

A FREE GUIDE FROM JACK WALL

The Bloods Checklist.

Normal for who?

For assisted and unassisted athletes. What to test, what to watch, and why “normal” isn’t the whole story.

200+ BLOOD PANELS READ • J3U CERTIFIED COACH • NO DOSES, NO PROTOCOLS

WHY THIS EXISTS

Nobody in this sport tells you what to actually check.

Your GP says your bloods are "normal". You train hard, around work and family, and you've been at it for years. But nobody has ever sat you down and told you what to actually check.

Most of my DMs are about what to run. Very few are about what to test. That's backwards, and it's why I keep seeing haematocrit through the roof and blood pressure nobody's measured.

Natural or enhanced, I'm not here to preach or to sell you a stack. No doses or protocols, here or in my DMs. Just what to watch, so whatever you decide, you decide with your eyes open.

My day job is root-cause analysis on safety-critical nuclear systems, where nothing gets signed off on a feeling. I've read over 200 client panels the same way.

STEP 01

Measure

A full baseline before anything changes.

STEP 02

Trend

Same lab, same conditions, every draw.

STEP 03

Act

When the numbers say so, not on a feeling.

Built on the J3U framework and the physiology textbooks I coach from, with sources on every page. Use it alongside your GP.



JACK WALL • TRANSFORM COACHING

200+

BLOOD PANELS READ

300+

CLIENT TRANSFORMATIONS

59 → 75

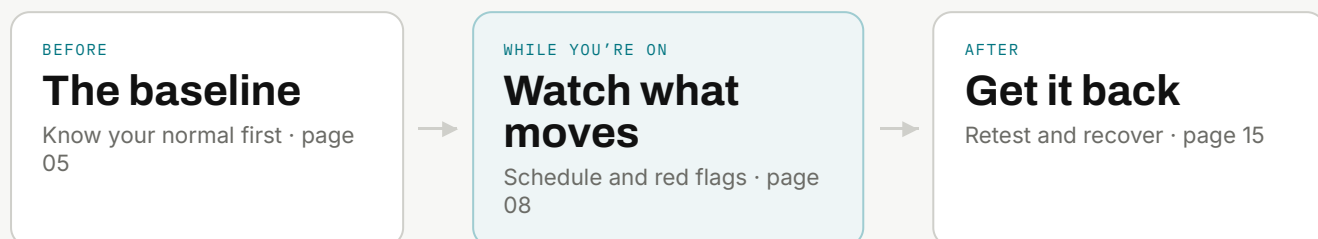
MY OWN EGFR, 275 LB VS
50 LB LIGHTER (PAGE 10)

J3U

CERTIFIED COACH

YOUR ROADMAP

What's inside



00	Five truths about bloods	EVERYONE	04
01	Before you start: the baseline	EVERYONE	05
02	Fertility isn't a later problem	ASSISTED OR TRT	07
03	While you're on: what moves and why	ASSISTED	08
04	The numbers I coach to	EVERYONE	12
05	How to get a clean draw	EVERYONE	14
06	After: coming off and recovery	ASSISTED	15
07	Six myths I hear every week	EVERYONE	16
+	Your bloods log (print it)	EVERYONE	17
>	Meet Jack, and your next step		18

HOW TO USE IT

Read it once, then take [page 05](#) to your GP or a private lab before anything changes. Use the log on [page 17](#) for every draw, and judge each result against your own baseline as well as the lab's range. Natural? Everything marked Everyone is yours.

WHAT IT ISN'T

It isn't medical advice, and it isn't a protocol. There are no doses, cycles or "what to run" anywhere in here. Results outside range go to your GP. Chest pain, collapse, signs of a stroke or sudden breathlessness: call 999.

WHY TEST AT ALL

EVERYONE

Five truths about your bloods.

01 • THE HEART GOES FIRST

[WHAT TO DO • PAGE 06](#)

1 **Heart** — 2 **Kidneys** — 3 **Brain** — 4 **Liver**

The order of risk

The liver takes the biggest hit in the short term but it's the most resilient. The heart is the leading cause of early death in bodybuilders, and autopsies of steroid users most commonly show cardiovascular disease.

02 • HARM SCALES WITH DOSE X DURATION

[WHAT TO DO • PAGE 08](#)

Total exposure is what matters. A lower amount run for years can add up to the same damage as a higher amount run briefly. In one cohort of young male users followed for about 12 years, mortality was roughly 3x that of non-users and rose with how long they'd used. That's an association and it doesn't prove cause, but it's still a number worth respecting.

03 • THE BIG ONES ARE SILENT

[WHAT TO DO • PAGES 06 AND 10](#)

High blood pressure doesn't feel like anything, because the body's pressure sensors reset to the new level within a day or two. You can lose 75 to 80% of your kidney's filtering units before the basics stop working, and they don't grow back. By the time you feel it, it's late.

04 • "NORMAL" ISN'T A TARGET

[WHAT TO DO • PAGE 12](#)

A lab range describes the population, from a pensioner to a teenager. It doesn't describe you at 100 kg with a lot of muscle. Some markers read high just because you're big; others rise late, after the damage has started. That's why a baseline matters.

05 • TREND BEATS A SINGLE NUMBER

[WHAT TO DO • PAGE 17](#)

One result is a snapshot. Same lab, same conditions, plotted over time, is information. And symptoms override bloods: if you feel rough, a "normal" panel doesn't make you fine.

Sources: J3U Level One M5, M6 • Guyton & Hall Physiology 13e p.222, p.325, p.435

Feeling fine isn't a test result. Test before anything changes.

CHAPTER 01

EVERYONE

01

The baseline panel.

Bloods before anything changes, and again after any change. Without a baseline, nobody can tell you what's moved. These are the UK lab names to ask for.

ASK FOR

WHY IT MATTERS

Full blood count (FBC)	Haematocrit is the one to watch. Your starting value is what every later rise gets judged against.
U&Es + cystatin C	Kidney function. Creatinine comes from muscle, so big lifters read "worse" than they are. A cystatin C-based eGFR fixes that.
Urine ACR + urinalysis	Albumin in the urine is the earliest sign of kidney filter damage, often before eGFR moves, and muscle doesn't skew it.
LFTs + GGT + CK	Liver enzymes also leak from trained muscle. GGT and CK are what separate a hard leg session from a liver problem.
Lipids + ApoB + Lp(a)	LDL and ApoB drive artery disease. Lp(a) is genetic, raised in about a quarter of people, and nearly doubles the risk. Test it once.
Fasting glucose, HbA1c, fasting insulin	Insulin resistance shows up in insulin before glucose. HbA1c rises late, so you want the early warning.
Testosterone, oestradiol, SHBG, prolactin	Ask for LC-MS/MS where the lab offers it. Standard immunoassays can cross-react and read wildly high.
LH + FSH	Your own production signals. Androgens switch them off, so a pre-use value is the only reference you'll ever have.
Thyroid: TSH, free T4, free T3	Your metabolic baseline. Needed to read any change later.
hs-CRP, homocysteine, ferritin, vitamin D	Inflammation, iron and the basics. Retest CRP after any cold or infection.
PSA OVER 45 IGF-1 IF GH	Prostate baseline, and the age-adjusted marker for growth hormone.

WHERE TO GET IT DONE

Start with your GP. Don't have recent bloods? I've got a partner discount with Youth Revisited: use code **JACKWALLFITNESS** when you book, then send me the results. Any decent lab will do.

Sources: J3U Level One M5, M6 • Guyton & Hall p.177, p.336, p.366, p.874 • Katzung Basic & Clinical Pharmacology 11e p.721

BEYOND THE BLOOD TEST

EVERYONE

Your heart and pressure.

HOME BLOOD PRESSURE

Buy a validated upper-arm cuff in the right size (big arms need a large cuff). Take a week of readings before anything changes so you know your normal. Technique is on [page 14](#).

RESTING HEART RATE

Take it from your sleep window (a watch or ring does this). It's your early warning for fatigue and for load creeping up.

ECHO + ECG

A baseline echocardiogram and ECG, read by a cardiologist, through your GP or privately. It shows heart muscle thickness and pumping function, which bloods never will.

CORONARY CALCIUM SCORE

A baseline CT calcium score. It uses a small dose of radiation, so it isn't a yearly test, but a starting number is worth having.

THE QUESTIONS I ASK FIRST

- ☐ What does your goal actually require? A lot of people are chasing a timeline.
- ☐ Are the basics maxed: 7 to 9 hours' sleep, stress handled, food consistent, training genuinely hard?
- ☐ Is your blood pressure under 120/80 right now?
- ☐ Have you thought about kids, now or later? ([Page 07.](#))
- ☐ Does your GP know? They can only read your results properly if they do.

Most people who sort out sleep, food and training find they don't need what they thought they did.

Sources: J3U Level One M5, M6

THAT'S THE BIT I COACH

Sorting sleep, food and training around a full-time job is most of what I do. If that's where you're stuck, DM me PANEL and tell me what your week looks like.

→ DM me PANEL

Fertility isn't a later problem.

This is the one lads in their twenties wave away, and the one I see men in their thirties regret.

How it works

Your brain sends two signals, LH and FSH, telling your testes to make testosterone and sperm. Add testosterone from outside and it switches both off.

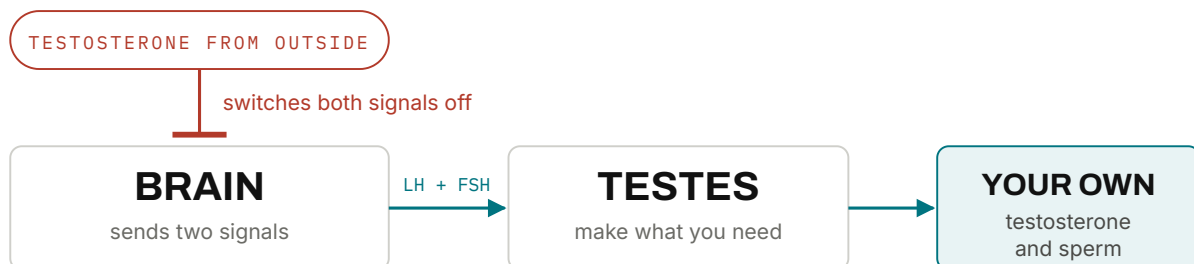
It doesn't take big amounts. In male contraceptive trials, testosterone alone stopped sperm production in many men within months.

Recovery

It can come back, but it can take months and sometimes up to two years. Each on-off cycle makes it harder, and some men end up on TRT for life. Nandrolone and trenbolone hit it hardest.

And it isn't contraception. "Most men" isn't "all men".

WHAT OUTSIDE TESTOSTERONE DOES



BEFORE ANYTHING CHANGES

- ☐ Get LH, FSH and testosterone on your baseline panel ([page 05](#)).
- ☐ If kids are even a maybe, ask your GP or a fertility clinic about a semen analysis and sperm storage first.
- ☐ "I never want kids" at 21 is a big decision to make for your 40-year-old self.

The schedule I hold clients to.

Monitoring is the check-engine light. It only works if you look at it.

WHAT	HOW OFTEN	NOTES
Full panel + urinalysis	Every 10 to 12 weeks	Non-negotiable. Plus after any change, and HbA1c every draw.
Home blood pressure	1 to 2x a week	Same time of day, same arm, technique on page 14 .
Resting heart rate	Ongoing	Watch the trend over several weeks.
Echo + ECG	Yearly	Trends heart muscle thickness and function. Cardiologist read.
Coronary calcium score	Every 1 to 3 years	Radiation involved, so never yearly.
Competitors	Prep + show	Before prep, mid-prep (about 8 to 10 weeks out), and about 2 weeks either side of the show. Never in peak week or the first week after.

10-12

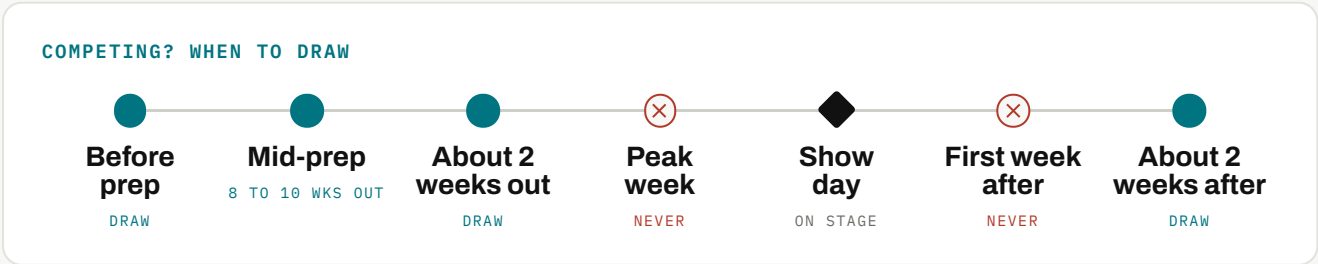
WEEKS BETWEEN PANELS

1-2

BP CHECKS A WEEK

1

ECHO A YEAR



THE RED LINE

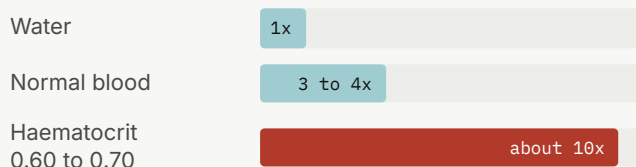
Thick blood and pressure.

Haematocrit

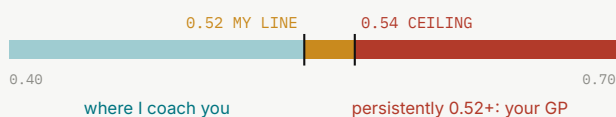
Haematocrit is the share of your blood that's red cells. Androgens push it up, more so the higher the dose. Expected, but not harmless.

Thicker blood flows slower, and slow flow is one of the main triggers for clots. That's the bridge from a number on a page to a stroke.

HOW THICK, AGAINST WATER



I check it first on every panel. Persistently 0.52 or above goes to your GP. No DIY "blood dumping".

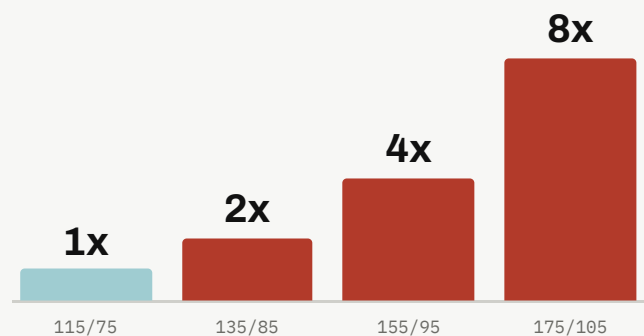


Blood pressure

From 115/75 up, heart and stroke risk roughly doubles with every 20/10 rise. It damages the heart, the brain and the kidneys.

Thick blood, water retention and the drugs all push it up. Risks multiply too: high BP plus diabetes is over 8x the heart risk, and add high lipids and it's close to 20x.

RISK AGAINST 115/75, ROUGHLY



WHAT I COACH TO

Blood pressure under 120/80. Resting heart rate under 70, and no more than about 10 beats above your own baseline.

Sources: Katzung p.167, p.720, p.721 • Guyton & Hall p.177, p.232, p.453, p.491, p.873 • J3U Level One M5

READ THE PATTERN

Lipids, liver and kidneys.

Lipids

HDL	↓	Androgens lower it
LDL	↑	Orals push it up
ApoB	●	The one to trend

LDL and ApoB drive artery disease, so trend those. Oral steroids hit this panel hardest.

Liver

MARKER	TRAINING	LIVER
AST • ALT	↑	↑
CK	↑	=
GGT • ALP	=	↑
Bilirubin	=	↑

Training lifts AST and ALT for 7 to 10 days. GGT, ALP and bilirubin rising together goes to your GP.

Kidneys

eGFR from creatinine	64
	
Dashed line: 60, the GP line	
eGFR from cystatin C	113
	

Same lifter, two methods. Creatinine comes from muscle, so it undersells a big lifter's kidneys. Ask for cystatin C and urine ACR.

59 → 75

MY EGFR

MY OWN PANEL

At 275 lb my eGFR read 59, which looks like kidney disease on a textbook chart. 50 lb lighter, it was 75. Same kidneys, less muscle. Any eGFR under 60 still goes to your GP, with cystatin C and urine ACR.

WHERE IT STOPS BEING "JUST TRAINING"

Protein in your urine on a retest, a cystatin C eGFR falling or under 60, or GGT and bilirubin climbing: all go to your GP. One odd kidney result gets a hydrated retest with cystatin C and ACR about 30 days later.

Sources: Katzung p.720, p.722 • J3U Level One M5, M6 • Guyton & Hall p.366

WANT ME TO READ YOURS?

Same kidneys, two very different numbers. If one of your results has worried you and nobody's explained it, DM me PANEL and tell me which one.

→ DM me PANEL

SUGAR, GH AND HORMONES

Checking sugar isn't enough.

Growth hormone and glucose

GH raises blood sugar, and insulin climbs to cover it (diagram below). It can also unmask an underactive thyroid.

One fasting glucose means little. A late meal, a bad night or a hard session can skew it. Track HbA1c and fasting insulin every draw.

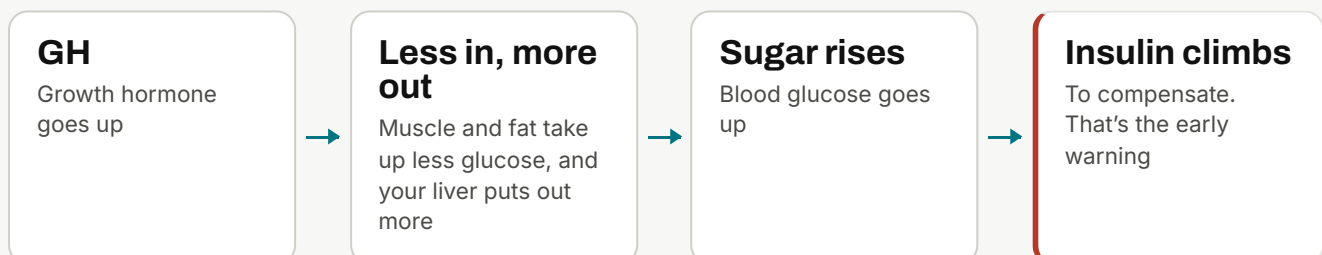
HbA1c rises late, and reads falsely high when haematocrit is up. 38 or 39 is no reason to relax.

Insulin resistance signs

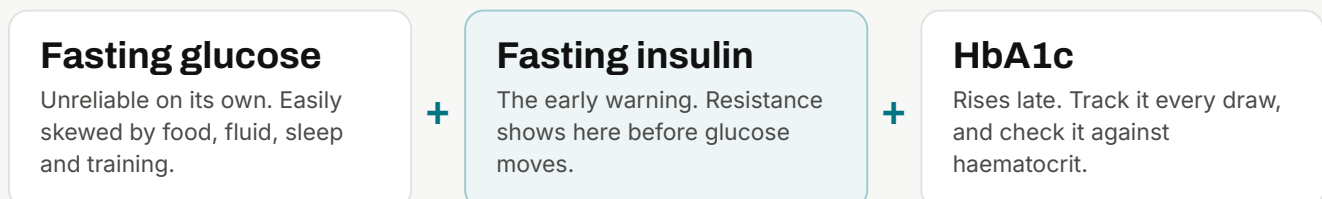
- ☐ A watery, smooth look
- ☐ Pumps fading, appetite dropping
- ☐ Lethargy and joint pain
- ☐ Reflux or bloating
- ☐ Blood pressure creeping up
- ☐ Progress stalling

Any of those, on GH or off it: bloods and a chat with your GP. Sugar in your urine is a glucose-control flag.

WHAT GH DOES TO YOUR SUGAR



READ THEM TOGETHER, EVERY DRAW



INSULIN IS DOCTOR TERRITORY

Blood glucose of 1.1 to 2.8 mmol/L causes shock, seizures and coma. Anyone using insulin needs a doctor involved, a glucose meter and someone around who knows the signs of a hypo.

04

CHAPTER 04

EVERYONE

The numbers I coach to.

These are tighter than a lab's "normal" range on purpose. They're early-warning targets. None of them is a diagnosis.

● GREEN

On target. Keep doing what you're doing.

● AMBER

Retest clean ([page 14](#)), then get it read in context.

● RED

Your GP. Don't wait for your next panel.

HEART, BLOOD AND LIPIDS

MARKER

● I COACH TO

● RETEST, GET IT READ

● YOUR GP

Blood pressure Home average, technique page 14	Under 120/80	120/80 to 134/84	135/85 or more
Resting heart rate Against your own baseline	Under 70, within ~10 of baseline	70 or more, or 10+ over your baseline	Palpitations with dizziness: 999
Haematocrit 0.54 is the Endocrine Society ceiling	Below 0.52 L/L	0.52 to 0.54 once, no symptoms: retest hydrated	Persistently 0.52+, or any symptoms
LDL cholesterol The causal driver of artery disease	Under ~2.6 mmol/L	Above ~2.6	Outside your lab's range
ApoB Particle count, the better read	Under 0.8 g/L	Above 0.8	Outside your lab's range
HDL cholesterol Watch it, but don't chase it	Above ~1.3 mmol/L	Below ~1.3	Outside your lab's range
Lp(a) Genetic. Test it once	Know it once	Raised: LDL, ApoB and BP targets get tighter	Outside your lab's range

AMBER NEVER WAITS ON A SYMPTOM

Chest pain, collapse, palpitations with dizziness, signs of a stroke or sudden breathlessness: call 999, whatever your numbers looked like last time. Anything else that worries you: your GP.

Sources: J3U Level One M5 • Katzung p.168 • UK GP thresholds per NICE guidance (general reference)

THE NUMBERS I COACH TO

Sugar, kidneys and inflammation.

MARKER	I COACH TO	RETEST, GET IT READ	YOUR GP
hs-CRP Inflammation. Retest after illness	Under 1 mg/L	Above 1: retest once you're well	Outside your lab's range
HbA1c Strain shows from about 39	Under ~34 mmol/mol	~34 to 38	39 or more
Fasting glucose Read with insulin, never alone	~4.2 to 5.0 mmol/L	Above ~5.0: read it with insulin	Outside your lab's range
Fasting insulin The early warning	Ideally under ~10 mU/L	Above ~10	Outside your lab's range
eGFR (cystatin C) Concern under 60	90 to 120	60 to 89: retest with ACR in ~30 days	Under 60, or falling over time
Urine ACR Earliest kidney damage sign	Under ~3 mg/mmol	Raised once: hydrated retest	Raised again on the retest

WHY YOUR GP MIGHT SAY "FINE"

UK GPs usually diagnose high blood pressure at 140/90 in clinic, confirmed by a 135/85 home average, and labs flag pre-diabetes from an HbA1c of 42. Those are diagnosis thresholds. Mine are earlier, because the whole point is to act before you need a diagnosis.

Amber isn't a diagnosis and it isn't an emergency. It's where context decides it: hydration, training, the lab and your own baseline.

Sources: J3U Level One M5 • Katzung p.168 • UK GP thresholds per NICE guidance (general reference)

GOT SOME AMBER?

A table can't tell you whether your number is muscle, dehydration, a lab quirk or a real problem. That's the bit I do. DM me PANEL with your latest results.

→ DM me PANEL

05

CHAPTER 05

EVERYONE

How to get a clean draw.

Half the “scary” results I see come down to how the sample was taken.

The blood test

- 01 **No training for 24 to 48 hours.** Ideally in a deload week. Big lifters may need longer for AST and ALT to settle.
- 02 **Fasted.** Water is fine.
- 03 **Drink about 2 L of water beforehand.** Dehydration pushes haematocrit up 2 to 3 points, sometimes more, and inflates kidney markers and glucose too.
- 04 **Sleep properly the night before.**
- 05 **Not ill.** Retest hs-CRP after any cold or infection.
- 06 **Same lab, same test method, same time of day** every time, so the trend means something.
- 07 **Tell them what you’re using** on the form. GH and insulin both skew glucose readings.

Home blood pressure

- 01 Validated upper-arm cuff, the right size, on a bare arm.
- 02 Seated, back supported, feet flat, arm resting at heart level.
- 03 Empty bladder. No caffeine, nicotine or exercise beforehand.
- 04 Rest 3 to 5 minutes and don’t talk.
- 05 Take 3 readings a minute apart and average the last two.
- 06 One high reading? Re-measure daily for 3 to 6 days before you decide anything.

POINTS ON HAEMATOCRIT

+2-3

That’s what dehydration alone can add. Drink before every draw.

YOUR DRAW-DAY CHECKLIST

48 HOURS BEFORE

No training

Ideally in a deload week

THE NIGHT BEFORE

Sleep properly

And don’t go in ill

THE MORNING OF

Fasted, 2 L water

Water is fine, food isn’t

AT THE LAB

Same lab, same time

And tell them what you’re using

CHAPTER 06

ASSISTED

06

After: coming off and recovery.

What to retest

- ☐ The full panel at the end of prep or your hardest phase, then again after the change. Competitors: about two weeks either side of the show, never the first week after.
- ☐ LH, FSH and testosterone, tracked with a clinician, to see whether your own production is coming back. A semen analysis if fertility matters to you.
- ☐ Anything that was out of range, repeated under clean conditions (page 14).
- ☐ Blood pressure weekly while weight and water come back.

THE PRINCIPLE

Get your markers back in range. Deteriorating bloods are a reason to stop pushing, and never a reason to add something. The J3U position on a post-show “blast” is clear: it adds mostly fat and fluid, more blood pressure and kidney load, and leaves deranged bloods unresolved.

LOOK AFTER YOUR HEAD

Coming off is hard on mood, and the risk is higher when someone is coming off steroids and psychiatric medication at the same time. If you feel low, tell someone. NHS 111 option 2 or Samaritans on 116 123, any time, and 999 if you're in immediate danger.

HOW LONG RECOVERY CAN TAKE

Severe liver strain
can take

more than 3 months

Natural testosterone
can take

up to 2 years, and harder with every on-off cycle

0

6 months

12 months

18 months

24 months

Sources: J3U Level One M5, M6, M9 • Katzung p.721, p.722

COMING OFF?

Recovery bloods are where context matters most: what's coming back, what isn't, and what needs a clinician. DM me PANEL and tell me where you're at.

→ DM me PANEL

07

CHAPTER 07

EVERYONE

Six myths I hear every week.

MYTH 01

“I don’t take that much.”

THE REALITY

Deaths, often cardiac, happen at moderate exposure in people who are genetically predisposed. You don’t know you’re one of them until you are.

MYTH 02

“It’s just an oral.”

THE REALITY

Orals, and “just SARMS”, are often the most harmful first exposure: liver, lipids and a full shutdown. A lot of what’s sold is counterfeit too, so you can’t be sure what you’re actually taking.

MYTH 03

“Injectables don’t touch the liver, so I’m fine.”

THE REALITY

Maybe not the liver, but androgens still push haematocrit up and HDL down. The liver isn’t the biggest long-term risk. The heart is.

MYTH 04

“My GP said it’s normal.”

THE REALITY

Creatinine understates lifters’ kidneys, immunoassays can misread hormones, the haematocrit range runs right up to 0.54, and HbA1c rises late. Ask for cystatin C, LC-MS/MS hormones and your trend over time.

MYTH 05

“I feel fine.”

THE REALITY

So does nearly everyone with high blood pressure or early kidney damage. Both are silent until they aren’t. Feeling fine isn’t a test result.

MYTH 06

“I’ll get bloods if something feels off.”

THE REALITY

Without a baseline, a result after the fact can’t tell you what’s changed, how fast, or what caused it. Test before anything changes.

PRINT ME

Your bloods log

One column per draw. Same lab, same conditions. Circle anything outside your lab's range or the targets on pages 12 and 13.

MARKER	BASELINE	DRAW 2	DRAW 3	DRAW 4	AFTER
Date / lab					
Haematocrit (L/L)					
Haemoglobin (g/L)					
eGFR (cystatin C)					
Creatinine ($\mu\text{mol/L}$)					
Urine ACR (mg/mmol)					
ALT / AST (U/L)					
GGT / bilirubin					
LDL / HDL (mmol/L)					
ApoB (g/L)					
HbA1c (mmol/mol)					
Fasting glucose / insulin					
Testosterone / E2					
LH / FSH					
TSH / free T4 / free T3					
hs-CRP (mg/L)					
Home BP (avg)					
Resting HR (avg)					
Bodyweight (kg)					
Notes (sleep, training, illness)					

FILLED THIS IN?

Take a photo, DM me PANEL and I'll tell you what I'd look at first.

[→ DM me PANEL](#)

BEFORE YOU SEND ANYONE YOUR PANEL

Who's reading your bloods? Jack Wall.

Nuclear engineer by day. Physique coach by trade.

Lifting for 17 years: skinny vegetarian teenager to a near-270 lb frame. Everything in this guide I've managed on my own body first, my own bloods included ([page 10](#)).

By day I do root-cause analysis on safety-critical nuclear systems. I coach the same way: find the real cause before anyone touches anything.

17

YEARS LIFTING

200+

BLOOD PANELS READ

300+

CLIENT TRANSFORMATIONS

J3U

CERTIFIED COACH

Nuclear root-cause analyst

Safety-critical systems, day job

J3 University certified

Under John Jewett

Bloodwork reviews

Every client's panel, every draw

Coached by the best

Hany Rambod, Milos Sarcev, Jordan Peters +4

WHO I COACH

Natural lifters, assisted athletes, competitors and busy professionals who want to look and feel the best they ever have. Same standard for all of them: measure it, trend it, act on it.

YOUR NEXT STEP

Want me to read yours?

Getting the bloods done is the easy bit. Knowing which numbers are muscle, dehydration, a lab quirk or a job for your GP is the part most people get wrong.

BLOODWORK REVIEW • £79 • ONE-OFF, 45 MINUTES

Send me your panel and I'll go through every line with you: what's moved, what's training, what to retest and what to take to your GP. Where supplements would help, you get a list with links to buy them.

[→ Book your review](#)**1:1 COACHING • FROM £166.50 A MONTH**

Same coaching on every plan. Buy now and your onboarding questionnaire arrives straight away.

Monthly**£200** / month

Rolling. Cancel with 30 days' notice.

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Same £200 rate in one payment.

[→ Buy • £600](#)**Best value • save £201****6 months****£999** / 6 months

£166.50 a month. Where the method compounds.

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- ✓ Weekly check-ins, feedback in 24h
- ✓ Training logbook
- ✓ Training and nutrition built off your data
- ✓ Direct access 7 days a week
- ✓ Bloodwork interpretation

**NOT SURE WHICH PLAN? TALK TO ME FIRST****Complete the questionnaire, get a free call.**[→ 1. Start the questionnaire](#)[→ 2. Book your free call](#)

You must complete the questionnaire before your call, or the call will be cancelled.



TRANSFORM·COACHING

Engineered on data.

@JACK_TRANSFORMCOACHING

Important. This guide is general education about health monitoring. It isn't medical advice, it isn't a diagnosis, and it isn't a recommendation to use any drug. It contains no doses or protocols, and none will be given. Anabolic steroids, growth hormone and insulin carry serious risks including heart disease, stroke, kidney and liver damage, infertility and death. Every result outside its reference range, and every medication decision, belongs with your GP or a specialist. If you're under 18, don't use this guide; speak to your GP. Sources are cited on each page: J3U Level One Certification (Jewett and Miller), Guyton & Hall Textbook of Medical Physiology 13e, Katzung Basic & Clinical Pharmacology 11e. © 2026 Jack Wall, Transform Coaching.