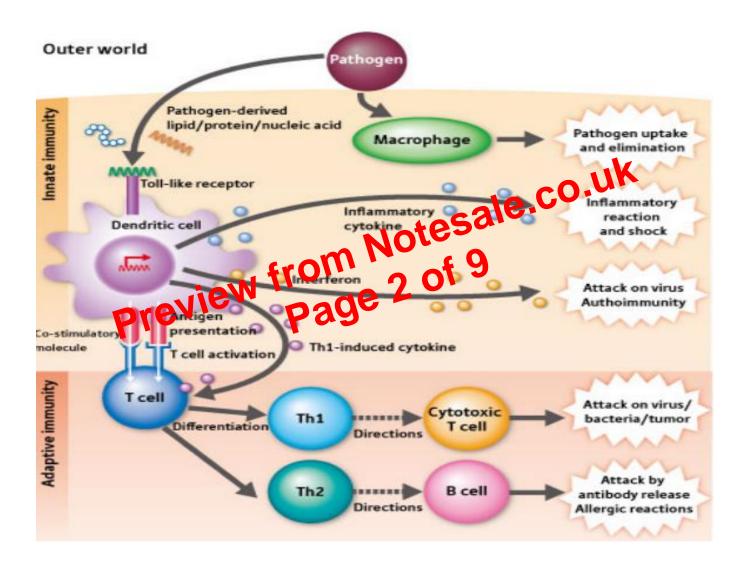
## **ROUTES OF INFECTION FOR PATHOGENS**

- Pathogens enter body via mucosal surfaces such as: the airway (inhaled droplets and spores); gastrointestinal tract (contaminated water or food); reproductive tract (physical contact).
- Or they can enter via external epithelia such as: an external surface (physical contact); wounds and abrasions (minor skin abrasions, puncture wounds, handling infected animals); insect bites.

## **IMMUNE RESPONSES: INNATE IMMUNITY AND ADAPTIVE IMMUNITY**



## INNATE IMMUNE RESPONSE AT SITES OF INFECTION

- 1. Bacterial cell surface induces cleavage and activation of complement.
- 2. One complement fragment covalently bonds to the bacterium, the other attracts an effector cell.