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# 1 Logique interne

## 1.1 Nom des molécules

Pour tracer une molécule, il suffit d'appeler `\chemfig\{!\nomDeLaMolecule\}`. La représentation de base pour les molécules est la formule topologique, il faut ajouter un suffixe au nom pour passer à une autre représentation **si elle est définie, ce qui n'est pas du tout toujours le cas**. Les suffixes sont les suivants :

- SemiDev : formule semi-développée ;
- Dev : formule développée ;
- Haw : représentation de Haworth ;
- Cram : représentation de Cram.

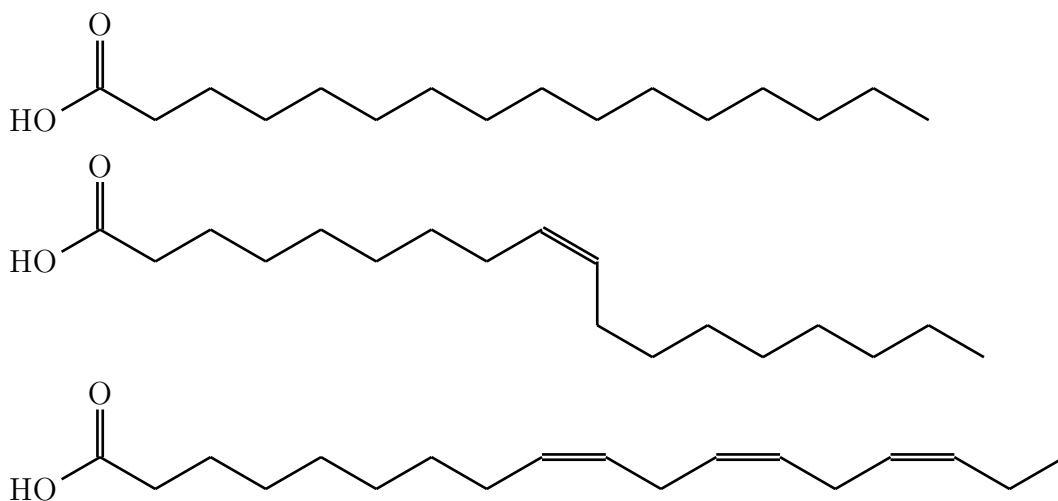
Pour les acides aminés, il existe quatre autres suffixes

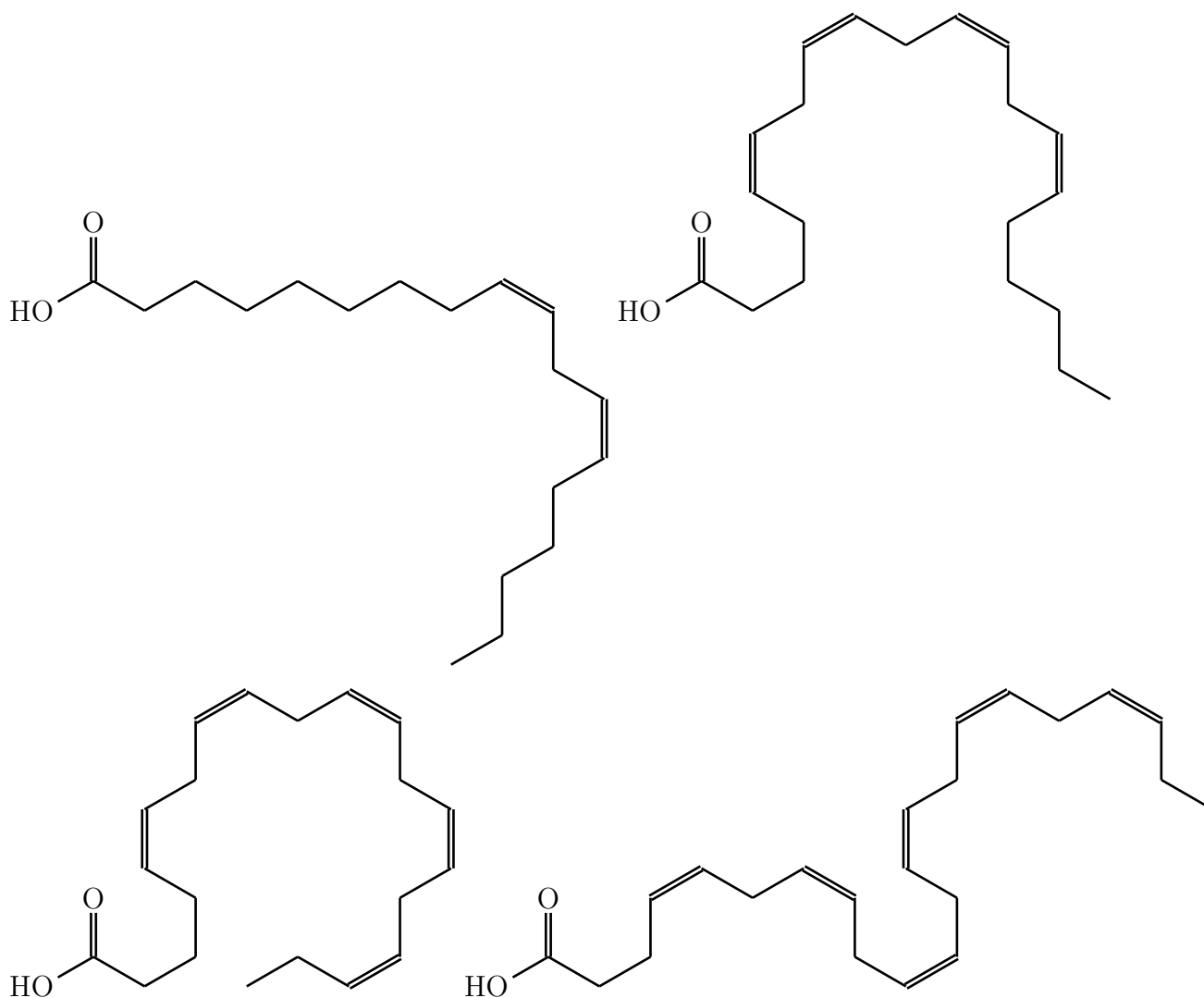
- L : représentation de Fischer gauche ;
- H : pour tracer un polypeptide, la chaîne latérale est vers le haut ;
- D : représentation de Fischer droite ;
- B : pour tracer un polypeptide, la chaîne latérale est vers le bas.

# 2 Lipides

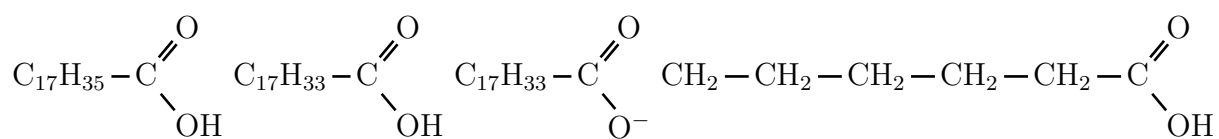
## 2.1 Acide gras

```
\chemfig{!\palmitique}
\chemfig{!\oleique}
\chemfig{!\linoleique}
\chemfig{!\linolenique}
\chemfig{!\arachidonique}
\chemfig{!\eicosaPentaenoique}
\chemfig{!\docosaHexanoique}
```



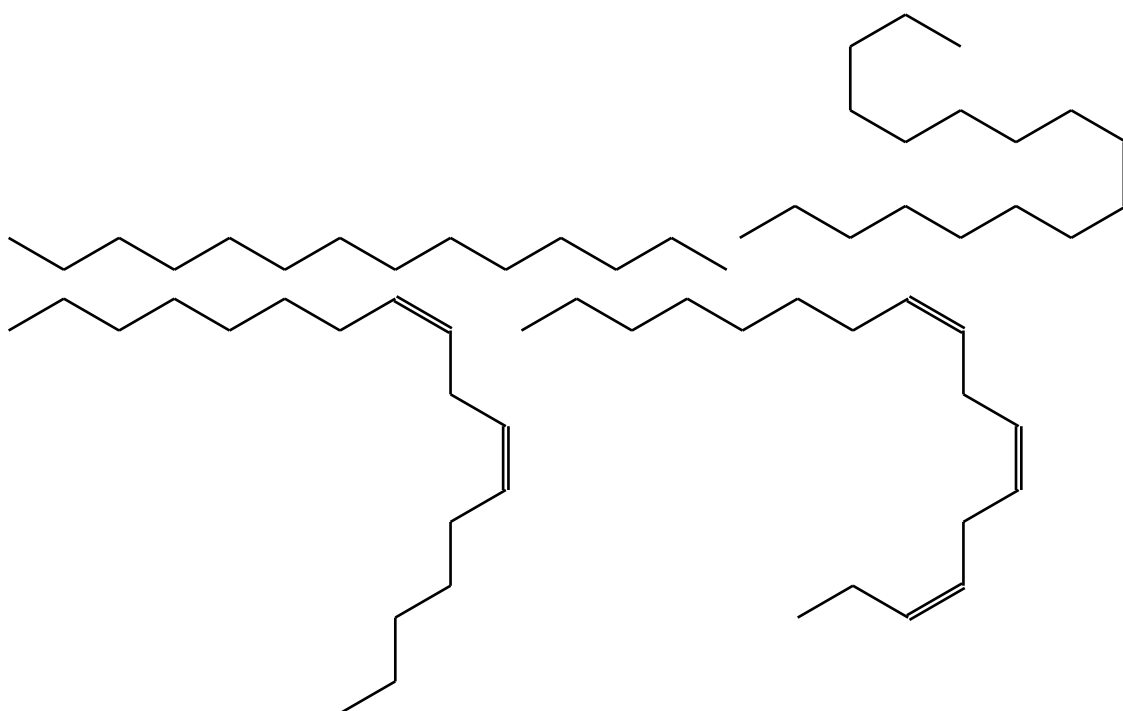


```
\chemfig{!\steraiqueSemiDev}
\chemfig{!\oleiqueSemiDev}
\chemfig{!\oleateSemiDev} \qq{}
\chemfig{!\caproiqueSemiDev}
```



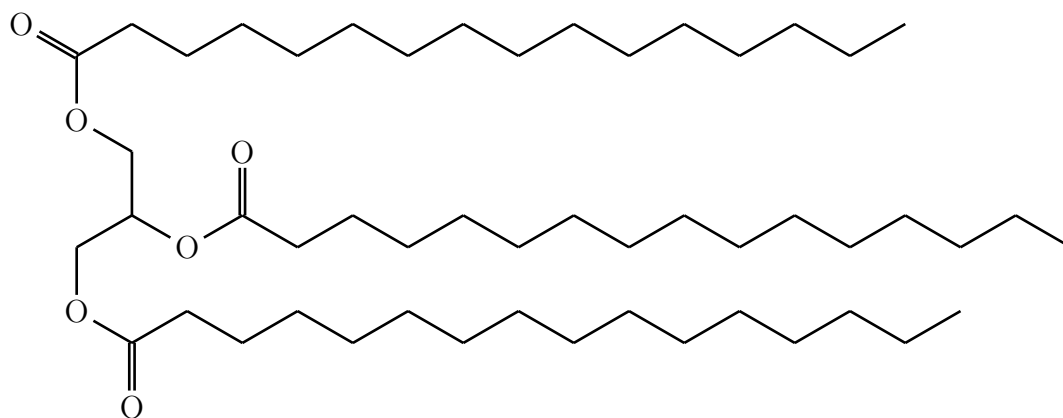
## 2.2 Pour les chaînes dans les triglycérides

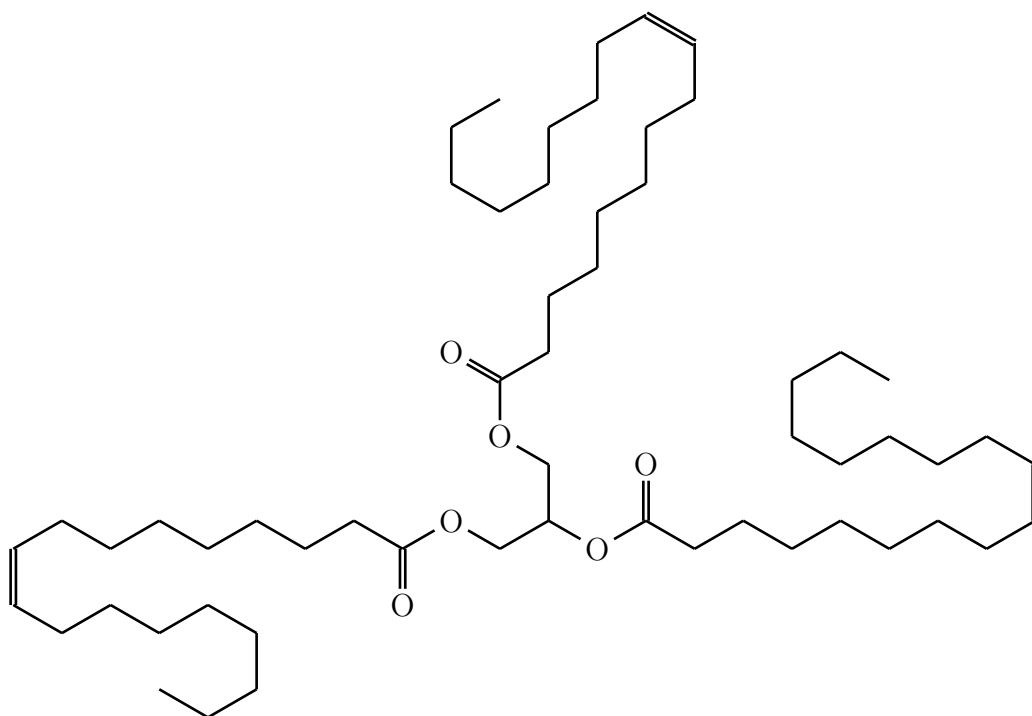
```
\chemfig{!\tripalmitique}
\chemfig{[: -30] !\trioleique}
\chemfig{[: -30] !\trilinoleique}
\chemfig{[: -30] !\trilinolenique}
```



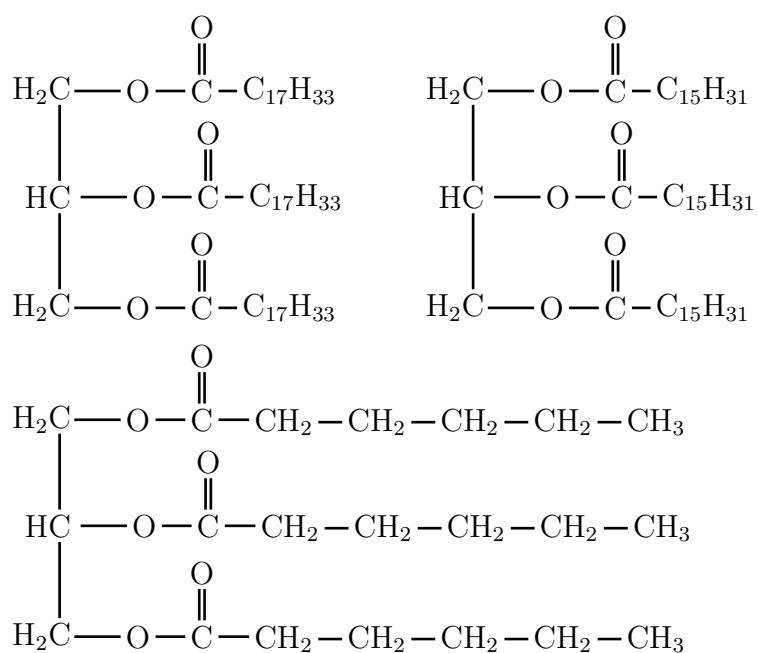
## 2.3 Triglycérides

```
\chemfig{[:-60] !\palmitine}
\chemfig[atom sep = 1.8em]{[:-60] !\oleine}
```



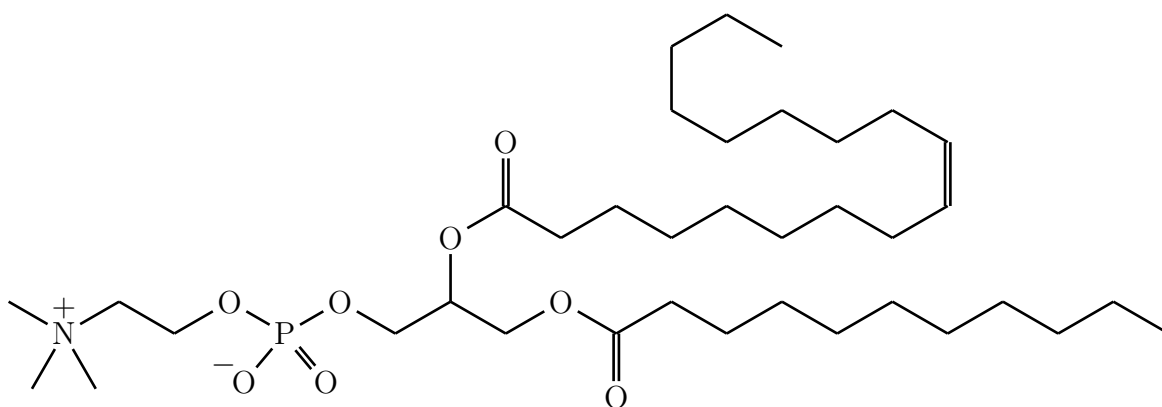


```
\chemfig{!\oleineSemiDev}
\chemfig{!\palmitineSemiDev}
\chemfig{!\caproineSemiDev}
```



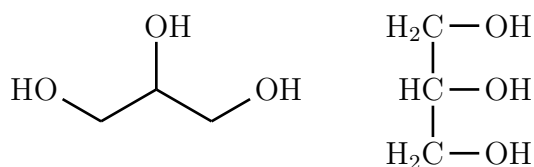
## 2.4 Phospholipide

```
\chemfig{!\phosphatidylcholine}
```



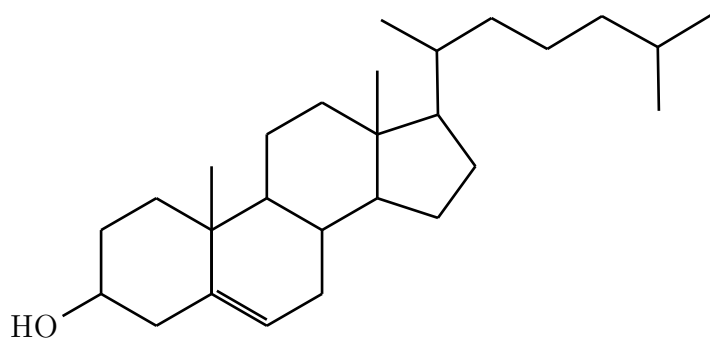
## 2.5 glycérol

```
\chemfig{!\glycerol}
\chemfig{!\glycerolSemiDev}
```



## 2.6 Stérols

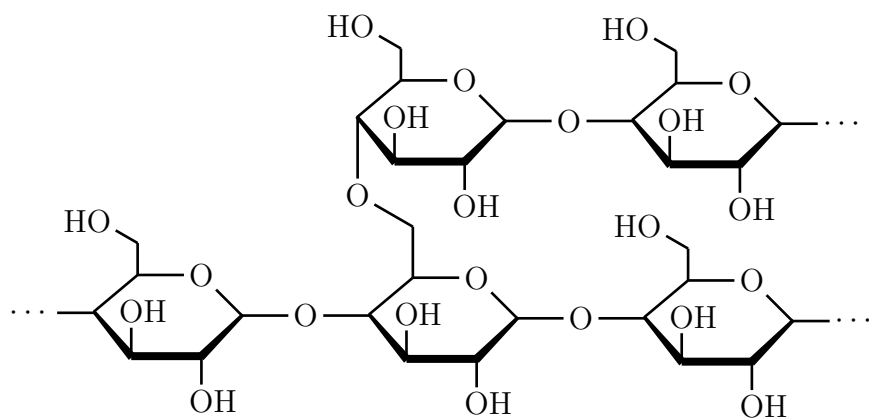
```
\chemfig{!\cholesterol}
```



# 3 Glucides

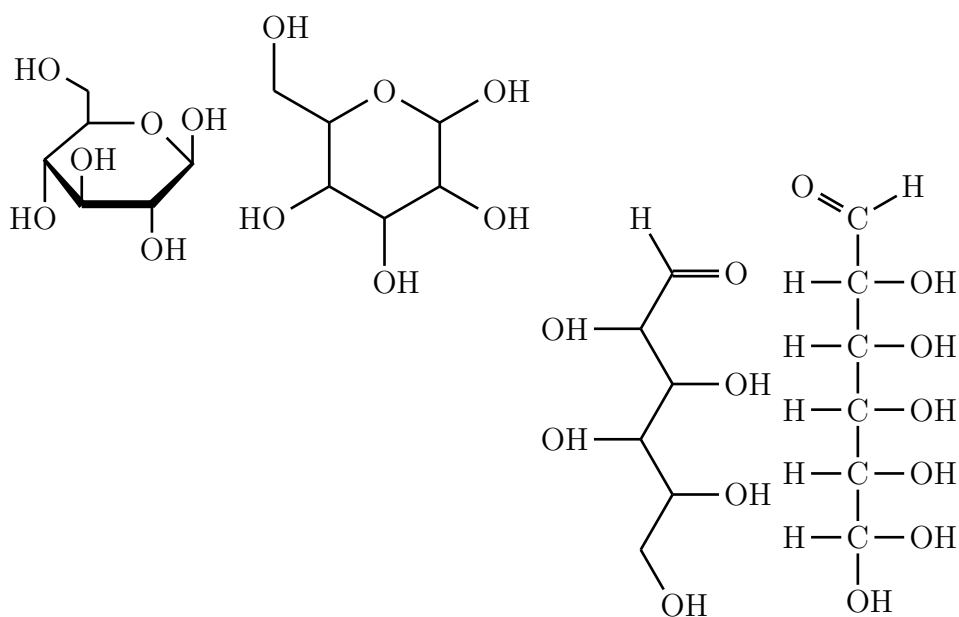
## 3.1 Amidon

```
\chemfig{!\amylopectineHaw}
```



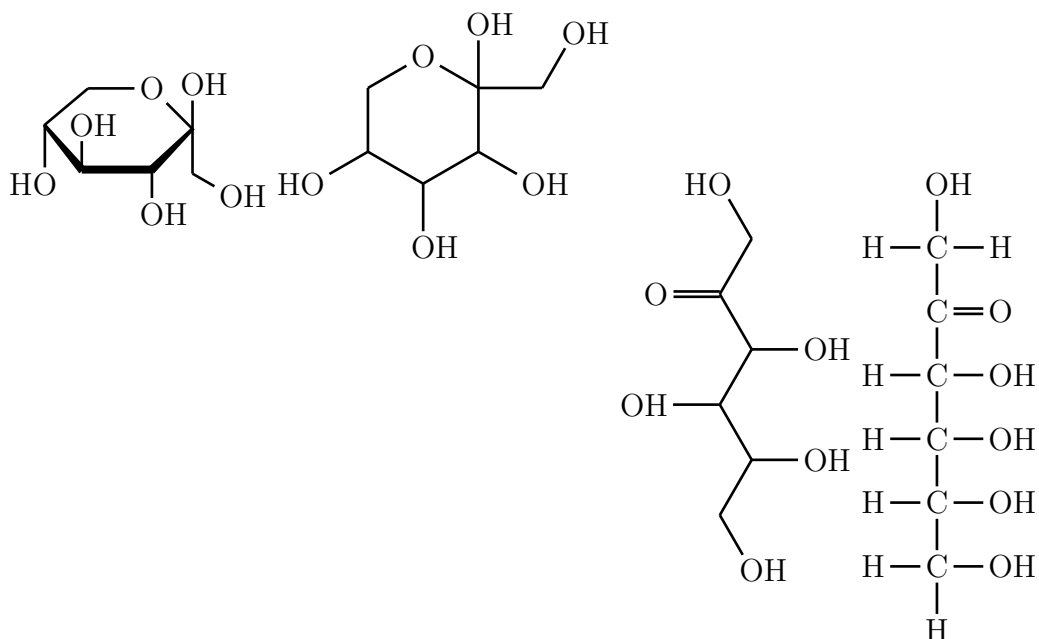
### 3.2 glucose

```
\chemfig{!\glucoseHaw}
\chemfig{!\glucoseCycle}
\chemfig{[: -90] !\glucose}
\chemfig{[: -90] !\glucoseSemiDev}
```



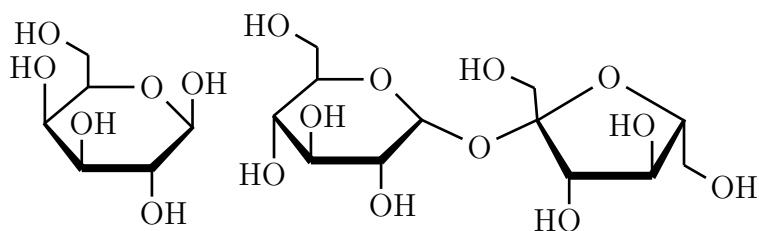
### 3.3 fructose

```
\chemfig{!\fructoseHaw}
\chemfig{!\fructofuranoseHaw}
\chemfig{!\fructoseCycle}
\chemfig{[: -90] !\fructose}
\chemfig{[: -90] !\fructoseSemiDev}
```



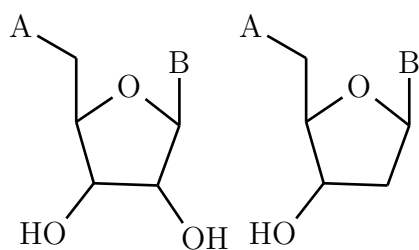
### 3.4 Galactose et saccharose

```
\chemfig{!\galactoseHaw}
\chemfig{!\saccharoseHaw}
```



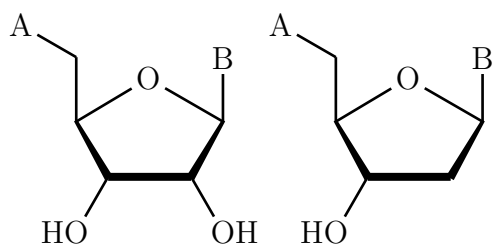
### 3.5 Ribose et desoxyribose

```
\chemfig{A !\ribose B}
\chemfig{A !\desoxyribose B}
```



```
\chemfig{A !\riboseHaw B}
\chemfig{A !\desoxyriboseHaw B}
```

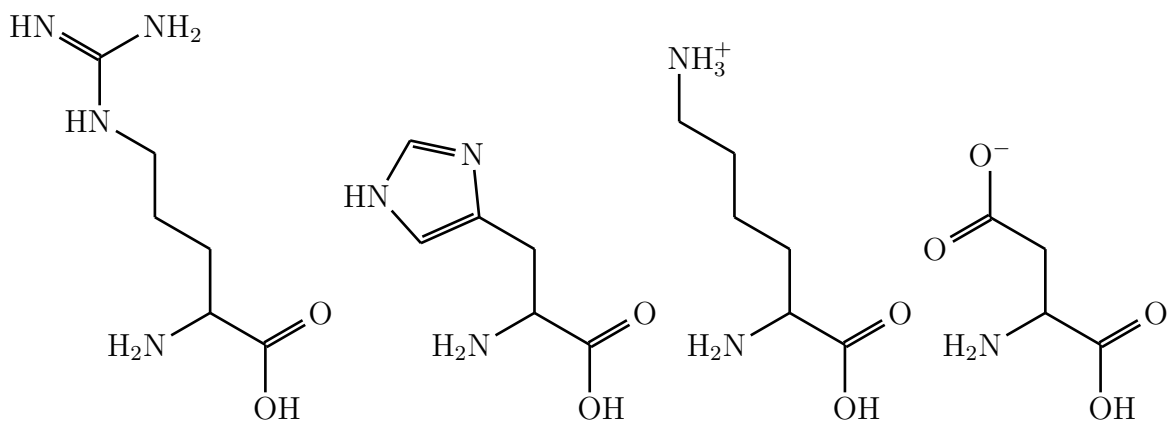




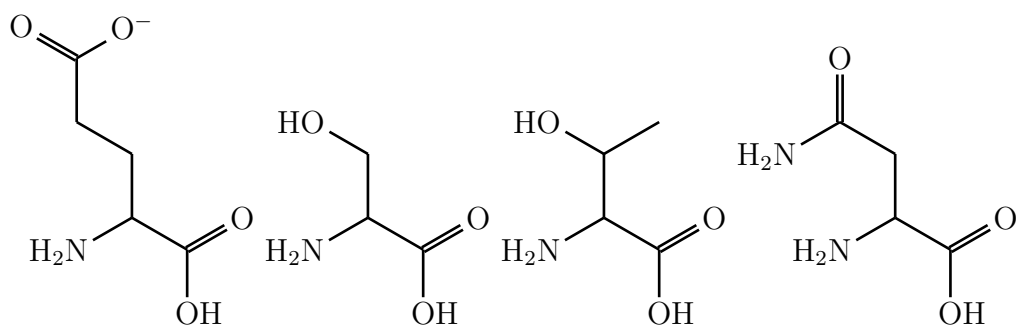
## 4 Acides alpha aminés

### 4.1 Formules topologiques

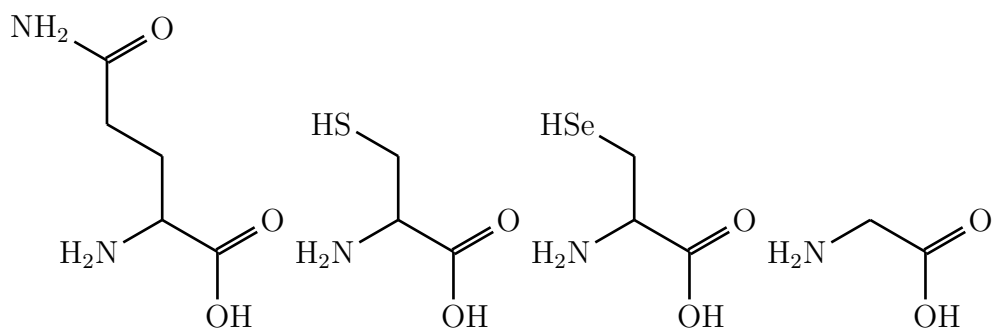
```
\chemfig{!\arginine}
\chemfig{!\histidine}
\chemfig{!\lysine}
\chemfig{!\aspartique}
```



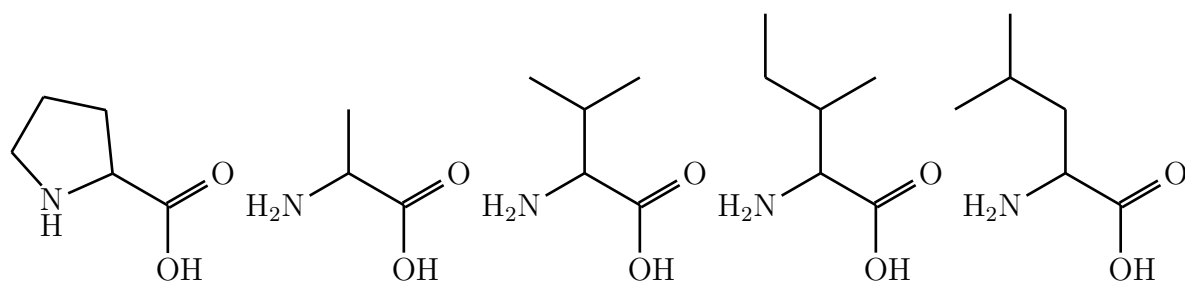
```
\chemfig{!\glutamique}
\chemfig{!\serine}
\chemfig{!\threonine}
\chemfig{!\asparagine}
```



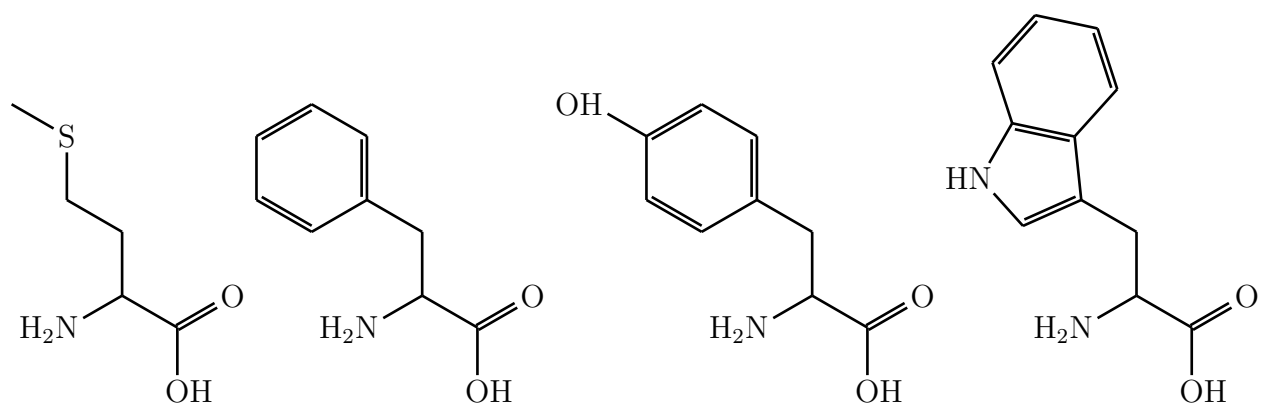
```
\chemfig{!\glutamine}
\chemfig{!\cysteine}
\chemfig{!\selenocysteine}
\chemfig{!\glycine}
```



```
\chemfig{!\proline}
\chemfig{!\alanine}
\chemfig{!\valine}
\chemfig{!\isoleucine}
\chemfig{!\leucine}
```

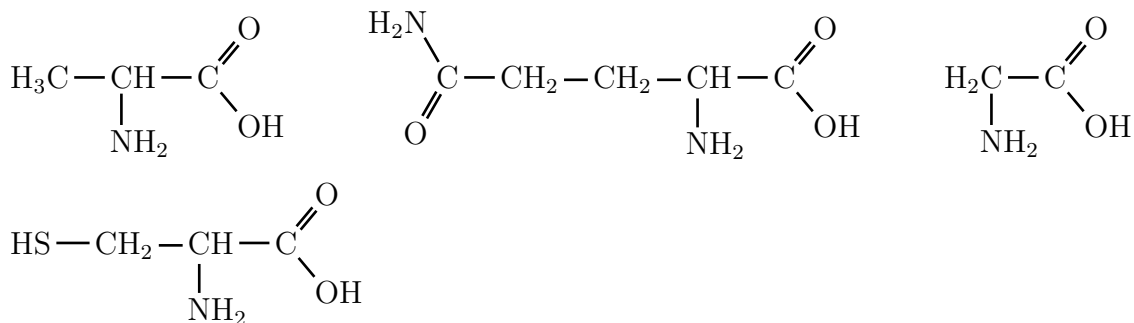


```
\chemfig{!\methionine}
\chemfig{!\phenylalanine}
\chemfig{!\tyrosine}
\chemfig{!\tryptophane}
```



## 4.2 Formules semi-développées

```
\chemfig{!\alanineSemiDev}
\chemfig{!\asparagineSemiDev}
\chemfig{!\glycineSemiDev}
\chemfig{!\cysteineSemiDev}
```

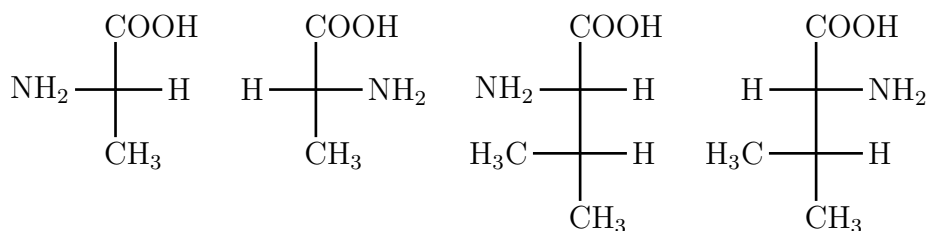


### 4.3 Représentation de Fischer

```

\chemfig{!\alanineL}
\chemfig{!\alanineD}
\chemfig{!\valineL}
\chemfig{!\valineD}

```

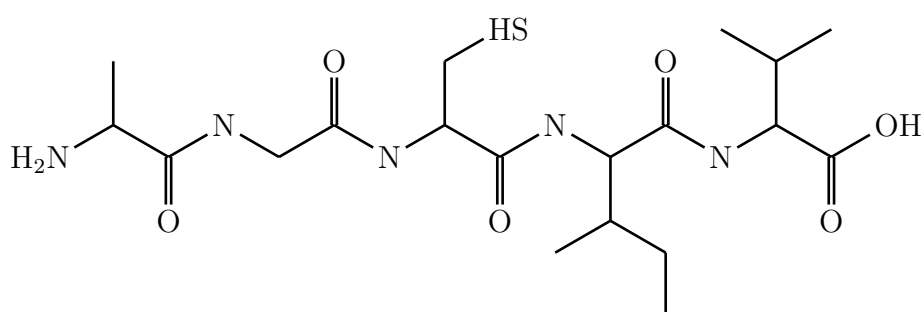


### 4.4 Acide alpha aminés pour les polypeptides

```

\chemfig{
  [:-30] H_2N !\alanineH N !\glycineB N !\cysteineH N !\isoleucineB N !\valineH OH
}

```

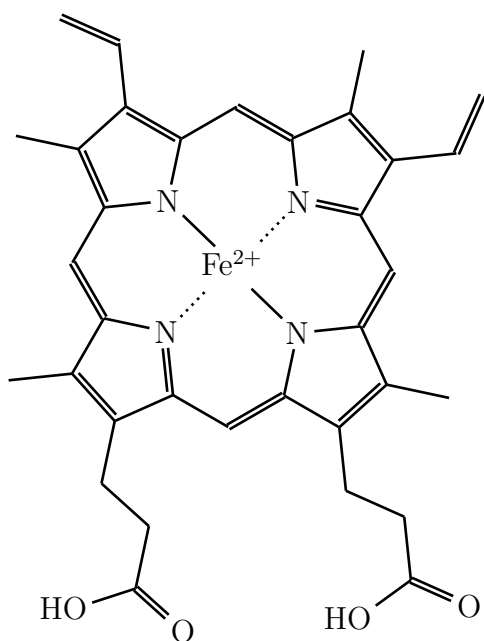


### 4.5 Heme

```

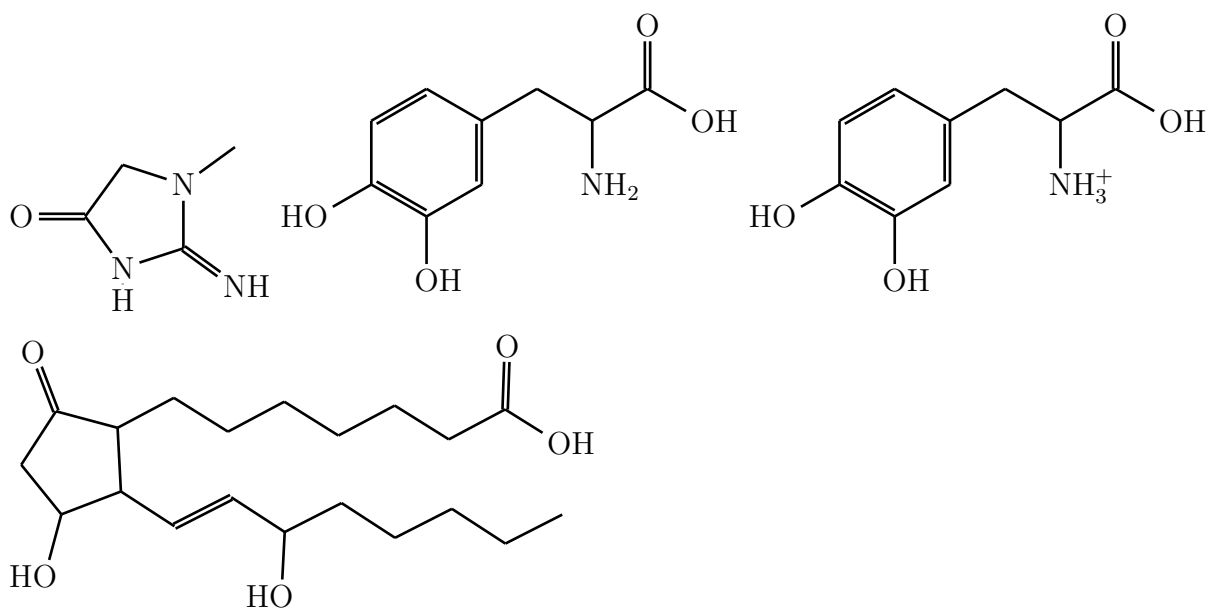
\chemfig{!\hemeB}

```



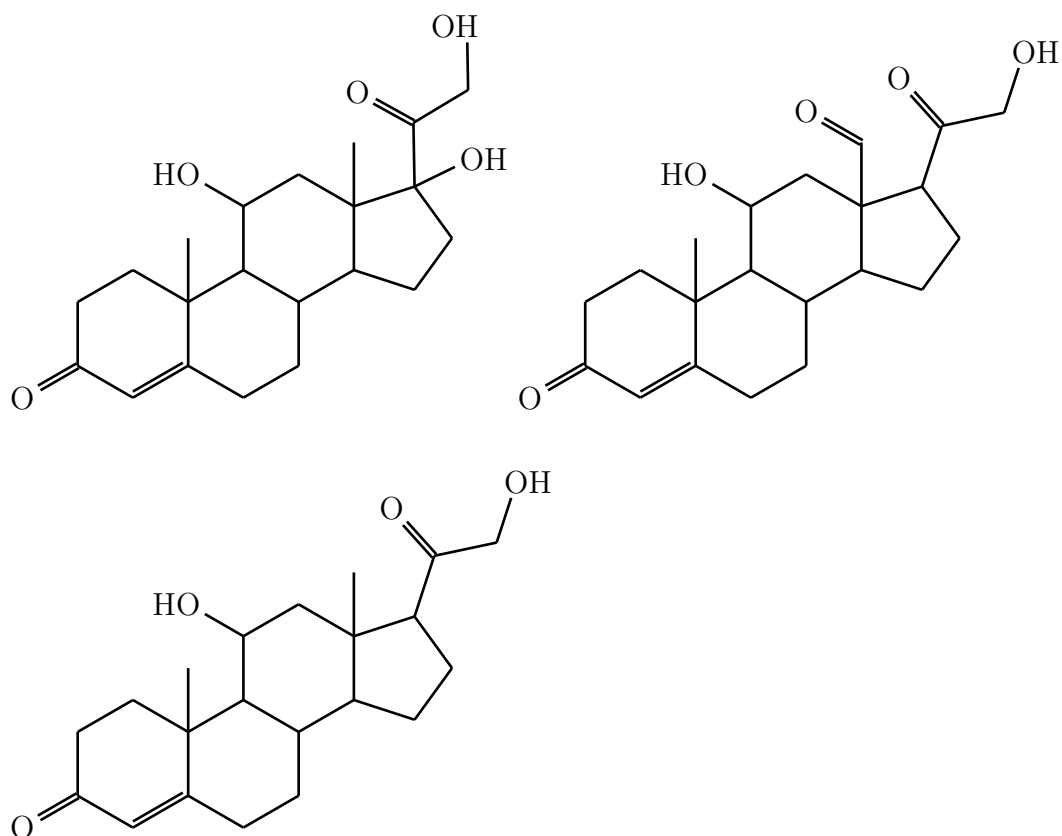
## 5 Hormones

```
\chemfig{!\creatinine}
\chemfig{!\DOPA}
\chemfig{!\DOPAH}
\chemfig{!\prostaglandine}
```



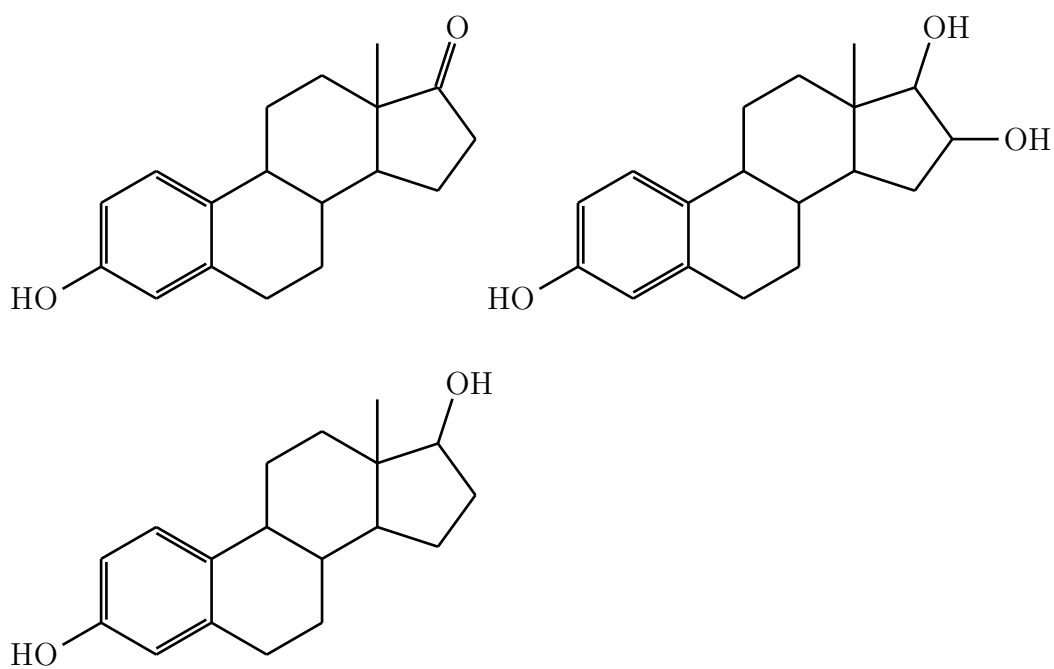
### 5.1 Corticoïdes et minéralocorticoïdes

```
\chemfig{!\cortisol}
\chemfig{!\corticosterone}
\chemfig{!\aldosterone}
```



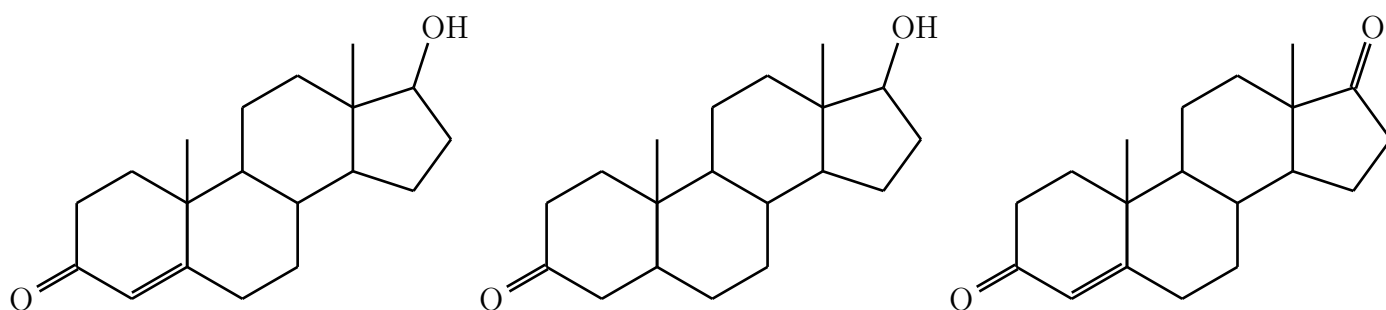
## 5.2 Oestrogènes

```
\chemfig{!\estrone}
\chemfig{!\estriol}
\chemfig{!\estradiol}
```

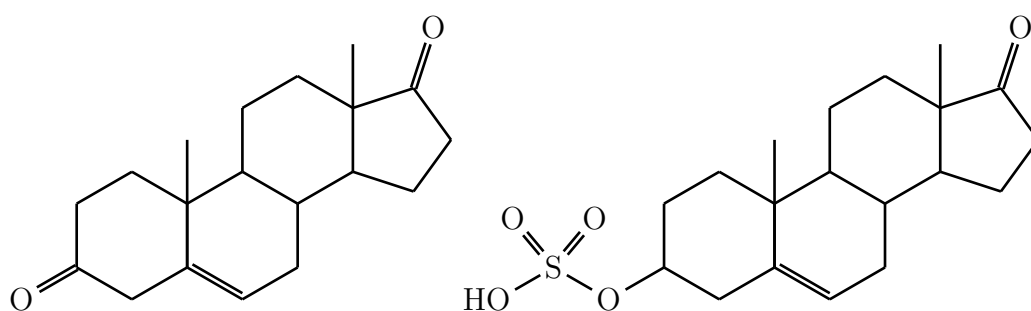


## 5.3 Androgènes

```
\chemfig{!\testosterone}  
\chemfig{!\dihydrotestosterone}  
\chemfig{!\androstenedione}
```

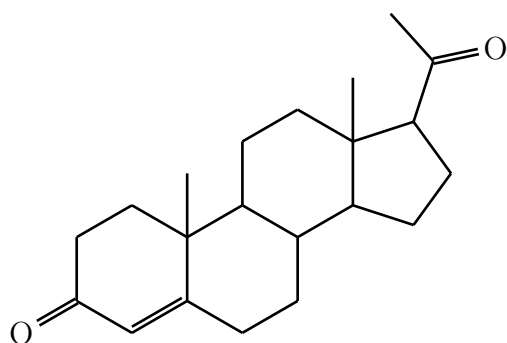


```
\chemfig{!\DHEA}  
\chemfig{!\DHEAS}
```



## 5.4 Progestatif

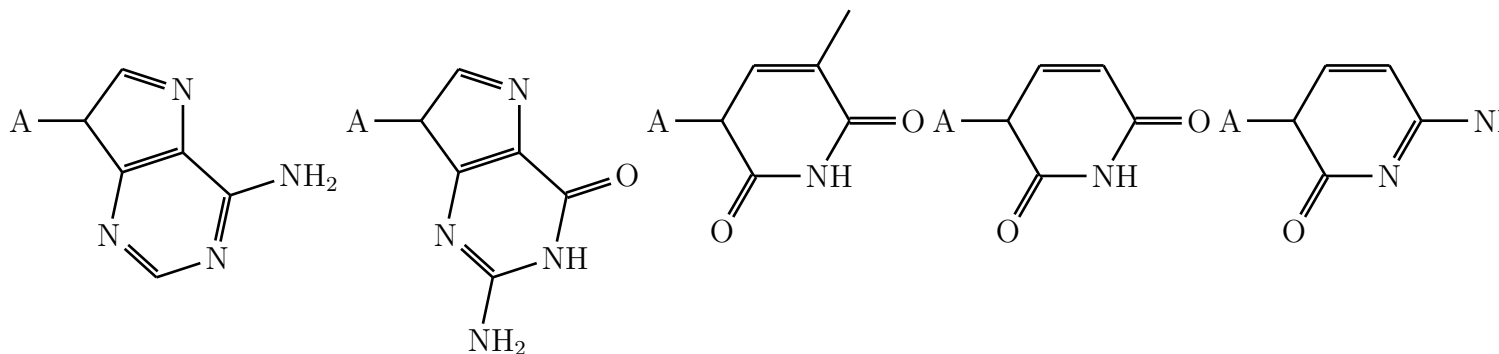
```
\chemfig{!\progesterone}
```



## 6 Nucléotides

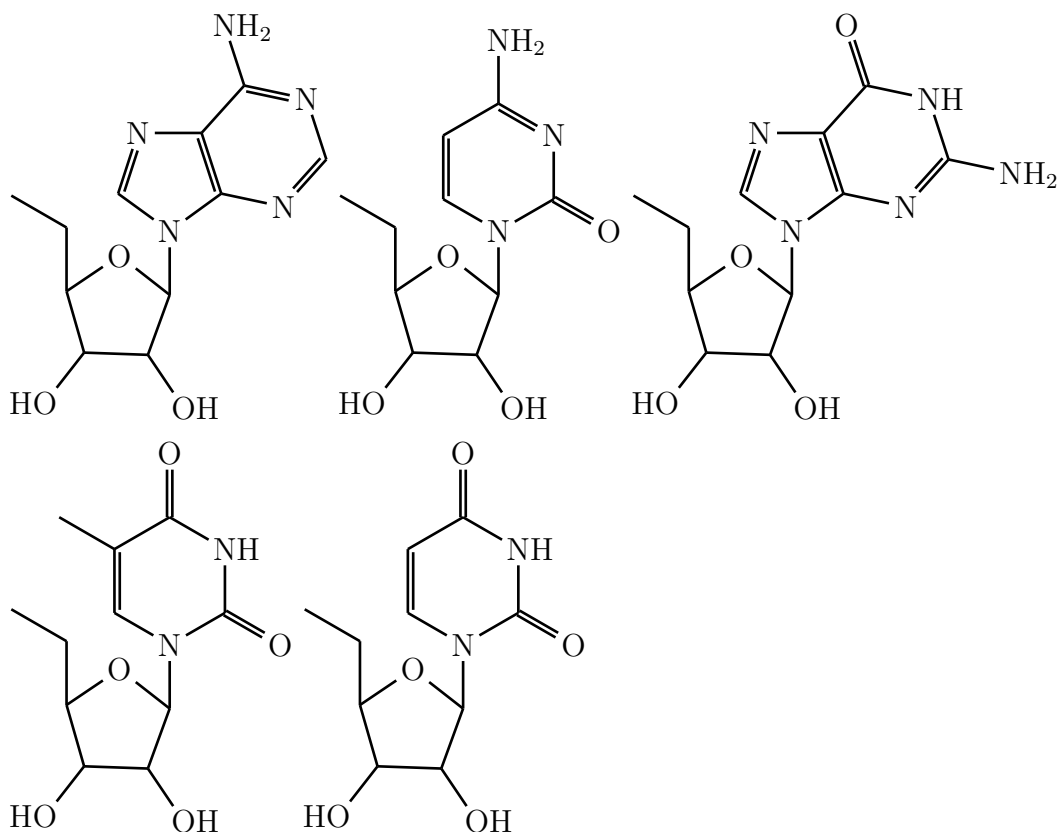
### 6.1 Bases nucléiques

```
\chemfig{A- !\adenine}  
\chemfig{A- !\guanine}  
\chemfig{A- !\thymine}  
\chemfig{A- !\uracile}  
\chemfig{A- !\cytosine}
```



### 6.2 Ribonucléosides

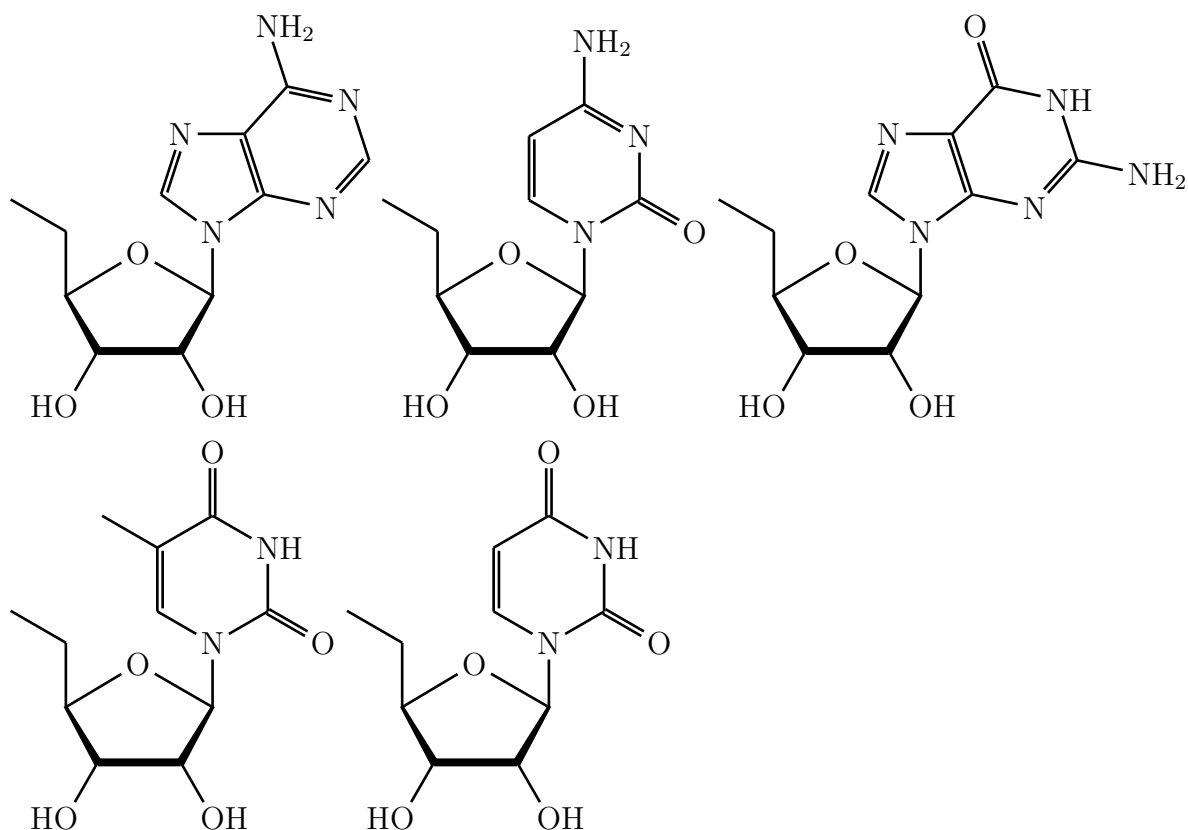
```
\chemfig{!\adenosine}  
\chemfig{!\cytidine}  
\chemfig{!\guanosine}  
\chemfig{!\thymidine}  
\chemfig{!\uridine}
```



```

\chemfig{!\adenosineHaw}
\chemfig{!\cytidineHaw}
\chemfig{!\guanosineHaw}
\chemfig{!\thymidineHaw}
\chemfig{!\uridineHaw}

```

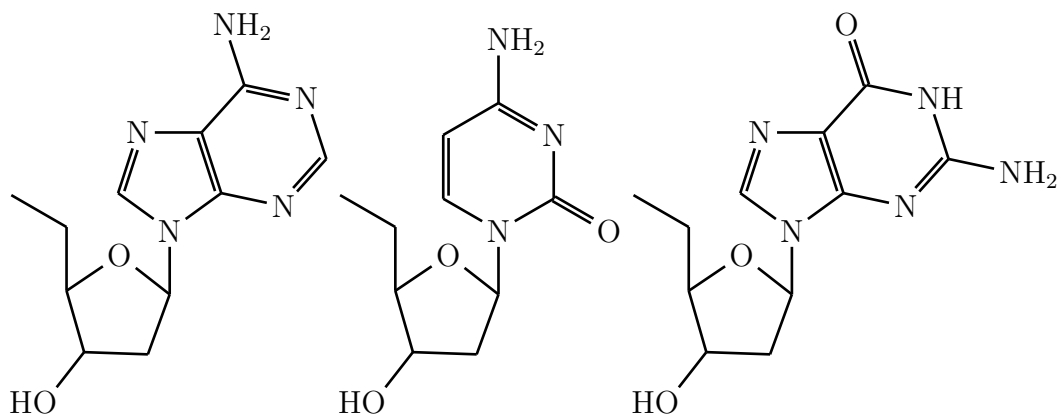


### 6.3 Desoxyribonucleosides

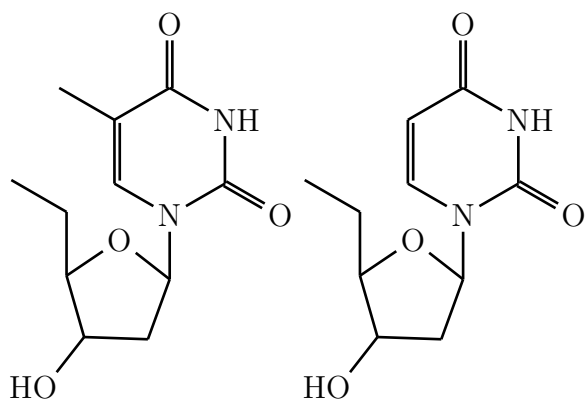
```

\chemfig{!\desoxyAdenosine}
\chemfig{!\desoxyCytidine}
\chemfig{!\desoxyGuanosine}
\chemfig{!\desoxyThymidine}
\chemfig{!\desoxyUridine}

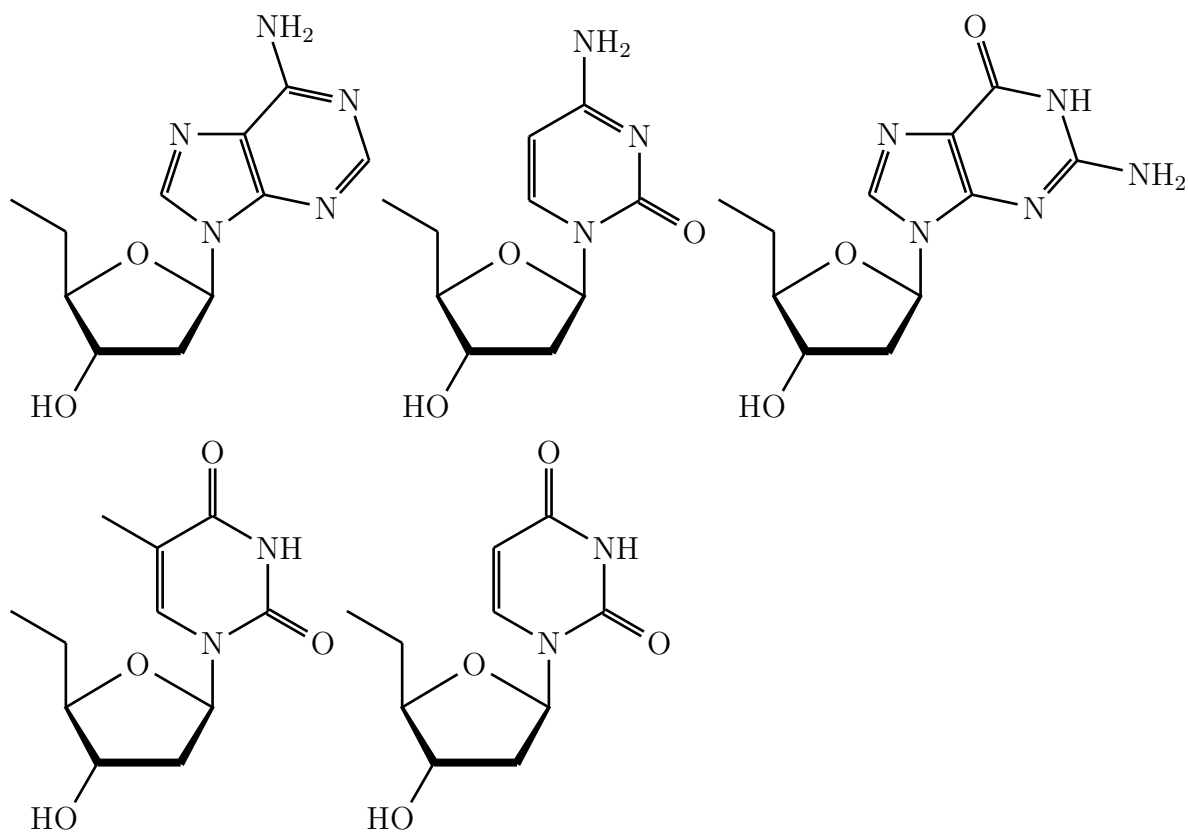
```





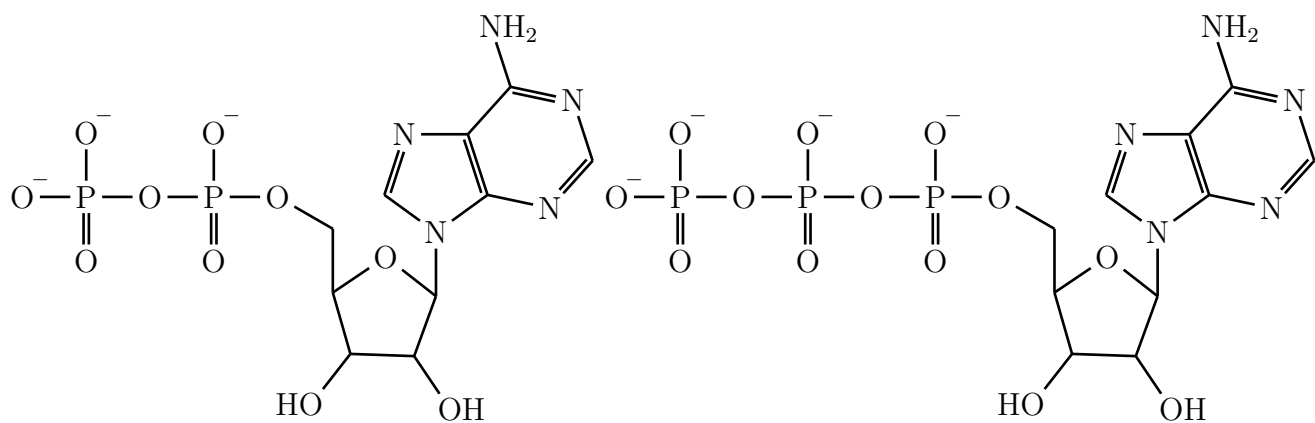


```
\chemfig{!\desoxyAdenosineHaw}
\chemfig{!\desoxyCytidineHaw}
\chemfig{!\desoxyGuanosineHaw}
\chemfig{!\desoxyThymidineHaw}
\chemfig{!\desoxyUridineHaw}
```

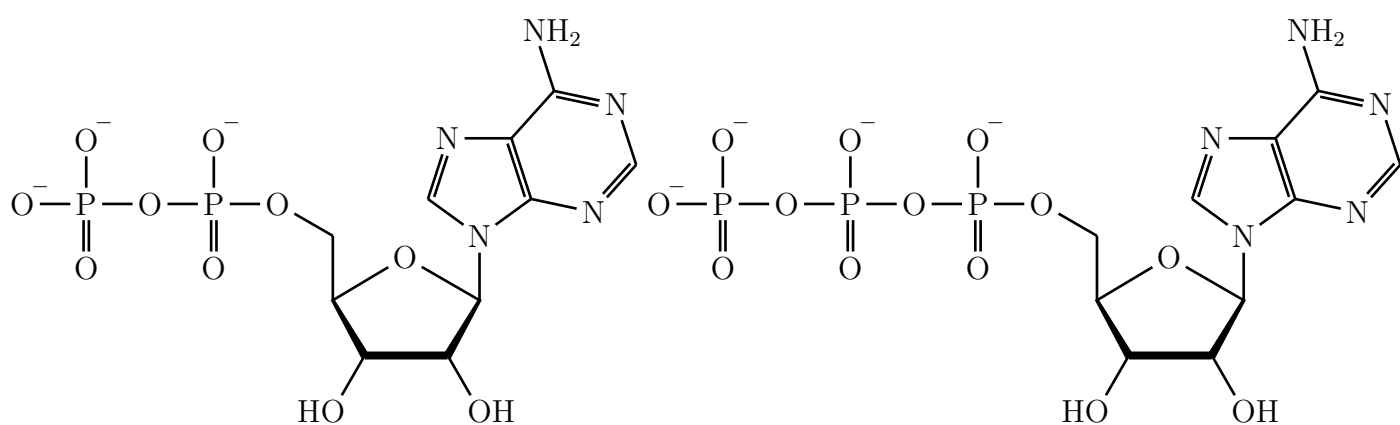


## 6.4 Adénosine triphosphate et adénoside diphosphate

```
\chemfig{!\ADP}
\chemfig{!\ATP}
```

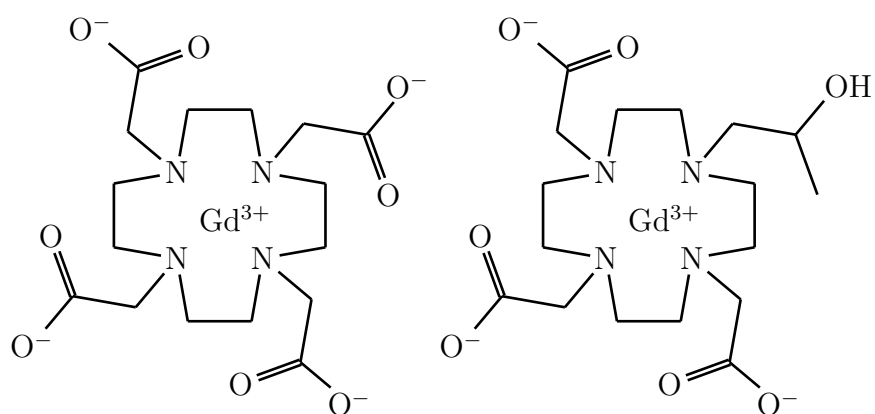


`\chemfig{!\ADPHaw}`  
`\chemfig{!\ATPHaw}`



## 7 Produits de contraste

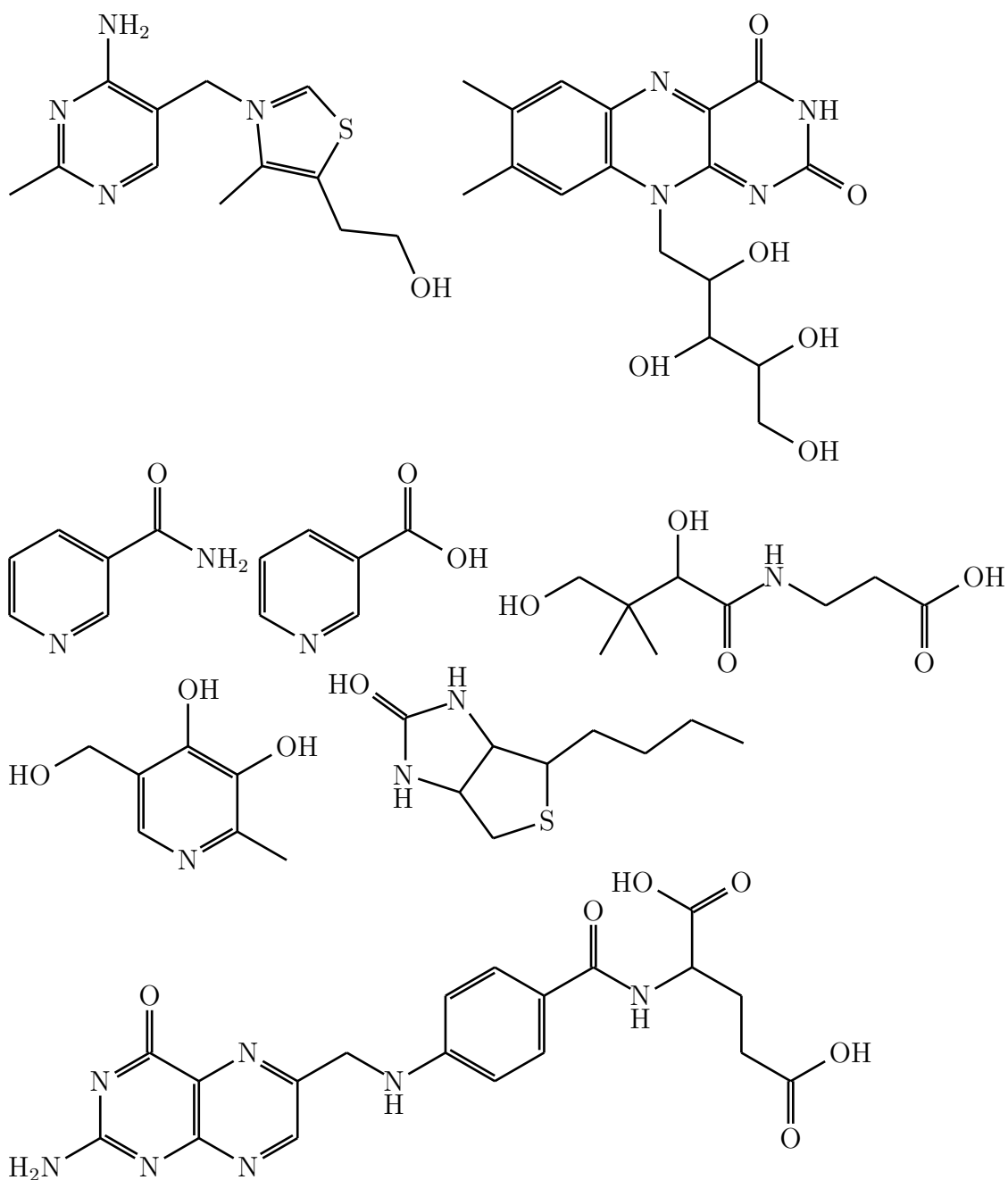
`\chemfig{!\ionChelate}`  
`\chemfig{!\chelateAlcool}`

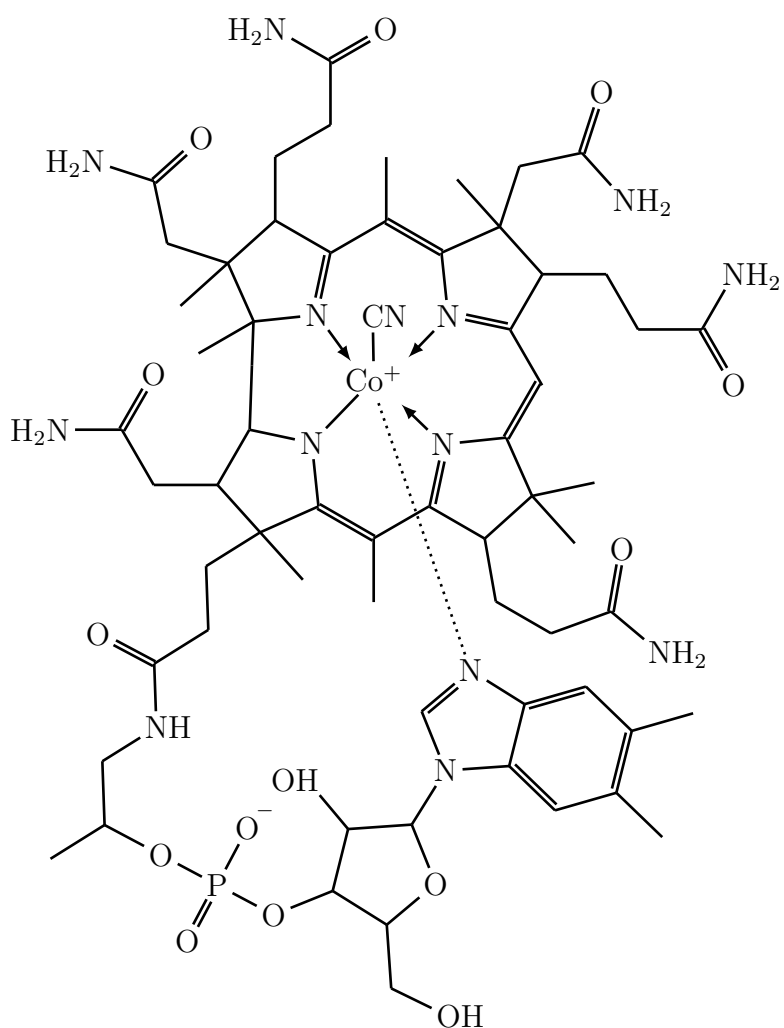


## 8 Vitamines

### 8.1 Vitamines B

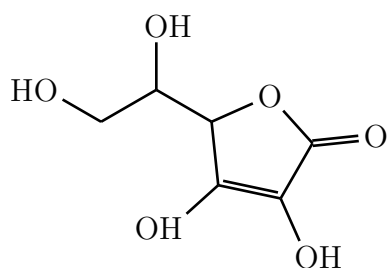
```
\chemfig{!\thiamine}           % B1  
\chemfig{!\riboflavine}        % B2  
\chemfig{!\nicotinamide}       % B3  
\chemfig{!\acideNicotinique}   % B3  
\chemfig{!\acidePantothenique} % B5  
\chemfig{!\pyroxidine}         % B6  
\chemfig{!\biotine}            % B8  
\chemfig{!\acideFolique}       % B9  
\chemfig{!\cyanocobalamine}    % B12
```





## 8.2 Vitamine C

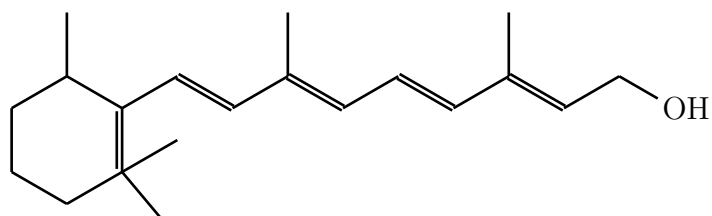
```
\chemfig{!\acideAscorbique} % C
```

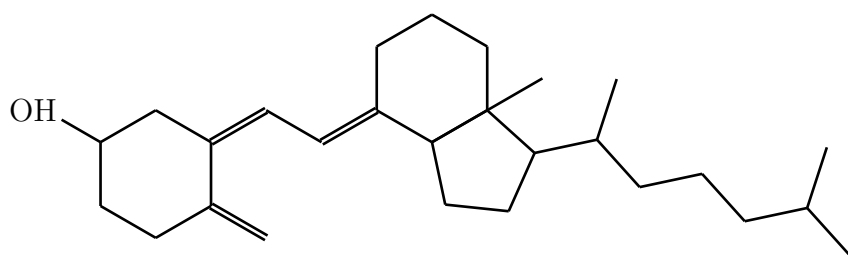


## 8.3 Vitamines A, D, E, $K_1$ et $K_2$

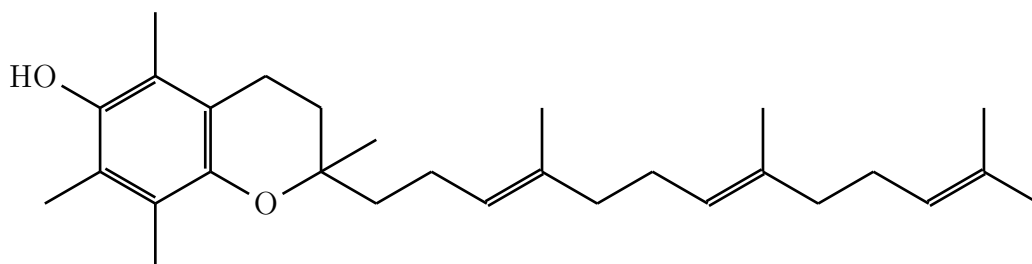
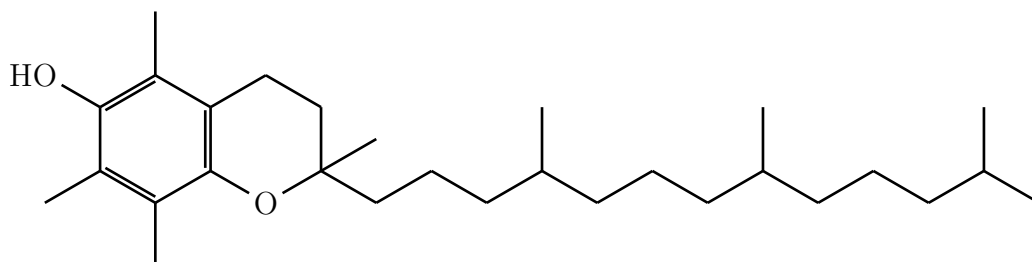
```
\chemfig{!\retinol} % A
```

```
\chemfig{!\cholecarciferol} % D
```

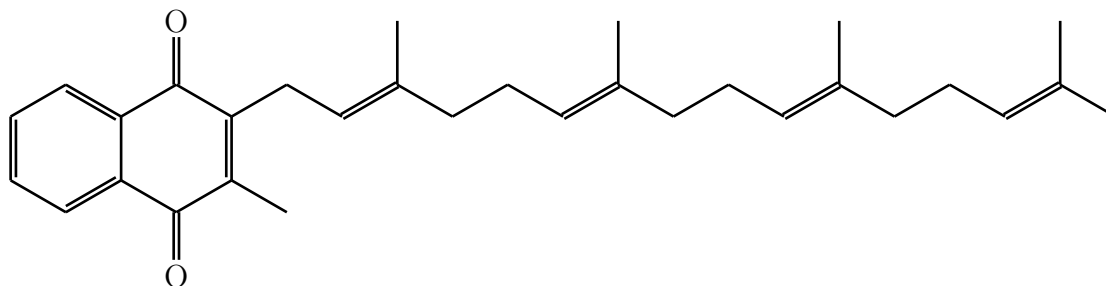
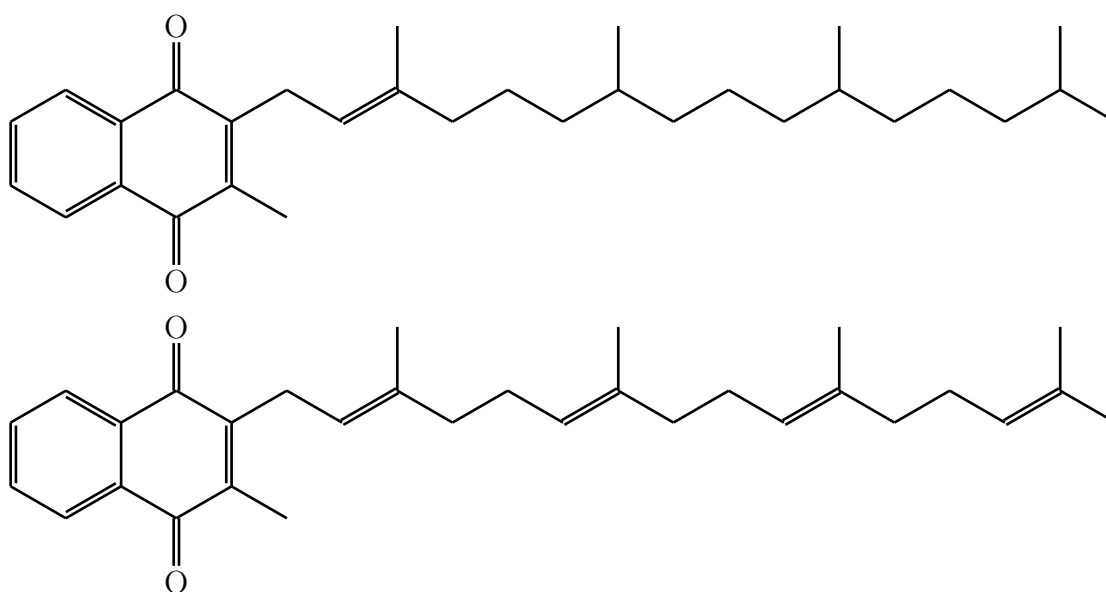




\chemfig{!\tocopherol} % E  
\chemfig{!\tocotrienol} % E



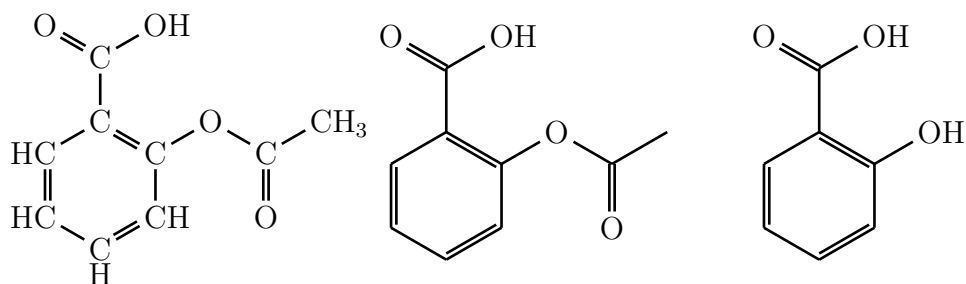
\chemfig{!\phylloquinone} % K1  
\chemfig{!\menatetrenone} % K2



## 9 Médicaments et produits de synthèse

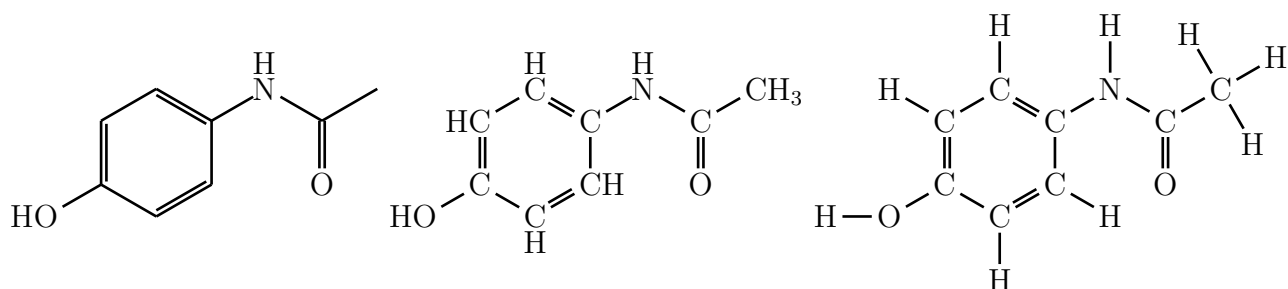
### 9.1 Aspirine

```
\chemfig{!\aspirine}  
\chemfig{!\aspirineSemiDev}  
\chemfig{!\acideSalicylique}
```



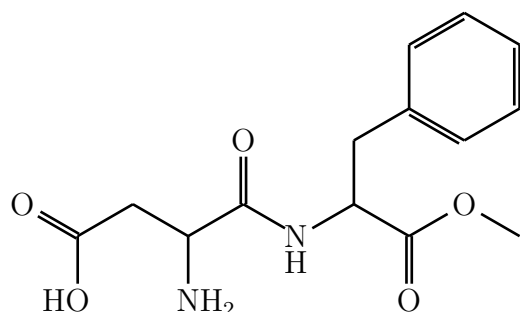
### 9.2 Paracétamol

```
\chemfig{!\paracetamol}  
\chemfig{!\paracetamolSemiDev}  
\chemfig{!\paracetamolDev}
```



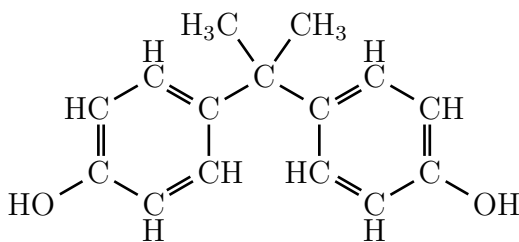
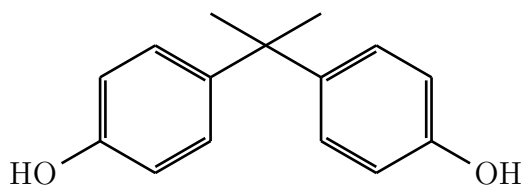
### 9.3 Aspartame

```
\chemfig{!\aspartame}
```



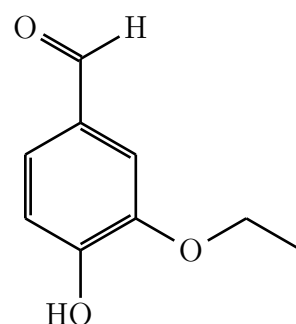
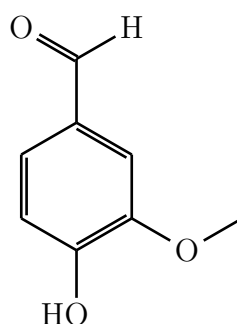
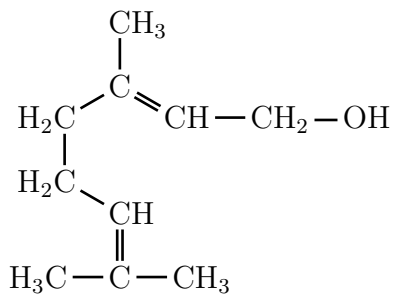
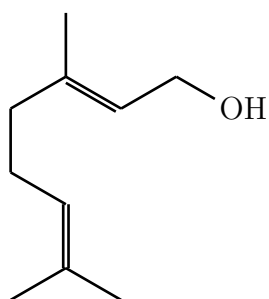
### 9.4 Divers

```
\chemfig{!\bisphenolA}  
\chemfig{!\bisphenolASemiDev}
```

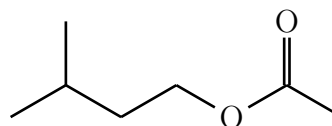
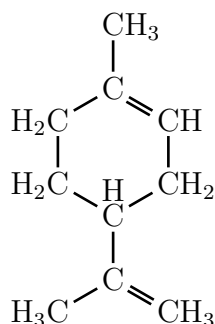
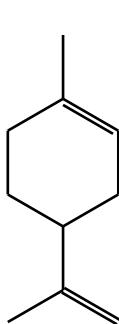
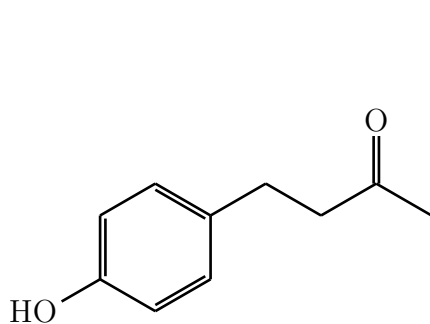


## 10 Molécules odorantes

```
\chemfig{!\geraniol}
\chemfig{!\geraniolSemiDev}
\chemfig{!\vanilline}
\chemfig{!\ethylvanilline}
```



```
\chemfig{!\oxyphenylone}
\chemfig{!\limonene}
\chemfig{!\limoneneSemiDev}
\chemfig{!\acetateIsoamyle}
```



## 11 Drogues

```
\chemfig{!\THC}
\chemfig{!\cocaineHaw}
```

