

Discipline	Sciences de la Vie et de la Terre	Niveau	Seconde
Thème	Corps humain et santé		

Compétences :

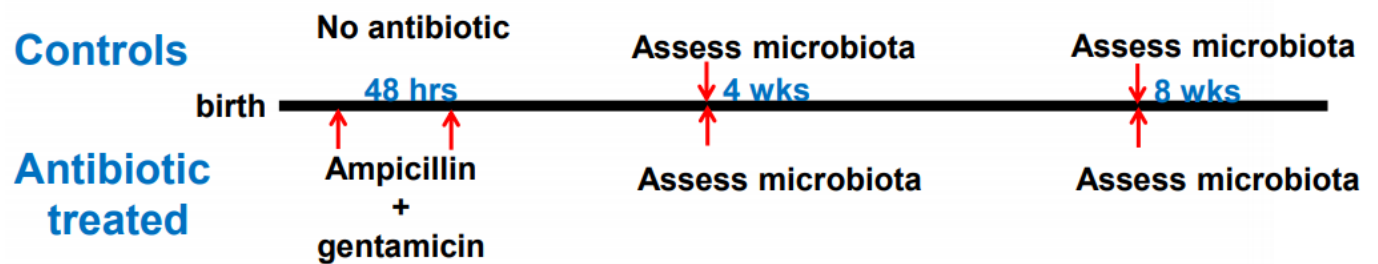
Écouter, visionner et comprendre des contenus disciplinaires dans le contexte linguistique et culturel de la section	
Lire et comprendre des contenus disciplinaires dans le contexte linguistique et culturel de la section	
Parler et interagir à l'oral en mobilisant des contenus disciplinaires dans le contexte linguistique et culturel de la section	
Écrire et interagir à l'écrit en mobilisant des contenus disciplinaires dans le contexte linguistique et culturel de la section	
Rechercher et exploiter des informations pour faciliter la coopération internationale dans le contexte linguistique et culturel de la section	

Activity 2: MICROBIOTA IMBALANCE (also called DYSBIOSIS)

Learning objective: Identify the impact of antibiotics consumption on the microbiota

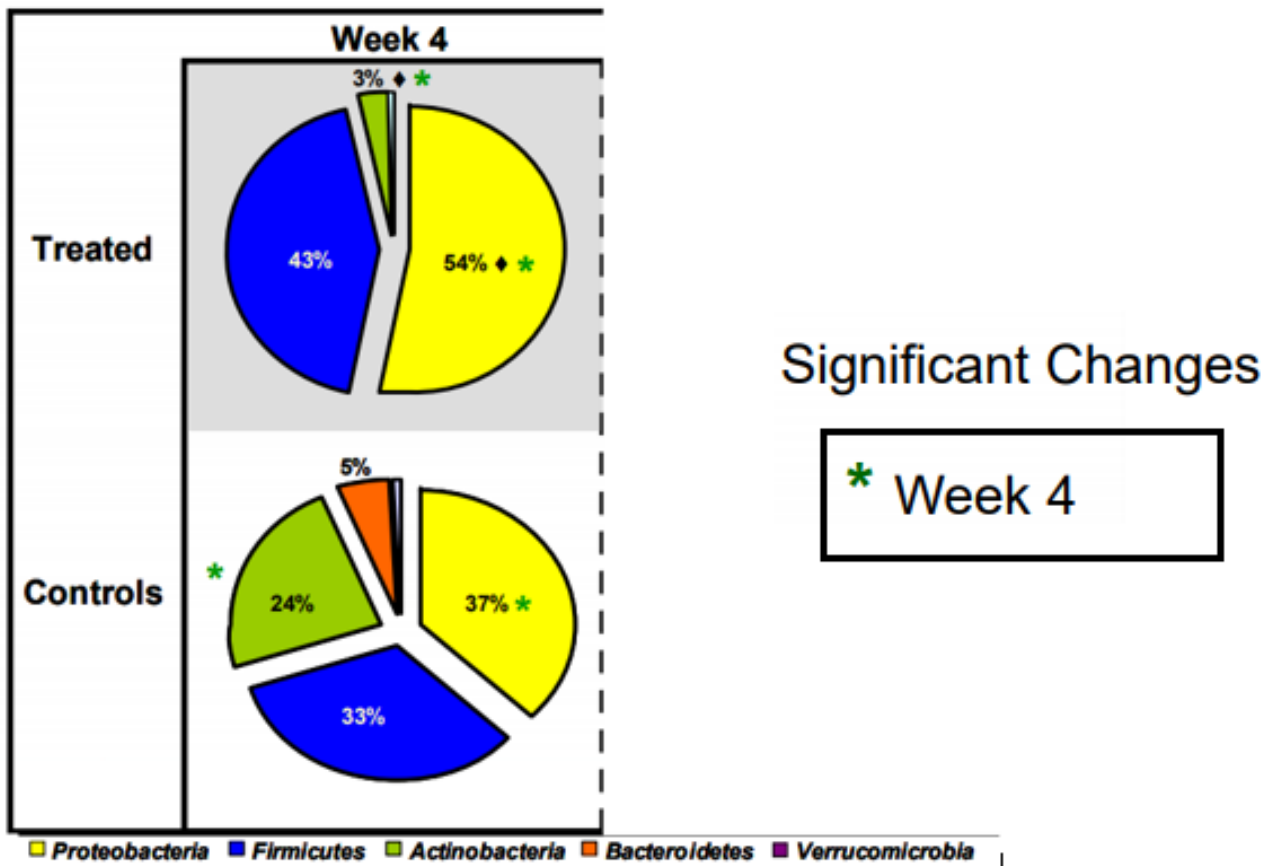
Task: Using the documents below, show the impact of antibiotic consumption on the microbiota. Also indicate what can happen when antibiotics are used in large quantities. Conclude (in one or two sentences) about the impact of antibiotic overconsumption on our health.

Infant microbiota study



adapted from: The impact of antibiotics on the gut microbiota, Dr Paul Cotter, Teagasc Food Research Centre, Moorepark & Alimentary Pharmabiotic Centre (APC), University College Cork Cork, Ireland

Results:



Clostridium difficile infection and antibiotics:

Antibiotic-associated diarrhea is among the most common adverse events related to **antibiotic** use. Most cases are mild, but **Clostridium difficile** (Firmicutes) infection causes a spectrum of disease, ranging from occasional diarrhea to colitis and potentially death.

Extracted from: <https://pubmed.ncbi.nlm.nih.gov/29858434>

In 3-8% of patients infected with **Clostridium difficile**, who have taken multiple antibiotics, there is a virulent pathogenic spread of Clostridium difficile to the detriment of other organisms in their gut microbiota. There is therefore an ecological alteration of the microbiota: this is dysbiosis. This imbalance can lead to death.

Adapted from Nathan SVT 2nde