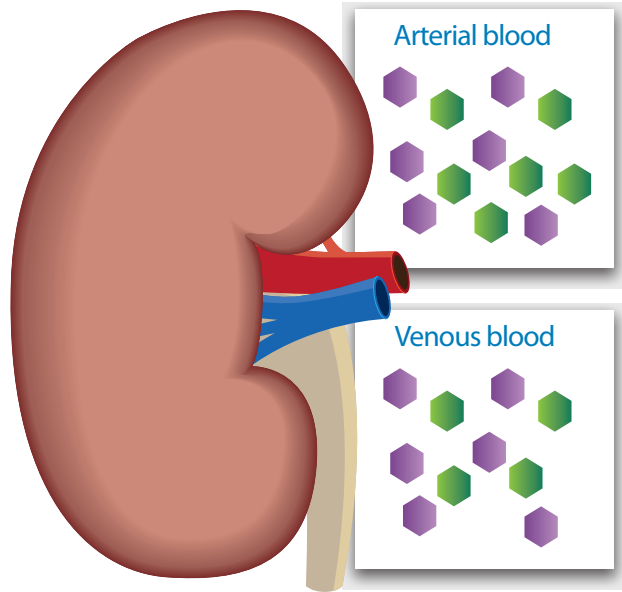
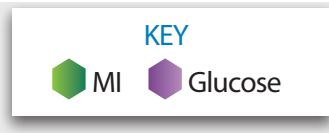
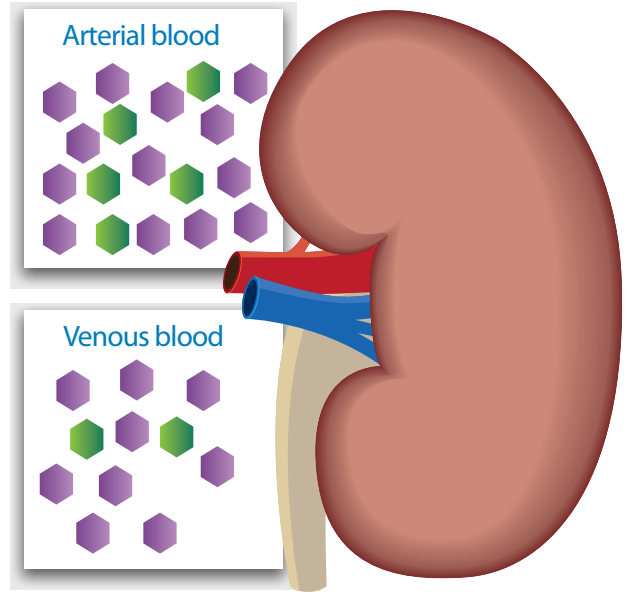


Normal State



Hyperglycaemia (in PCOS, Diabetes & High C/H Diet)



Arterial blood is filtered by the kidneys. Almost 100% of glucose and MI enter the filtrate and are actively reabsorbed. Under normoglycaemic conditions, MI transport (SMIT2) activity is normal: $\approx 100\%$ is reabsorbed

In hyperglycaemia SMIT2s are inundated with glucose, impeding reabsorption of MI - so more is excreted. In T2D and PCOS, MI is typically 4-6x & 2-3x higher. ^{6,7,8,9}