



## **WILL POPEYE TRADE SPINACH FOR SPUDS?**

---

WE LOVE OUR SPUDS. THE AVERAGE AMERICAN EATS MORE than 140 pounds of potatoes every year, making it by far the nation's most popular vegetable. Consequently, the U.S. Agricultural Research Service (ARS) is trying to boost the potato's calcium content, for the health of the consumer—and the potato.

It seems that potatoes are naturally deficient in calcium because they grow underground, and most of the calcium in the soil is drawn into the above-ground stems and leaves. The calcium deficiency leaves the plant vulnerable to defects that lower its yield. Staffers at the U.S. Potato Genebank in Sturgeon Bay, Wis., screened 21 varieties of wild spud for their ability to absorb calcium. After identifying two South American types with high calcium intake, geneticist John B. Bamberg and physiologist Jiwan Palta isolated the genes that control calcium retention. The wild tubers are not suitable for eating, but the researchers are cultivating hybrids with the calcium-friendly genes.

*Catherine Arnst*