are read. Knowing this, your numbers tell you something real.

It can

- ✓ Give you a rested baseline for CK and liver tests
- ✓ Read your kidney result with your muscle mass in mind
- ✓ Show your cholesterol, which being strong does not cancel out

It cannot

- ✗ Monitor a steroid cycle: we do not offer that
- ✗ Show whether you are overtrained: testosterone and cortisol do not tell you that
- ✗ Read a high CK as an injury: it rises with normal training

WHY IT MATTERS

01

Heavy lifting changes liver and muscle tests for days

In healthy men, one hour of weightlifting raised AST, ALT and CK, and they stayed high for at least 7 days. Tested in the wrong week, a healthy body can give a worrying result.^[1]

02

CK is the fatigue marker of strength training, against your own baseline

In simulated training camps, CK followed fatigue in strength training. It depends on age, sex, ethnicity and muscle mass, and rises in the 24 hours after hard effort, so your own range tells you more than a group range.^[2, 3, 4]

03

A lot of muscle changes how your kidney result is read

UK guidance says to read eGFR with caution in people with a lot of muscle, such as bodybuilders, and to eat no meat in the 12 hours before the test.^[5]

04

Being strong does not switch off heart risk

European sports cardiology guidance works out the risk of people over 35 who play sport from cholesterol, age, sex, blood pressure and smoking.^[6]

What usually makes sense, and when to repeat it

TEST	WHY	WHEN TO REPEAT
CK (creatine kinase)	The muscle enzyme. Heavy sessions raise it for days, so it only means something against your own rested baseline. ^[1, 2, 3, 4]	As a series, after 2 to 3 easy days, at the same point in your training week.
Liver tests (ALT, AST, GGT)	Weightlifting can raise ALT and AST for a week, so tell whoever reads your result how you trained. ^[1]	With your general panel; if high, again after a week without heavy training, as your GP advises.
Kidneys (creatinine, eGFR, urea)	A lot of muscle can make eGFR read lower than it really is, and meat in the 12 hours before the test can change it. ^[5]	With your general panel.
Cholesterol (total, LDL, HDL, triglycerides)	Heart risk. Being strong does not cancel it out. No fasting needed. ^[6, 7]	From 35, as often as your GP advises.
Full blood count, ferritin and vitamin D	A baseline for red cells, iron stores and vitamin D, the usual core for anyone who trains. Ferritin is still the first number for women who lift. ^[8, 9]	Ferritin about twice a year if you are at risk; vitamin D in late autumn or winter.
Testosterone (men)	A baseline for testosterone. It changes through the day, so keep the same morning time for each test. Low testosterone in men is one of the signs of not eating enough for your training. ^[10]	Only with a reason, such as a cutting phase or a health concern, as your GP advises.
If you use or have used anabolic steroids	About 6.4% of men and 1.6% of women have used them, and most users are gym-goers, not athletes. They affect the heart, liver, hormones and kidneys: tell your GP, and your results give you numbers for that conversation. ^[11, 12]	As your GP advises.

What to do with your result

Your result arrives in your account, with reference ranges. A value outside the range, or a symptom with a normal result, is a conversation with your GP: treatment and supplements are their call. Repeat the same test later to compare.

SOURCES

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Scan for the full page, the tests that cover these markers, a short video and the guided check-up.

bpr.clinic/blood-tests/for/strength-and-gym

General information, not personal medical advice. Talk to your GP about your own situation. Questions: hello@bpr.clinic or message us in the BPR app.

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