

FREE GUIDE

Shift work

Nights and rotating shifts: blood sugar, cholesterol and vitamin D.

Blood tests for shift work and nights

Large studies link night shifts to higher blood sugar, less healthy cholesterol and low vitamin D. None of it gives signs; a blood test shows where you stand.

It can

- ✓ Show your blood sugar and cholesterol, which give no signs
- ✓ Show your vitamin D when you see little daylight
- ✓ Check common reasons for tiredness that does not pass

It cannot

- ✗ Show that your shifts caused a result: the studies show links, not cause
- ✗ Show how your body clock is coping: there is no checked blood marker for that
- ✗ Explain tiredness on its own: what to do is your GP's call

WHY IT MATTERS

01

Night work is linked to type 2 diabetes, and the number of nights matters

In the UK Biobank, with more than 270,000 people, shifts with nights were linked to type 2 diabetes, and more than 8 nights a month to higher odds still. A review of 12 studies found the link too, stronger in men and in rotating shifts.^[1, 2]

02

Shifts, especially permanent nights, are linked to less healthy cholesterol

In a review of 66 studies with 197,063 workers, shift work went with higher triglycerides and lower HDL; permanent nights also with higher total cholesterol. Another review found a 30% higher risk of metabolic syndrome.^[3, 4]

03

Shift work is linked to heart attack and stroke

In a review of 34 studies with 2 million people, shift work was linked to heart attack (23% more) and ischaemic stroke (5% more).^[5]

WHY IT MATTERS

04

Sleeping by day means little sun: low vitamin D is the rule

In a review by job, shift workers averaged 33.8 nmol/L, and 80% were under 50 nmol/L. In the UK, from October to March, even people out by day do not make enough. ^[6, 7]

05

The numbers that matter give no signs

Cholesterol and HbA1c only show in a blood test. UK guidance works out heart risk from 25, and encourages a diabetes risk check from 40, or from 25 in higher-risk groups. ^[8, 9]

What usually makes sense, and when to repeat it

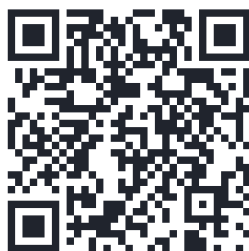
TEST	WHY	WHEN TO REPEAT
HbA1c (average blood sugar)	Your average blood sugar over the past two to three months. Night shifts are linked to type 2 diabetes, and HbA1c needs no fasting, which helps when your meals move around. ^[1, 2, 9]	Once a year if you work nights often, or as your GP advises.
Cholesterol (total, LDL, HDL, non-HDL, triglycerides)	Shift work, especially permanent nights, is linked to higher triglycerides and lower HDL, the 'good' cholesterol. No fasting needed. ^[3, 4, 8]	With your HbA1c.
Vitamin D, 25(OH)D	Shift workers have some of the lowest vitamin D levels of any job group. Less daylight means less vitamin D. ^[6, 7, 10]	Late autumn or winter; after supplements, as your GP advises.
Full blood count, ferritin and thyroid (tiredness that does not pass)	Shift work makes you tired, but it is not the only possible reason. Iron, red cells and thyroid are common first checks; one symptom alone may not point to the thyroid. ^[11]	When tiredness does not ease with rest; talk to your GP.

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/shift-work

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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