

Photosynthesis in Everyday Life

From your breakfast to the air in your lungs, you meet the results of photosynthesis all day long.



Every meal

Grains, fruit and vegetables come from plants; meat, milk and eggs come from animals that ate plants. Almost all food energy began as sunlight.



The air you breathe

Photosynthesis keeps the air supplied with oxygen. About half of Earth's oxygen comes from the ocean, made by tiny drifting phytoplankton.



Wood, paper and cotton

Timber, paper and cotton are mostly cellulose, a fibre plants build from the glucose they make by photosynthesis.



Coal, oil and gas

Fossil fuels formed from ancient plants and plankton. Burning them releases energy that photosynthesis captured millions of years ago.



Greenhouse crops

Growers add warmth, light and extra carbon dioxide to speed up photosynthesis. In Iceland, tomatoes grow under glass all year round.



Stadium grass

Stands shade parts of a pitch, so some clubs use rigs of grow lights to keep the grass photosynthesising and growing.



Autumn colours

As chlorophyll breaks down in autumn, yellow and orange pigments that were hidden underneath show through. Some trees also make new red ones.



The planet's yearly breath

Carbon dioxide in the air falls each northern spring and summer as plants grow, then rises in winter as growth stops and leaves decay.



Not just plants

Algae and cyanobacteria photosynthesise too. One tiny ocean bacterium, *Prochlorococcus*, makes up to 20% of the oxygen in the biosphere (NOAA).

NEXT IN THE SERIES

8. Photosynthesis Myths: What Plants Really Do