

# Fermentation - A Variety of Products

## Pharmaceuticals

- **Penicillin (G/V)**
- **6-APA (amoxi-, ampi- and oxacillins)**
- **7-ADCA (cephalexin, cefadroxyl, cefradin)**
- **Clavulanic acid**
- **Erythromycin**
- **Nystatin**

## Biopharmaceuticals

- **Monoclonal antibodies**
- **Therapeutic proteins**

## Food additives and specialties

- **Enzymes**
- **Yeast**
- **Starter cultures**
- **Pimaricin**
- **Lactoferrin**
- **Pufa**
- **Vitamin B12**
- **$\beta$ -carotene**

## Cosmetics

- **Ceramides**