Module 2E Question:

Researchers want to know whether a **high-fat diet (HFD)** leads to greater **weight gain** in mice compared to a **standard chow diet**. Using the data below, compute the **Welch's approximate t-test** comparing *weight gain* (Weight12 – Weight0) between the two groups. You may use the following pre-computed weight gains:

Mouse	Diet	Weight Gain (12w – 0w)
M1	Chow	2
M2	Chow	2
M5	Chow	2
M6	Chow	2
M9	Chow	2
M10	Chow	2
Chow gains: 2, 2, 2, 2, 2, 2		
Mouse	**Diet**	**Weight Gain (12w – 0w)**
M3	HFD	7
M4	HFD	7
M7	HFD	6
M8	HFD	6
M11	HFD	6
M12	HFD	6
HFD gains: 7, 7, 6, 6, 6, 6		

What would happen if you used the two-sample t test instead of Welch's approximate t test?