

\* Methylene blue - basis for use in diagnosis

→ Used in diagnosis of G6PD deficiency

→ Take blood sample (Red color)

↓  
Add ~~reducing~~ oxidizing substance like nitrite, ferricyanide

↓  
Blood became dark brown color due to  $Fe^{3+}$

↓ Add methylene blue

↓ See color of blood after 60 min

↓ Red ( $Fe^{2+}$ )

↓  
No G6PD deficiency

↓ Brown ( $Fe^{3+}$ )

↓  
G6PD deficiency present

→ Advantage :-

- No equipment required
- Can be done in periphery
- Used for screening
- Done before giving drug causing hemolysis like primaquine in malaria.