

March 2011
QUESTION 20

Describe how previous immunisation protects against subsequent infection

Immune system

Is characterised by

recognition

effector responses

memory

Is functionally divided into two interrelated components

innate immunity

adaptive immunity

Vaccine

is the process of stimulating protective adaptive immune responses against pathogens

it is done by introducing nonpathogenic forms or components of these pathogens

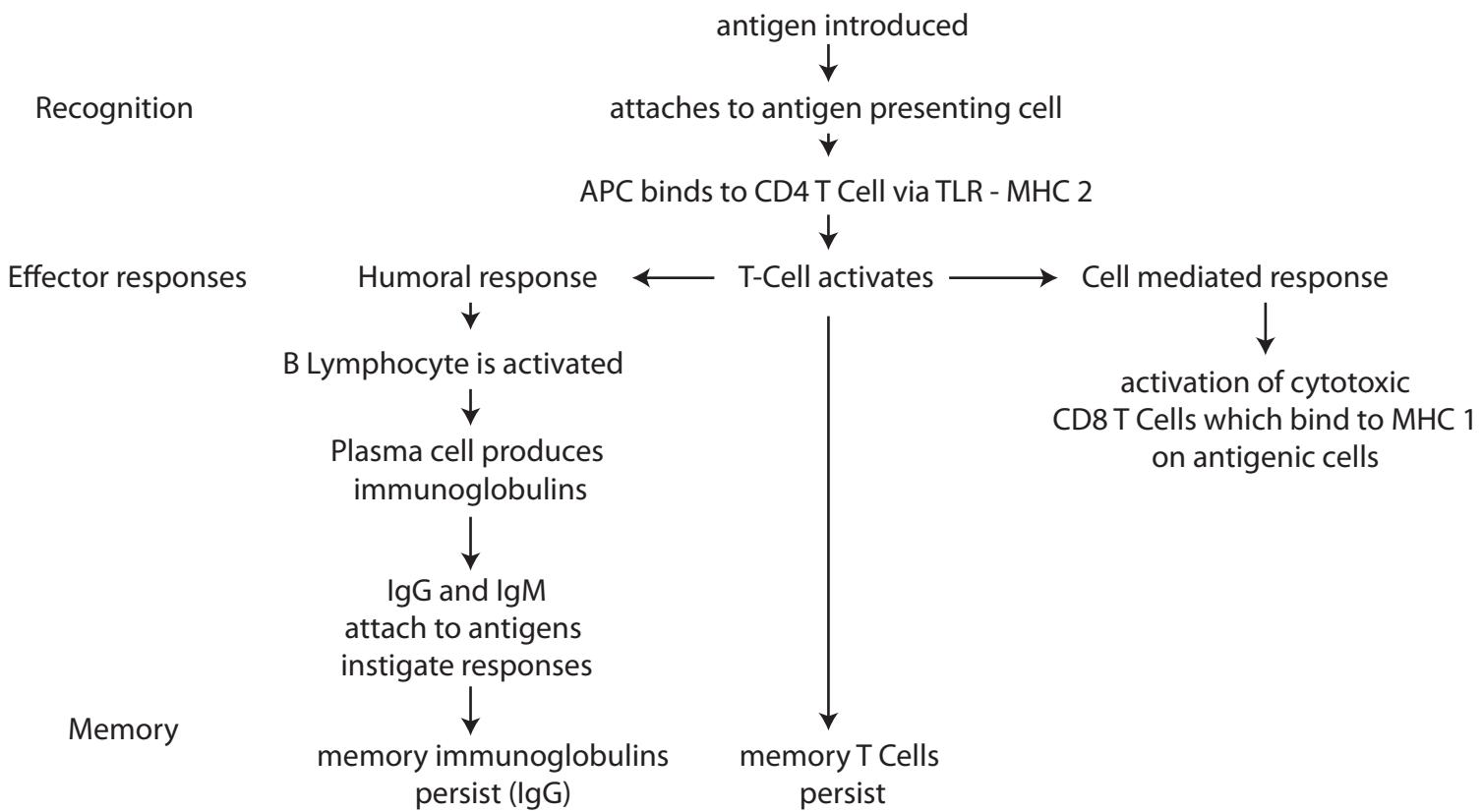
this induces an immune response and creates memory of the matching epitopes

Adaptive immunity

humoral (in the body fluids)

cell mediated

both are involved in development of memory



Subsequent infection is characterised by a much more rapid recognition memory T cells and IgG recognise the antigen and develop a rapid and specific effector response to the antigen