

## CORRESPONDENCE

### Prolonging the shelf-life of freeze-dried G6PD reagent tubes

The first batch of freeze-dried Glucose-6-phosphate dehydrogenase reagent tubes developed in 1991 were prepared from a mixture of all the chemicals involved. It was a simple and relatively sensitive diagnostic method but its shelf-life was three months when kept at 4°C and less than a week at room temperature. Its short "life span" was a setback in the commercial sense. Therefore, we experimented with different methods to prolong its shelf-life. We found that if the chemicals involved were separated, the shelf-life of the reagent tubes could be doubled. The concentration of each chemical employed in the modified method was as in the first batch but the chemicals were prepared to form two separate mixture? which were freeze-dried individually:

Mixture 1: Tris-HCl, Sodium Azide & B-Nicotinamide  
Adenosine Dinucleotide (NADP)

Mixture 2: Tris-HCl, Sodium Azide, Glutathione (GSSG)

*Reconstitution:* A mixture 2 tube was reconstituted with 100 ul of distilled water and the contents transferred to a mixture 1 tube and used immediately.

Alternatively, mixture 2 was not freeze-dried but kept in liquid form at 4°C. To date, the modified reagent tubes are still in good working condition, eight months after the day they were prepared. We also found that there was no difference in the performance of the two forms of mixture 2 for the same period of time.

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## REFERENCES

1. SK Cheong, YC Lim, KL Mok. A freeze-dried method for preparation of G6PD reagent tubes. Malays J Pathol 1991; 13 (1) 51-2.