

## LEARNING CHECK

Now that we've run through the conceptual ingredients of a one-way, between-subjects ANOVA, let's take a look at a new research result. Conveniently, Eskine (2012) had a second dependent variable in his experiment. Specifically, after viewing the pictures of one of three types of foods and completing their moral evaluations, participants were told that there was another experiment going on and that those researchers needed volunteers. They were asked to participate in this second experiment with no compensation of any kind provided for as much of 30 minutes as they could spare. Participants indicated how long, up to 30 minutes, they would be willing to volunteer in this subsequent experiment (referred to as "prosocial behavior"). The amount of time people said they would devote to this second experiment was the dependent variable. Here are the results of this one-way, between-subjects ANOVA:

A between-subjects analysis of variance (ANOVA) revealed an overall effect of food type on prosocial behavior,  $F(2, 59) = 8.894, p < .001, \eta_p^2 = .232$ , and a follow-up Tukey's honestly significant difference (HSD) test showed that those exposed to organic food volunteered significantly less time ( $M = 13.40, SD = 9.38$ ) than those exposed to control foods ( $M = 19.88, SD = 10.33$ ),  $p < .05$ , or comfort foods ( $M = 24.55, SD = 5.49$ ),  $p < .001$ , with the latter two groups not significantly differing. (Eskine, 2012, p. 252)

1. What were the means being statistically examined?

A: organic foods = 13.40 minutes; control foods = 19.88 minutes; and comfort foods = 24.55 minutes

2. What is the  $F$  ratio?

A: 8.894

(Continued)