What's on Your Plate?
First we learned that broccoli can prevent cancer, thanks to a compound it contains that was first isolated at Hopkins a decade ago. Now, a new Hopkins study shows that the compound, sulforaphane, which is especially concentrated in three-day-old broccoli sprouts, also may help prevent human reti-

eye that detects and sends images to the brain—was linked to attacks by oxidants. Recent evidence suggests that dietary antio-
xidants can help prevent or reduce damage to retinal cells. As a result, Hopkins pharmacologist Paul Talalay, who's been in-
vestigating links between diet and disease for more than two decades, wondered if sul-
foraphane might have similar benefits. His team tested three different cell types, including cancer cells and cells from the retina. When the cells were treated briefly with sulforaphane before exposure to an oxidant, all cell types defended themselves against damage. Furthermore, the response triggered by sulforaphane protected the cells against oxidants for two or three days. The extent of protection was tied to the amount of sulforaphane as well as the type of oxidant and its amount.

“This adds to already good evidence,” says Talalay, “that eating large quantities of vegetables—and cruciferous ones play a special role—is one thing that really works to fight disease.”