
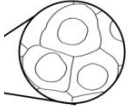
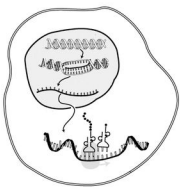


1.8 Human Albinism in Different Environments


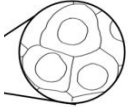
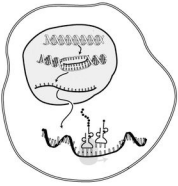
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**Directions:** Watch [“The Biology of Skin Color”](#) (2:25-5:36) by HHMI Biointeractive and read “The Known Health Effects of UV” by the World Health Organization. Use this information to determine if the TYR Mutation that causes Human Albinism is harmful in two different environments.

**Environment 1 - Australia, a country with a lot of direct sunlight**

	Humans with dark skin pigmentation.	Humans with Albino trait (has TYR Mutation)
<p><b>Organisms</b></p>  <p>How does the the trait appear <i>in this environment</i>? Is it harmful?</p>		
<p><b>Cells</b></p> <p>What do you think is going on inside the cells <i>in this environment</i>?</p> 		
<p><b>Molecules</b></p> <p>What do you think is happening on the molecular level <i>in this environment</i>?</p> 		

**Environment 2 - Norway, a country without a lot of direct sunlight**

	<b>Humans with dark skin pigmentation.</b>	<b>Humans with Albino trait (OCA1 type albinism)</b>
<p><b>Organisms</b></p>  <p>How does the the trait appear <i>in this environment</i>? Is it harmful?</p>		
<p><b>Cells</b></p> <p>What do you think is going on inside the cells <i>in this environment</i>?</p> 		
<p><b>Molecules</b></p> <p>What do you think is happening on the molecular level <i>in this environment</i>?</p> 		

**Conclusion:**

Does the environment determine if the TYR albinism mutation is harmful?