Pharmacological properties
Mode of action and Microbiology

**Cefutil® (Cefuroxime (Axetil))** owes its bactericidal activity to the parent drug Cefuroxime, which is a second-generation cephalosporin. Its bactericidal action depends on the ability to reach and bind penicillin-binding proteins located in the bacterial cytoplasmic membrane leading to inhibition of cell wall synthesis. Cefuroxime is an antibacterial agent with broad-spectrum activity against a wide variety of pathogens like:

**Gram-negative aerobes** like *E.coli, Klebsiella, H.influenza* (including β-lactamase producing strains), *M.catarrhalis, N.gonorrhea* (including Penicillinase and non-Penicillinase producing strains).

**Gram-positive aerobes** like: *S.aureus*, (including β-lactamase producing strains) *S.pneumoniae* and others.

**Gram-negative and Gram-positive anaerobic cocci.** Like peptococcus and peptostreptococcus

**Gram-positive anaerobic bacilli.** Like clostridium speices (except C. difficile) and propionibacterium

**Gram-negative anaerobic bacilli.** Like Bacteroides species (except B. fragilis ) and Fusobacterium species.

Under normal renal function, Cefuroxime (Axetil) has a half-life of 1-2hr. Cefuroxime is widely distributed through out the body and reaches therapeutic concentrations in most tissues and body fluids including synovial, pericardial, pleural, and peritoneal fluids. Also bile, sputum, urine and CSF.

Cefuroxime crosses the placenta and enters breast milk.

**Indications**

Cefutil® is indicated for the treatment of:

1- Upper respiratory tract infections including tonsillopharyngitis, otitis media & sinusitis.
2- Lower respiratory tract infections including bronchitis, acute exacerbation bronchitis & pneumoniae.
3- Urinary tract infections and uncomplicated gonorrhea.
4- Skin and soft tissue infections and impetigo.

Dosage and administration
- **Cefutil®** can be given without regard to meals, however, absorption is enhanced when it is given with food.
- **Cefutil®** tablets and oral suspensions are not bioequivalent, and are not substitutable on mg-per-mg basis.
- Patients who can not swallow solids can take Cefuroxime (Axetil) tablets mixed with fluids (juices or milk). Alternative therapy, such as the oral suspension, should be considered for children.

Usual pediatric dose:
- In children from 3 months up to 2 years 125mg every 12 hours.
- In children over 2 years 250mg every 12 hours.
- Children who can swallow tablets 125-250 mg every 12 hours

Usual adult dose
250-500mg every 12 hours.
UTI (Uncomplicated) 125-250mg every 12 hours.
Gonorrhea (Uncomplicated cervical and urethral) 1mg single dose.

Use In Pregnancy & Lactation
Pregnancy category B, Cefuroxime (Axetil) can be given to pregnant or lactating women according to physician's assessment.

Contraindications
Hypersensitivity to Cefuroxime, any component, or cephalosporins.

Precautions
Cross sensitivity: Patients allergic to one cephalosporin, cephamycin, penicillin, or penicillin derivatives may be allergic to Cefuroxime (Axetil).
**Side effects**

Side effects arising from using Cefuroxime Axetil are generally mild and transient in nature. Like headache, diarrhea, nausea, vomiting, and skin rashes.

**Presentation**

**Cefutil® F/ C tablets:**
- Cefuroxime (Axetil) 125mg/tablet (Available in 10 tablets pack).
- Cefuroxime (Axetil) 250mg/tablet (Available in 10 tablets pack).
- Cefuroxime (Axetil) 500mg/tablet (Available in 10 tablets pack).

**Cefutil® Suspension:**
- Cefuroxime (Axetil) 125mg/5 ml (Available in 50 ml pack).
- Cefuroxime (Axetil) 250mg/5 ml (Available in 50 ml pack).