Blood Test for Kidney Function

ALL YOU NEED TO KNOW ABOUT BLOOD TESTS FOR KIDNEY FUNCTION



KIDNEY DISEASE

4 in 5 people living with diabetes will develop some stage of kidney disease during their lifetime.

The renal and cardiac systems are linked, acute or chronic disorder of one can induce dysfunction in the other. So, protect the kidneys to protect the heart, especially important in people living with diabetes.

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Diabetes is the most common cause of kidney failure in the UK.

An estimated 1 million people in the UK have undetected kidney disease.

People with diabetes should have blood taken for kidney function (Urea & Electrolytes) at least annually...

- Urea: waste product made from breakdown of proteins.
- · Creatinine: waste product made from breakdown of skeletal muscle.

Both are cleared from serum and excreted via kidneys, and so can measure renal function. Creatinine is a better marker than urea.

- Estimated glomerular filtration rate (eGFR): is calculated based on 3 variables (serum creatinine, age and sex).
- Cystatin-C: Alternative to eGFR, more accurate in extremes of muscle mass.

NORMAL U&E RANGES:

Sodium	133 – 146 mmol/L
Potassium	3.5 – 5.3 mmol/L
Chloride	95 – 108 mmol/L
Bicarbonate	22 – 28 mmol/L
Urea	2.5 – 7.8 mmol/L
Creatinine: Female	45 – 85 μmol/L
Creatinine: Male	60 – 105 μmol/L
eGFR	90 – 120 ml/min/1.73m ²

Detect kidney disease using Urine Albumin to Creatinine Ratio (UACR) and eGFR together.

Early detection and treatment (ACEi/ ARB + SGLT-2i) of kidney disease can prevent cardiac events in people living with diabetes.

For further information contact:

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