# Evidence 1: Language(s) Spoken

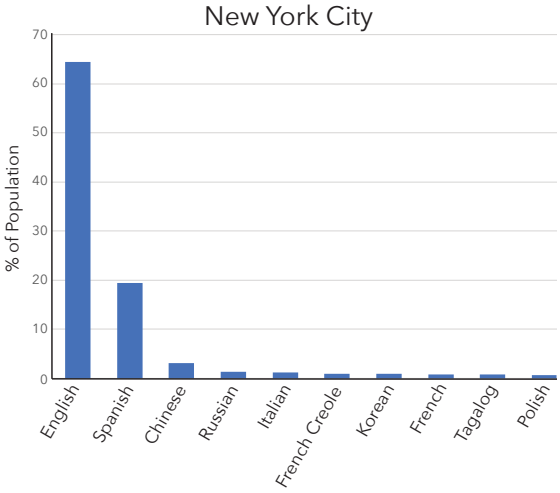
People around the world vary in the languages they speak. The languages you speak depend on where you live and the languages spoken around you.

Some people learn more than one language. Families may speak one language at home and a different one out in the community.

To speak at all, people need genes that code for proteins that build a mouth, a voicebox, and muscles to move them. Yet people who speak the same language don't need to be genetically related. Cities can have people from many ethnic groups who all speak a common language.

Around 800 languages are spoken in New York City. The graph shows the top ten.

Top 10 Languages Spoken in New York City



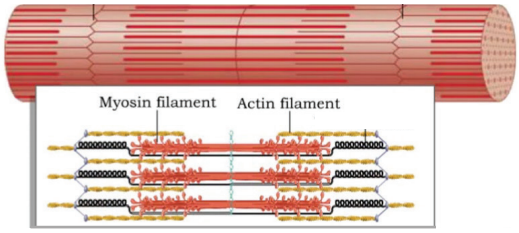

Data from worldatlas.com

# Evidence 2: Muscle Mass

People have genes that code for proteins called actin and myosin. These proteins help build muscles and make them work.

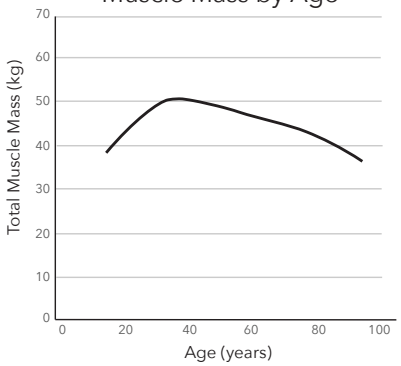
The amount of muscle (muscle mass) a person has can change. It may increase from exercise. It may decrease from inactivity, eating too little protein, or if a person has an injury that keeps them from using their muscles.

On top of those influences, the muscle mass of many people follows a pattern as they grow and age. The pattern is shown on the graph.




Muscle fiber. The zoomed in view shows the proteins muscles are made of.

Muscle Mass by Age



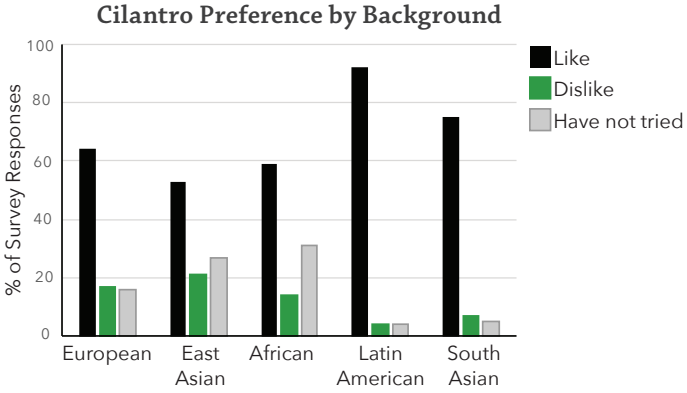

Data based on Kim 2016, Fig. 1a

# Evidence 3: Cilantro Taste Preference

Cilantro (also called coriander) is an herb used in cooking around the world, especially in Latin American and South Asian dishes. People vary in whether or not they like cilantro—often quite passionately! Some people love it. To others, it tastes like soap.

Gene variations are correlated to a person's like or dislike of cilantro. They may affect smell-sensing proteins in the nose (smell can affect taste). But liking or disliking cilantro can also come from culture or just personal preference.

This graph shows responses to a survey where people were asked about their background and cilantro preference.




Data based on Maur 2012

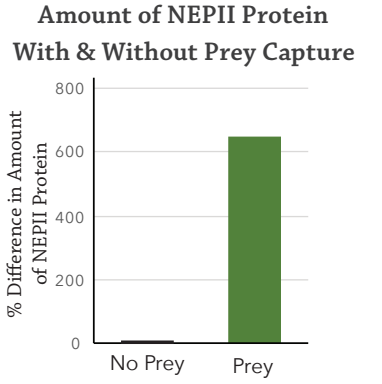
# Evidence 4: Digestive Enzymes in Pitcher Plants

Pitcher plant

Pitcher plants grow in low-nitrogen soil. To get this essential nutrient, the plants are carnivorous. They trap and digest insects in their pitcher-shaped leaves, which are filled with digestive juices.

The digestive juices contain proteins a lot like the ones that break down food in your own digestive system. These protein enzymes are coded for by genes, including one called *NepII*. The digestive protein is called NepII.

The graph shows the amount of NepII digestive protein made by pitcher plants. It compares plants that have never trapped prey to plants that have recently trapped prey.




Data based on Sagnova 2018, Fig. 4b