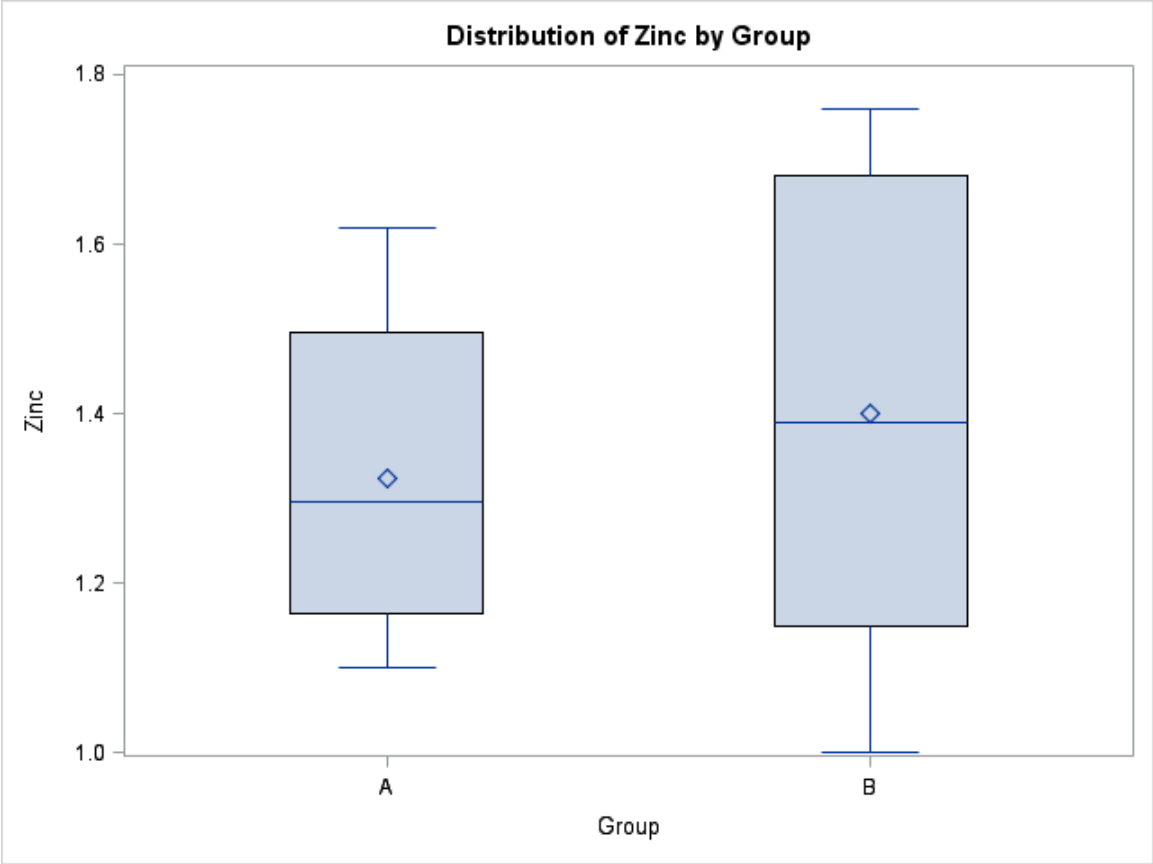

Group "A" observations

- The mean is greater than the median; the data is skewed to the right.
- The whiskers are not symmetrical; the upper whisker is longer than the lower whisker.
- The distribution is short-tailed; the whiskers are shorter than the box.

Group "B" observations

- The mean is greater than the median; the data is skewed to the right.
- The whiskers are not symmetrical; the upper whisker is shorter than the lower whisker.
- The distribution is short-tailed; the whiskers are shorter than the box.

Comparisons

- The mean and median are both higher in Group "B" than in Group "A".
- The spread/variability for Group "B" is higher than Group "A". Both the lower and upper extremes are greater in Group "B".
- The interquartile range in Group "B" covers more than 75% of the values in Group "A".
- The scattered values in Group "B" make it harder to determine if the result is due to chance (there is a lot of noise in the data).

Conclusion

- A t-test is required to measure whether the differences in Group A and Group B is significant or purely due to chance.

SAS Code Used

```
data dietary;
input Zinc Group $;
datalines;

1.31 A
1.45 A
1.12 A
1.16 A
1.30 A
1.50 A
1.20 A
1.22 A
1.42 A
1.14 A
1.23 A
1.59 A
1.11 A
1.10 A
1.53 A
1.52 A
1.17 A
1.49 A
1.62 A
1.29 A

1.13 B
1.71 B
1.39 B
1.15 B
1.33 B
1.00 B
1.03 B
1.68 B
1.76 B
1.55 B
1.34 B
1.47 B
1.74 B
1.74 B
1.19 B
1.15 B
1.20 B
1.59 B
1.47 B
;
run;

title 'Distribution of Zinc by Group';
proc boxplot data=dietary;
  plot Zinc*Group;
run;
```