

## Green Revolution: Salad Spinning Superseded

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### ABSTRACT

We present a new lettuce-drying paradigm and discuss its implications for public health.

### INTRODUCTION

Obesity remains a serious health concern throughout the United States and the world (Cecchini et al. 2010). Validated strategies for achieving and maintaining a healthy body weight include (A) exercising vigorously (Jakicic et al. 2001), (B) preparing meals at home rather than eating in restaurants (Bezerra et al. 2012), and (C) consuming lots of fruits and vegetables (Rolls et al. 2004). To our knowledge, however, these three strategies have never been unified into a single paradigm. Here we demonstrate that such a combination is feasible— in particular, that vigorous exercise (A) can be incorporated into the preparation (B) of a green salad (C).

### MATERIALS & METHODS

All experiments were conducted at the authors' home laboratory. Kale, lettuce, and spinach were purchased at Fred Meyer, weighed with an EatSmart Precision Pro Digital Kitchen Scale, and spun with an OXO Good Grips Salad Spinner.

### RESULTS

After lettuce is washed, it is typically dried with a salad spinner. In this study, we asked whether lettuce could be dried just as effectively with a method that offers the chef a better physical workout.

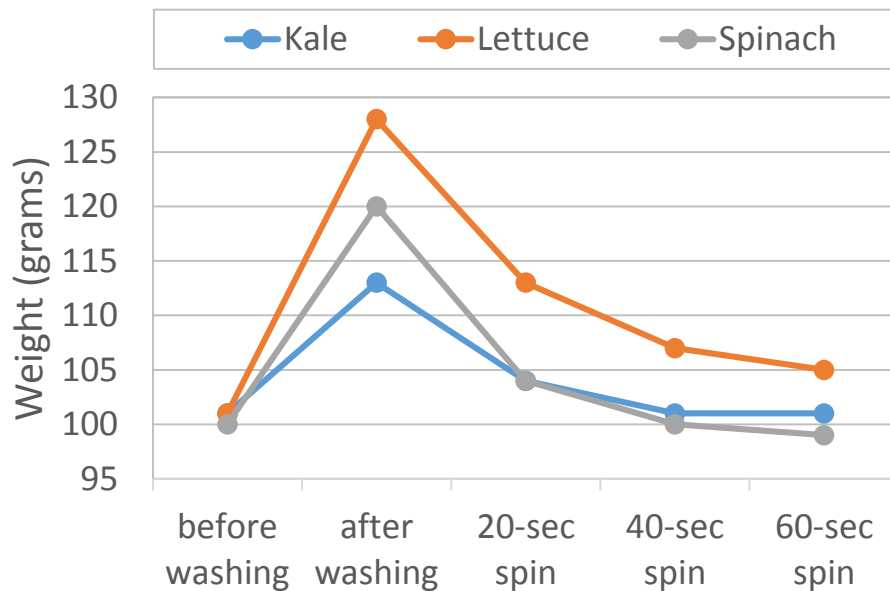
First we determined how much spinning in a salad spinner is necessary to dry just-washed greens. We found that forty seconds of spinning reduced the weights of just-washed greens to values close to their dry weights, and that extending the spin time to sixty seconds did not promote much further drying (Figure 1). We thus established forty seconds of spinning as the “gold standard” to which alternative drying methods could be compared.

The remainder of our study focused on lettuce, which the seven year-old junior author (P.S.C.) deemed the most palatable of the greens on hand. Could forty seconds of vigorous manual squeezing dry the lettuce as effectively as forty seconds of spinning? When a new sample of lettuce was washed and then squeezed intensively for forty seconds by the forty-one year-old senior author (G.J.C.), its weight dropped from 128 grams to 104 grams, only slightly above its pre-wash weight of 101 grams. These data, in combination with Figure 1, show that manual squeezing is indeed comparable to spinning.

In our final experiment, the junior author attempted to replicate the manual squeezing results of the senior author. However, manual squeezing by the junior author only reduced the lettuce's

weight from 127 grams down to 122 grams, well above its pre-wash weight of 101 grams. The junior author's inability to squeeze most water out of the lettuce confirms that manual squeezing is more physically demanding than using a salad spinner (which the junior and senior authors did equally well [data not shown]), and thus constitutes better exercise.

Figure 1:  
Time course  
of weight of  
salad greens  
after  
washing.



## DISCUSSION

We have amassed empirical evidence that manual squeezing can dry lettuce just as quickly and effectively as a salad spinner while providing a better workout, thus augmenting the health benefits of preparing and eating vegetables. Therefore we urge adult preparers of lettuce-based dishes to eschew salad spinners in favor of manual squeezing.

Future research will address a reviewer's concern that squeezed lettuce may not taste as good as spun lettuce. It will also explore whether our findings on salad preparation can be extended to other culinary tasks, such as the chopping of nuts.

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