

# How can I import a CSV file with column names that contain spaces?

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## RECOMMENDED CITATION

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Importing a CSV file with column names that contain spaces can be done by following a few simple steps. First, open your preferred spreadsheet program and select the option to import data. Next, locate the CSV file on your computer and select it. Once the file is open, you may notice that the column names containing spaces are not recognized. In order to properly import the data, you will need to manually adjust the settings to recognize the spaces in the column names. This can usually be done by selecting the option to "treat spaces as delimiters" or by specifying the column names within quotation marks. Once the settings have been adjusted, the CSV file with column names containing spaces can be successfully imported and the data can be analyzed or manipulated as desired.

## **R: Import CSV with Column Names that Contain Spaces**

**If you import a CSV file into R that contains column names with spaces, R will automatically replace the spaces with dots to make the column names have "valid" variable names.**

**If you would like to import the CSV file and keep the spaces in the column names, you must use the argument `check.names=FALSE` as follows:**

```
df <- read.csv("my_data.csv", check.names=FALSE)
```

**This will import the CSV file into R and keep the spaces in the column names.**

**The following example shows how to use this syntax in practice.**

## Example: Import CSV into R with Column Names that Contain Spaces

Suppose we have the following CSV file called `basketball.csv`:

```
team, points scored, assists collected, rebounds  
A,22,10,5  
B,15,6,5  
C,33,9,12  
D,20,14,3  
E,11,4,3
```

Notice that there are four column names in the CSV file and two of them contain spaces in the name.

If we use the `read.csv()` function to import this CSV file, R will automatically replace the spaces with dots:

**#import CSV file**

```
df <- read.csv('basketball_data.csv')
```

```
#view data frame
```

```
df
```

```
team points.scored assists.collected rebounds
```

```
1 A 22 10 5
```

```
2 B 15 6 5
```

```
3 C 33 9 12
```

```
4 D 20 14 3
```

```
5 E 11 4 3
```

Notice that dots have replaced the spaces in the two column names with spaces.

If you'd like to import the CSV file and keep the spaces in the column names, you can use the `check.names=FALSE` argument as follows:

```
#import CSV file and keep spaces in column names
```

```
df <- read.csv('basketball_data.csv',  
check.names=FALSE)
```

```
#view data frame
```

```
df
```

**team points scored assists collected rebounds**

**1 A 22 10 5**

**2 B 15 6 5**

**3 C 33 9 12**

**4 D 20 14 3**

**5 E 11 4 3**

**Notice that the spaces have been kept in the two column names with spaces.**

**However, you should note that if you attempt to perform any calculations using these column names with spaces that you must surround them in single back-quotes ( ` ) or you'll receive an error.**

**For example, if you attempt to calculate the sum of the values in the points scored column without using single back-quotes you will receive an error:**

**#attempt to calculate sum of points scored column  
sum(df\$points scored)**

**Error: unexpected symbol in "sum(df\$points scored"**

**Instead, you must surround the column name in single**

**back-quotes ( ` ) as follows:**

```
#calculate sum of points scored column
```

```
sum(df$`points scored`)
```

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**Notice that we don't receive an error this time.**

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