

Tekst 12

‘Magic bullet’ of cyanide could kill cancer cells

CANCER PATIENTS of the future could be treated with a powerful “magic bullet” that attacks tumours with a cyanide cocktail derived from the cassava plant, scientists disclosed yesterday at the British Association’s annual meeting.

Researchers from Imperial College in London have devised a way of using cyanide, one of the most dangerous and fast-acting poisons, selectively to destroy cancer cells yet leave healthy tissue untouched.

The key ingredient of the therapy is an enzyme derived from the cassava plant, which converts a harmless sugar molecule into the poison. Scientists have attached the enzyme to an artificial antibody specifically designed to target tumour cells only.

BY STEVE CONNOR
Science Editor

The idea is to inject the combination of antibody and enzyme into the site of a tumour and then flush the cancer with the sugar, which would cause cyanide to be released into the cancer cells.

Cyanide is such an effective poison because it interrupts the vital oxygen supply that enables living tissues to generate energy. “It suffocates you from the inside out,” Dr Deonarain said.

Because the poison cripples such an important part of a cell’s vital machinery, it would probably be impossible for tumour cells to develop a way of avoiding being killed.

‘The Independent’, September 7, 2000

Lees bij de volgende vragen steeds eerst de opgave voordat je de bijbehorende tekst raadpleegt.

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De kop “‘Magic bullet’ of cyanide could kill cancer cells” trekt je aandacht. Je vraagt je af hoe het mogelijk is dat gezond weefsel niet zou worden aangetast door cyanide, een zwaar vergif.

1p 43 □ Welke zin in de tekst geeft antwoord op je vraag?

Citeer de eerste twee en de laatste twee woorden van deze zin.