Accidental poisoning prevention: an anthropometric study for Saudi Arabian children

This study aims to provide anthropometric data on bottle opening strength of children in Saudi Arabia. The availability of such data allows package designers to design household bottles containing chemicals or medicine to make it inaccessible for children which in turns prevent accidental poisoning. The data are collected from subjects aged 1 to 5 years. Different design factors that influence the opening strength are investigated. The factors include cap diameter and surface roughness and the type and length of neck finish. The data is tabulated showing the weakest range of opening strength under different combinations of the factors under study.