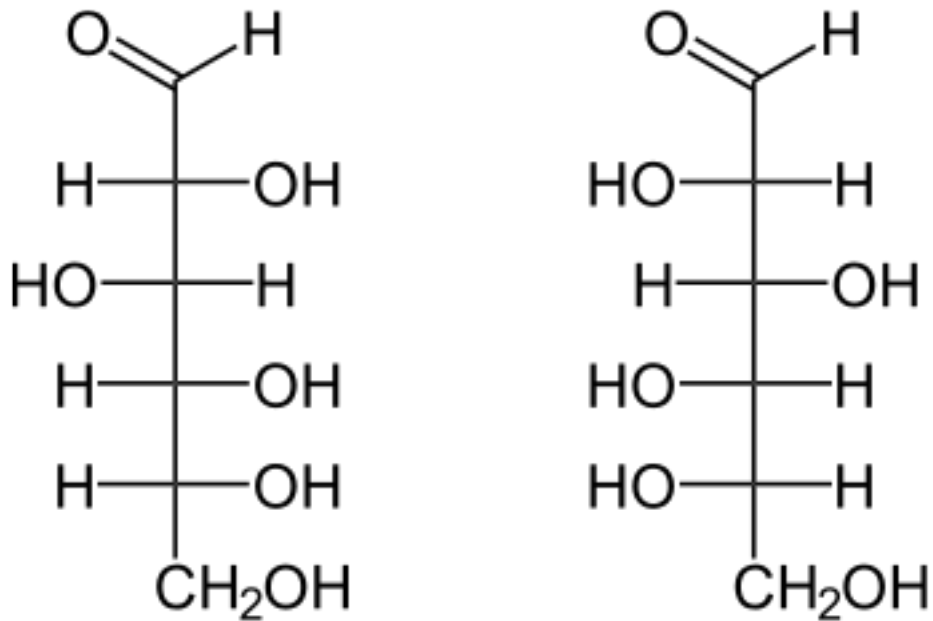




Tema 3. LOS GLÚCIDOS: ESQUEMA.
MONOSACÁRIDOS EN PROYECCIONES DE FISHER (LINAL) Y HAWORTH (CICLADOS)

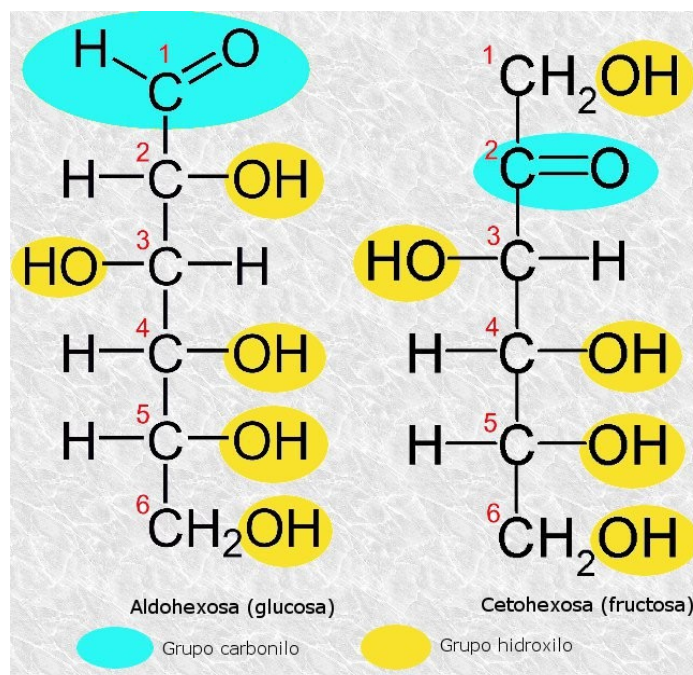
Fuente: Wikipedia

ISÓMEROS

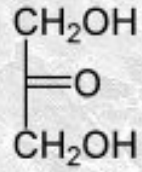


1. D y L Glucosa

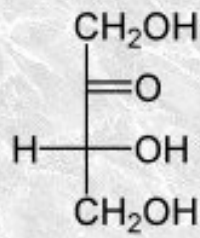
ALDOSAS y CETOSAS



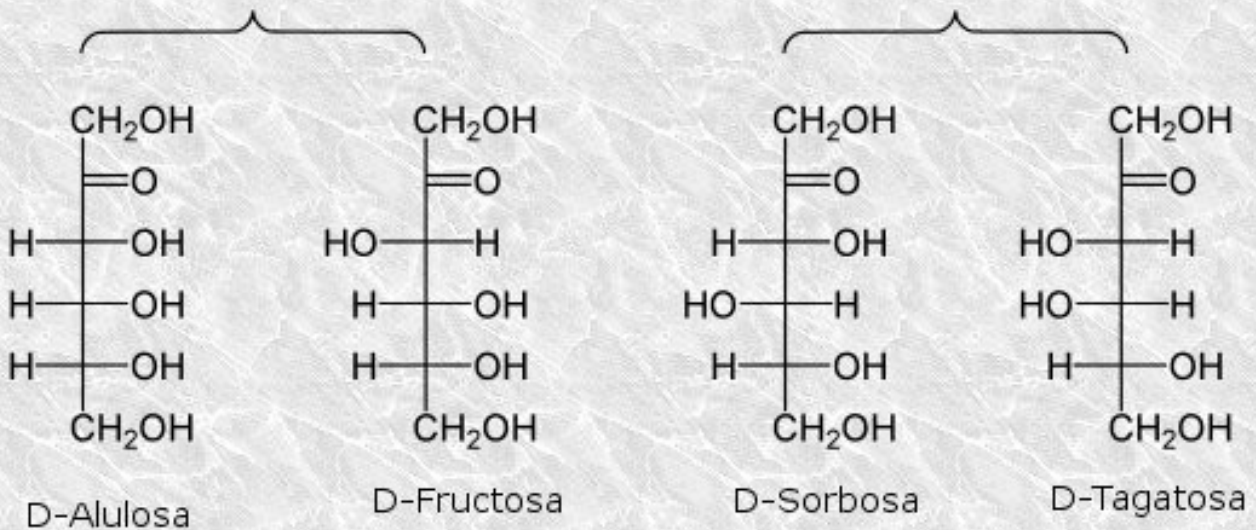
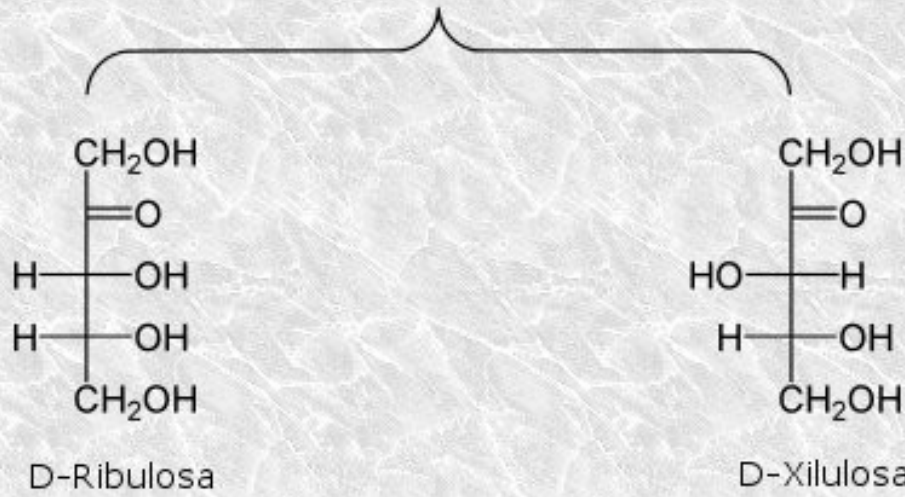
CETOSAS



Dihidroxiacetona

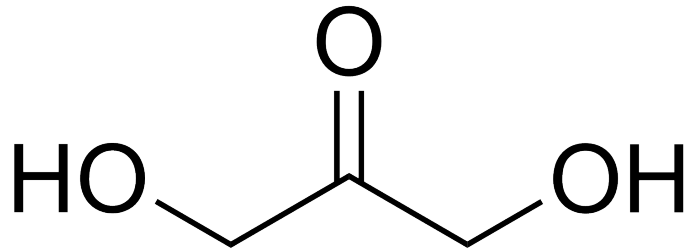


D-Eritrulosa



TRIOSAS

DIHIDROXIACETONA (ceto)



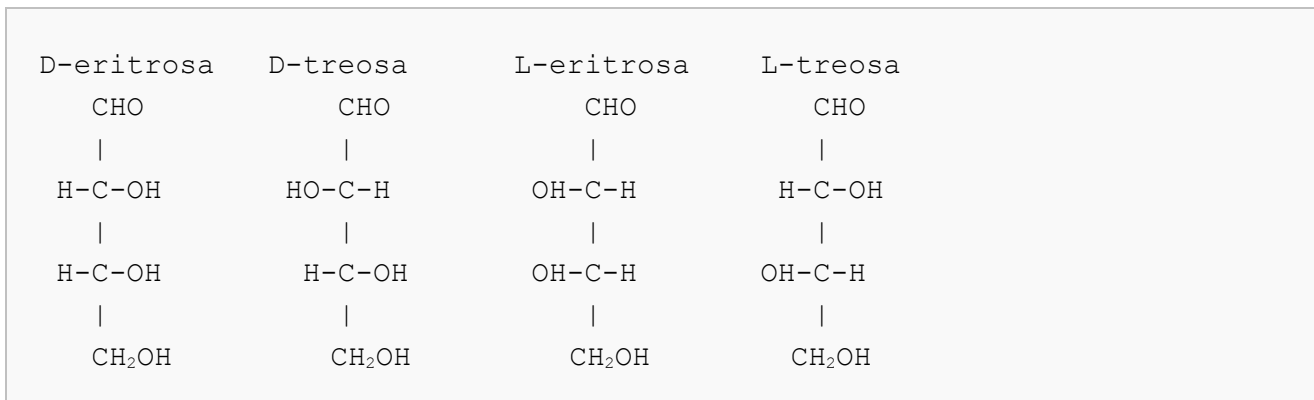
GLICERALDEHIDO (aldo)

Nombre del enantiómero	D-gliceraldehído (R)-gliceraldehído (+)-gliceraldehído	L-gliceraldehído (S)-gliceraldehído (-)-gliceraldehído
Proyección de Fischer	<p>The Fischer projection of D-glyceraldehyde shows a vertical chain of four carbons. The top carbon is an aldehyde group (H-C=O). The second carbon has an H on the left and an OH on the right. The third carbon has an OH on the left and an H on the right. The bottom carbon is a primary alcohol group (-CH₂OH).</p>	<p>The Fischer projection of L-glyceraldehyde shows a vertical chain of four carbons. The top carbon is an aldehyde group (H-C=O). The second carbon has an OH on the left and an H on the right. The third carbon has an H on the left and an OH on the right. The bottom carbon is a primary alcohol group (-CH₂OH).</p>
Fórmula estructural	<p>The structural formula of D-glyceraldehyde shows the three-carbon chain with the aldehyde group at the right end. The hydroxyl group on the second carbon is attached with a wedge bond, indicating it is on the right side of the Fischer projection.</p>	<p>The structural formula of L-glyceraldehyde shows the three-carbon chain with the aldehyde group at the right end. The hydroxyl group on the second carbon is attached with a dashed bond, indicating it is on the left side of the Fischer projection.</p>
Modelo molecular	<p>A ball-and-stick model of D-glyceraldehyde, showing carbon atoms in grey, oxygen in red, and hydrogen in white. The hydroxyl group on the second carbon is oriented towards the right.</p>	<p>A ball-and-stick model of L-glyceraldehyde, showing carbon atoms in grey, oxygen in red, and hydrogen in white. The hydroxyl group on the second carbon is oriented towards the left.</p>

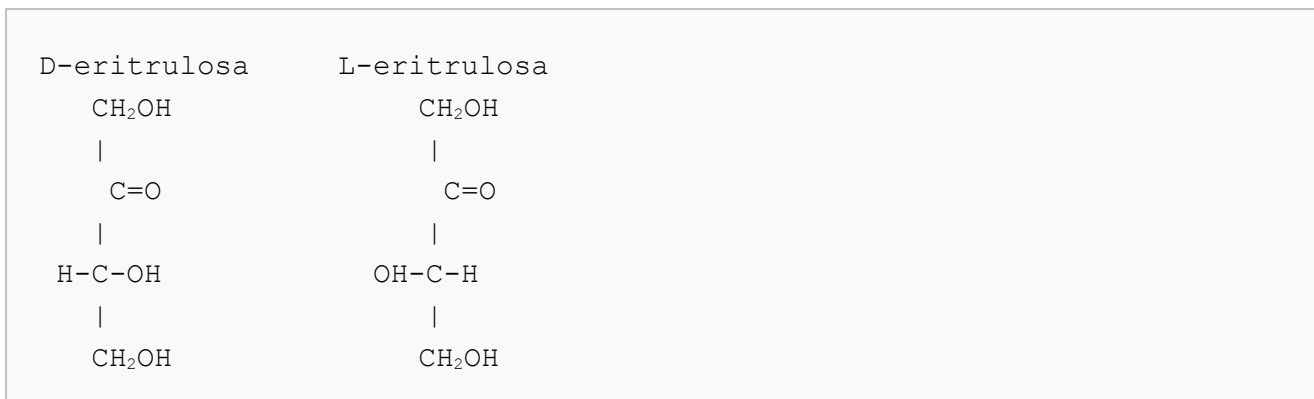
GLICERALDEHIDO: Es importante porque es el primer monosacárido que se obtiene en la **fotosíntesis**, durante la fase oscura (**ciclo de Calvin**). Además, es un paso intermedio de bastantes rutas metabólicas, como la glucólisis.

TETROSAS

ALDOTETROSAS

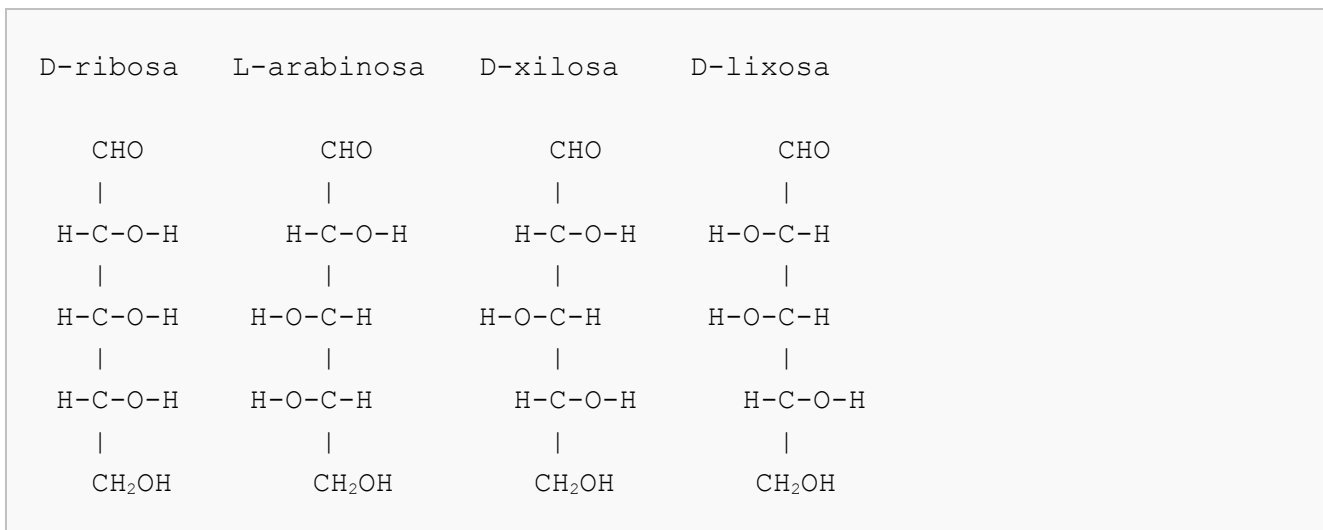


CETOTETROSAS

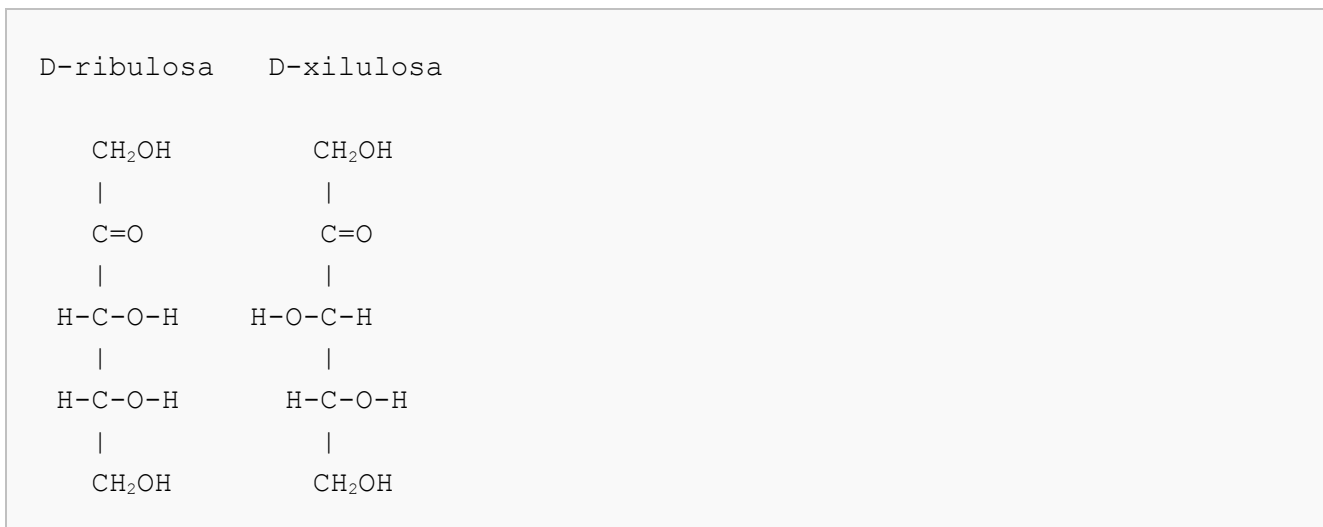


PENTOSAS

ALDOPENTOSAS

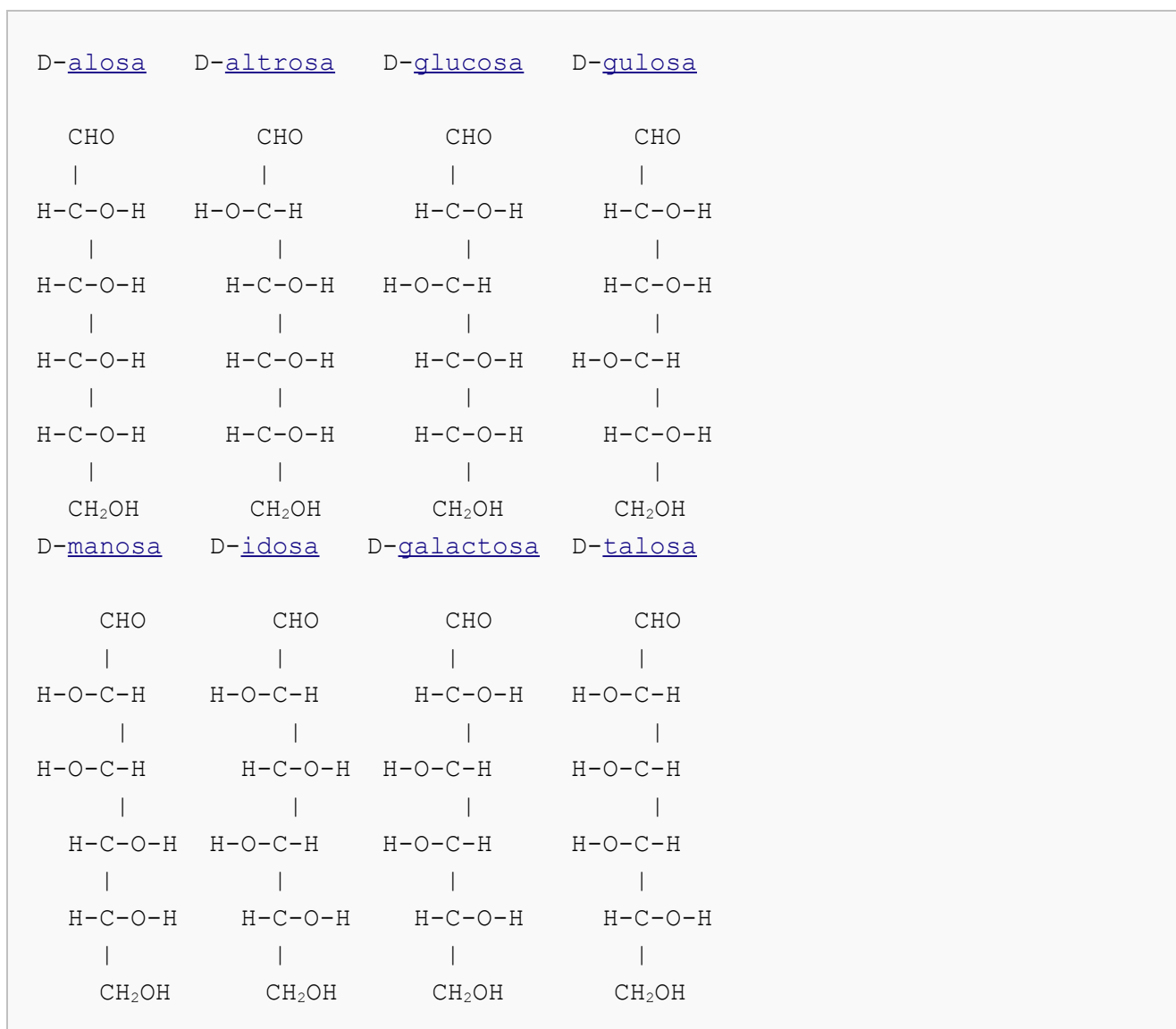


CETOPENTOSAS

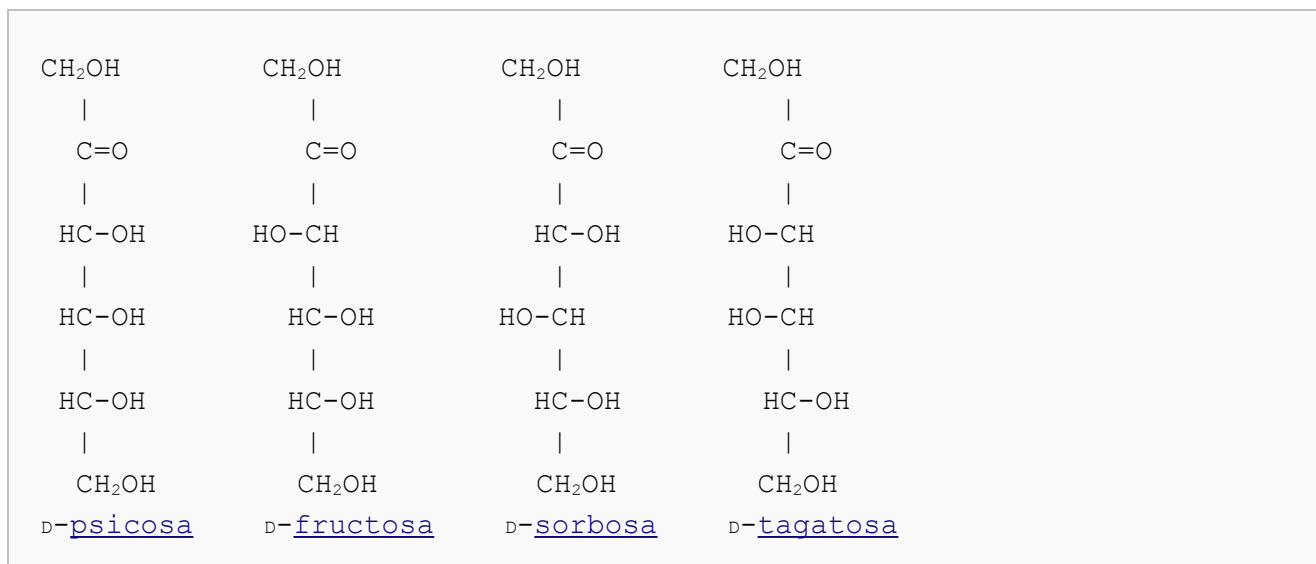


HEXOSAS

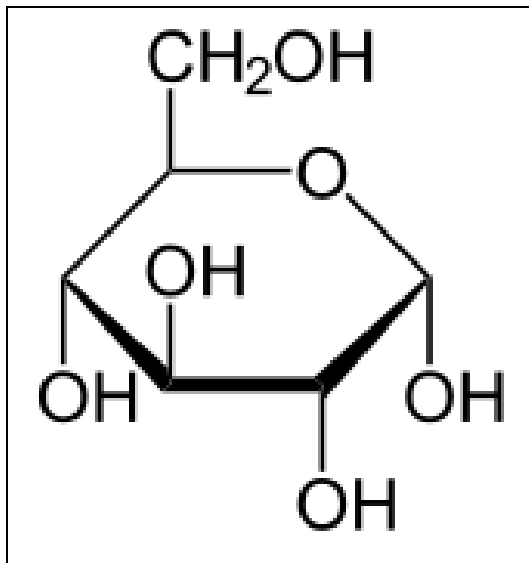
ALDOHEXOSAS



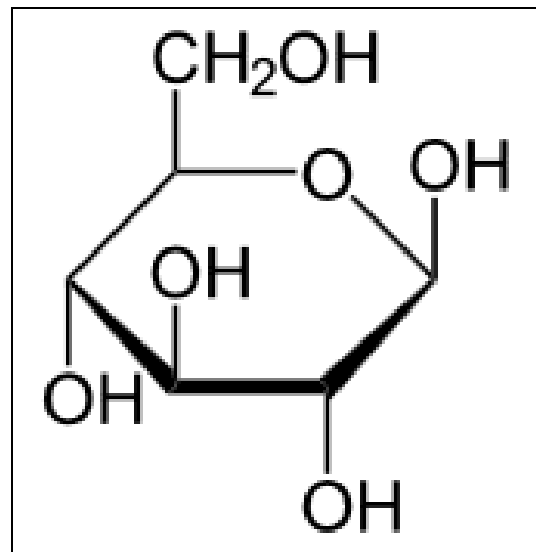
CETOHEXOSAS



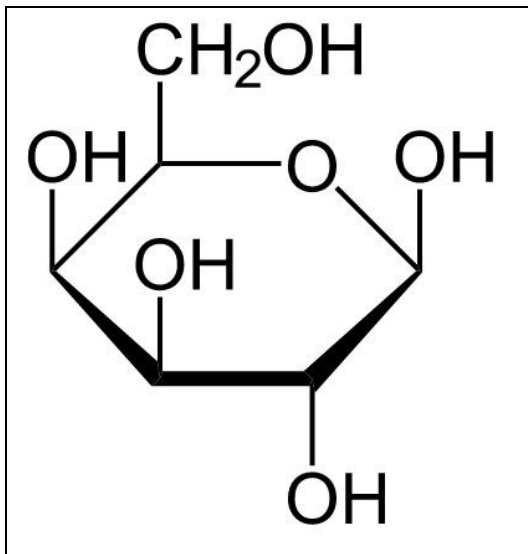
MONOSACÁRIDOS CICLADOS



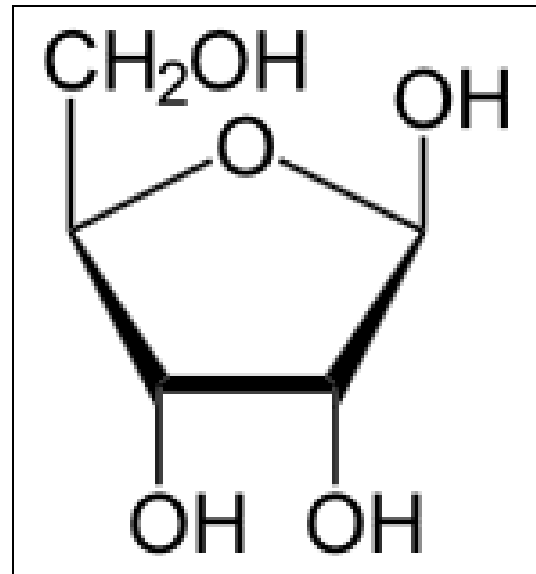
Alfa-D-Glucopiranososa



Beta-D-Glucopiranososa



Beta-D-Galactopiranososa



Beta-D-Ribofuranosa

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