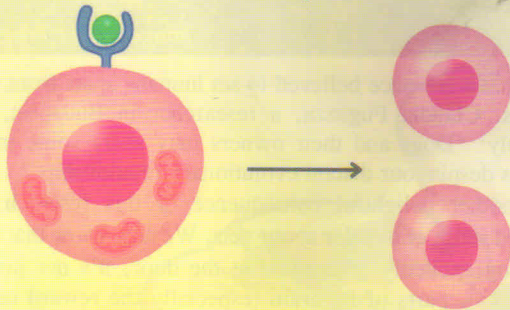


Our Cells are Intelligent!

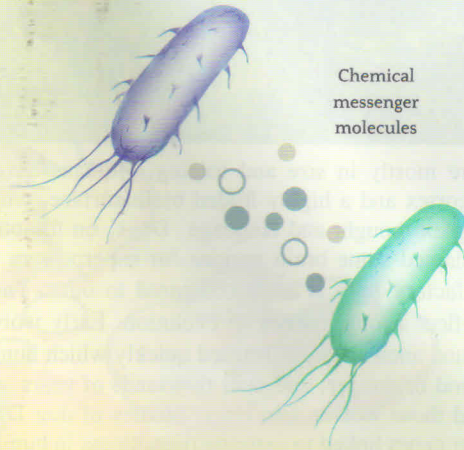
Jaspreet Kaur and Vaishnavi Rajagopalan

Cell divides in presence of growth factors and enough number of organelles



CELLS INTEGRATE INTERNAL CUES WITH OUTSIDE SIGNALS: Cell decides whether to divide or not depending on internal signals e.g. number of organelle and availability of external signal in the form of growth factor

Chemical messenger molecules



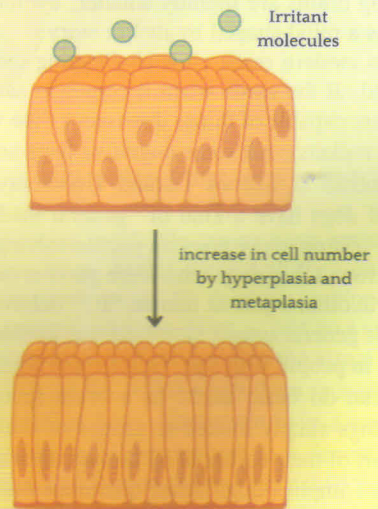
CELLS COMMUNICATE WITH EACH OTHER: Bacterial cells communicate with each other by release of chemical messengers

Sunlight



CELLS RESPOND TO ENVIRONMENT: Photosynthesizing bacteria orient itself towards sunlight

Irritant molecules



CELLS ADAPT TO ENVIRONMENT: Goblet cells increase in number in bronchial epithelium on exposure to irritants

ONE might have heard someone boasting about their intelligence or IQ levels, but you may not have heard of our cells being intelligent. Yes, each of us, made of tiny cells, exhibits cellular intelligence. According to the Merriam-Webster definition, intelligence is the power to learn, understand, and reason logically as well as employ knowledge to interact with or influence one's surroundings.

So, if we look carefully at the functions of small living cells, they closely align with this definition of intelligence. So, cellular intelligence is the ability of cells by which they learn to adapt to their environment. The concept of cellular intelligence was first presented by an American researcher, Nels Quevli, in 1916, who published a book during World War I, and it was entitled "*Cell Intelligence*". He stated about