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In-Video Quiz Questions for
Unit 4, Part 1: (2) Inference for a mean

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(01:12)

1. The 44 patients were first split into males and females, and then patients from each gender were randomized into the treatment and control groups. The resulting treatment and control groups had 22 patients each, 11 males and 11 females.
   (a) stratifying
   (b) blocking
   (c) placebo
   (d) blinding

(04:53)

2. Which of the following is the true interpretation based on this confidence interval?
   (a) 95% of distracted eaters consume between 32.1 g to 72.1 g of snacks after lunch.
   (b) 95% of the time the true average snack consumption of distracted eaters is between 32.1 g and 72.1 g.
   (c) 95% of random samples of 22 distracted eaters will yield average post-lunch snack consumption of 32.1 g and 72.1 g.
   (d) We are 95% confident that the 22 distracted eaters in this sample consumed between 32.1 g to 72.1 g of snacks after lunch.
   (e) None of the above.

(05:27)

3. Suppose the suggested serving size of these biscuits is 30 g. Do these data provide convincing evidence that the amount of snacks consumed by distracted eaters post-lunch is different than the suggested serving size?

$$\bar{x} = 52.1, s = 45.1, n = 22$$

(a) $H_0: \mu = 30$; $H_A: \mu \neq 30$
(b) $H_0: \mu = 30$; $H_A: \mu > 30$
(c) $H_0: \mu = 52.1$; $H_A: \mu > 52.1$
(d) $H_0: \mu = 52.1$; $H_A: \mu > 30$
(e) $H_0: \mu = 30$; $H_A: \mu \neq 30$

Answers:

1. b

Explanation: We're blocking for gender.

2. e

Explanation: Go back to the video for correct interpretation.

3. e

Explanation: Since we're looking for a difference, we use a two-sided alternative hypothesis.