



## **Study Found Pre-packaged Spinach Advertised as "Ready-to-eat" is Actually Misleading**

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Eat your leafy greens. While nutritionists commonly suggest this, a recent study by two Simmons students looking at the cleanliness of bagged spinach has uncovered data that could have ramifications for future research as well as the entire produce industry.

Simmons College nutrition graduate student Diana Bruen and undergraduate biochemistry major Asja Asceric received a grant from the Society for Applied Microbiology and this past spring traveled to Wales, England, to attend a four-day Food Microbiology Conference. During the conference, the two young women gave a presentation of their spinach study.

While taking a microbiology class last year with Professor Elizabeth Scott, Bruen became interested in the bacteria levels present on "ready-to-eat" produce. In an effort to facilitate cross collaboration between departments, Bruen and Asceric conducted their independent study in the biology department on the amount of bacteria present in pre-packaged spinach.

With assistance from Scott, the Center for Hygiene and Health in Home and Community, and the biology department, the students began their research last September looking into spoilage bacteria and E.coli contamination on three types of spinach: "field washed" spinach that has only been rinsed and not packaged, "triple-washed," and "thoroughly washed" pre-packaged spinach.

During the course of several months, they conducted bi-weekly test samplings and culturings and found that - over the course of seven days - bacteria levels increased in all three types of spinach, including significant growth in the "thoroughly washed" brand.

The students found that pre-packaged spinach advertised as "ready-to-eat" is actually misleading, and that consumers should wash all types of spinach before consumption. Bruen and Asceric hope to see future studies exploring this topic to see if reducing bacterial counts by various washing techniques could increase the refrigerated shelf life of pre-packaged spinach.