INFORMATION SHEET

BABY DIES AFTER BEING LEFT IN HOT CAR

Adapted from IOL news 5 February 2003 By Gill Clifford

A two year old girl has died after being left in a locked car in the sun while her caregiver went shopping.

The child was declared dead on arrival at Garden City Clinic in Johannesburg on Monday afternoon – when temperatures reached 30 $^{\circ}$ C – after she was rushed there by staff from a large well known supermarket.

"A customer left the child in the car while she came to shop. She must have been gone for about an hour or so, and when she got back to the car, the child was dead. The caregiver started screaming, so staff ran to help and tried mouth to mouth resuscitation," Suroobhai, managing director of the supermarket said.

10 The trauma co-ordinator at Garden City Clinic who was on duty when the child was brought in, said:

"All people need to realise the dangers of leaving a child in a car, particularly in this heat. If the temperature outside is hot, you can be sure it is a lot hotter in a car, which effectively acts like an oven."

A doctor from the Netcare Travel Clinic said the child was likely to have died of hyperthermia, as temperatures in an unventilated car could – in the current heat wave – rise to well above 50 °C.

"The normal body temperature is about 37 °C. If it rises above 42 °C for any sustained period of time (more than 10 minutes), you start to see changes in protein as they begin to **denature** in the body." the doctor said.

He said proteins in the body were similar to egg white.

"When heated, the process is the same and you see a change in colour and hardness. There's a breaking down and solidifying of tissue – you actually cook. And that damages important tissue, like the brain."

"Often death is preceded by seizures, which is what we see when animals are left in a hot car."

[Adapted with permission from: <IOL.co.za>]

Some properties of proteins

- Proteins are sensitive to temperature changes and can be denatured when heat is applied. Think of what happens to a raw egg when it is cooked – the runny colourless albumen goes hard and white.
- Enzymes are proteins.

Enzymes

Enzymes are proteins found in the body which have specific functions. They are as sensitive to temperature change as any other protein in the body.

A chemical test for protein

Potassium OR sodium hydroxide solution together with copper sulphate solution turns purple in the presence of protein. The deeper the purple colour the more protein the substance contains. A positive test for protein is obtained by using **2 ml** of each of the two solutions.