

How Do You Make Sweet?

How do you make something that is sweet? For that matter, how do you make any taste? I'm not talking about adding sugar to a recipe. Let's say that God provided you with all the atoms of the various elements you needed to make a molecule that tastes sweet. If you were to make such a molecule, you would need to know the construction of the sweet taste receptors on your tongue. You would need to know which molecular shapes would bind to those receptors. Then you would have to understand how all the different elements bind to one another and what molecular shapes they would have.

The complexity of this task was well illustrated when researchers at the University of Wisconsin-Madison released a computer model of a protein called brazein. Brazein is 2,000 times sweeter than sugar and found naturally in a West African fruit. Brazein's coiled molecular shape is responsible for its sweetness but if the molecule uncoils, it loses all its sweetness. Its structure closely resembles scorpion poisons and proteins used by some plants for self-defense. The more we learn about how things work in the world around us, the clearer it becomes that everything that exists has been carefully designed to interact in very specific ways. We learn more about this Creator, though, not from molecules, but from His holy Word.

Psalm 119:103

“How sweet are thy words unto my taste! yea, sweeter than honey to my mouth!”

Prayer: Dear Father, grant me understanding as I study Your Word. Amen.

Ref: Science News, "Protein's shape may give extra-sugary taste"