



Fish: Soon Up To 30 Percent Off

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Fish stories about ‘the big one that got away’ may have to scale back in the years ahead. A new study predicts that fish will shrink in size by up to 30 percent as ocean temperatures continue to climb.

Said [William Cheung](#), co-author of the study out of the University of British Columbia: “Fish, as cold-blooded animals, cannot regulate their own body temperatures. When their waters get warmer, their metabolism accelerates and they need more oxygen to sustain their body functions.... There is a point where the gills cannot supply enough oxygen for a larger body, so the fish just stops growing larger.”

As fish grow into adulthood they need more oxygen to supply their increased body mass. But the surface area of their gills, which pull oxygen from water, grow at a slower pace. A fish like cod, for example, doubles in size into adulthood, but its gills only grow by 80 percent or less. When looked at in the context of climate change, this reinforces the prediction that fish will shrink, in what scientists refer to as “gill-oxygen limitation theory.” Fish in warm waters need more oxygen but climate change will actually lead to less oxygenated water. The researchers say this forces them to stop growing at a point where the water can still meet their needs.

Fast-moving fish like tuna exert more energy and therefore need more oxygen. The warming waters will have a disproportionate impact on

them. But even smaller, slower fish, which figure into the food chain, will be affected.

Link: <https://scienceblog.com/495873/fish-soon-30-percent-off/>