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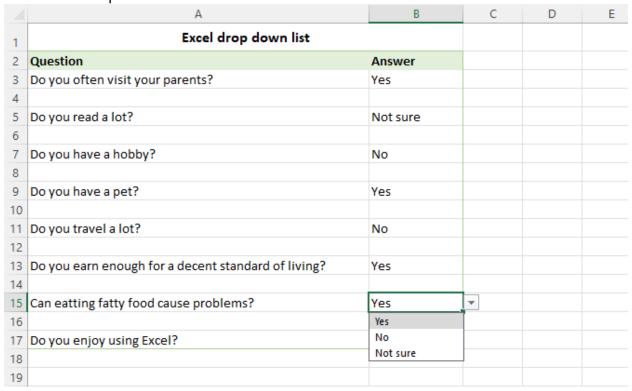


mohammed.qasim.obayes@uomus.edu.iq

## **Excel drop down list**

Excel drop down list, aka dropdown box or dropdown menu, is used to enter data in a spreadsheet from a predefined items list. When you select a cell containing the list, a small arrow appears next to the cell, so you click on it to make a selection.

The main purpose of using drop down lists in Excel is to limit the number of choices available for the user. Apart from that, a dropdown prevents spelling mistakes and makes data input faster and more consistent.



# How to create drop down list in Excel

To make a drop-down list in Excel, use the Data Validation feature. Here are the steps:





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mohammed.qasim.obayes@uomus.edu.iq

- 1. Select one or more cells where you want the picklist to appear. This can be a single cell, a range of cells, or a whole column. To select multiple non-contiguous cells, press and hold the Ctrl key.
- 2. On the Data tab, in the Data Tools group, click Data Validation.
- 3. On the Settings tab of the Data Validation dialog box, do the following:
  - In the Allow box, select List.
  - In the Source box, type the items separated by a comma with or without spaces. Or select a range of cells on the sheet containing the items.
  - o Make sure the *In-cell dropdown box* is checked (default), otherwise the drop-down arrow won't appear next to the cell.
  - Select or clear the *Ignore blank* option depending on how you want to handle empty cells.
  - o When done, click OK.

Congratulations! You have successfully created a simple dropdown list in Excel. Now, your users can click an arrow next to a cell, and then select the entry they



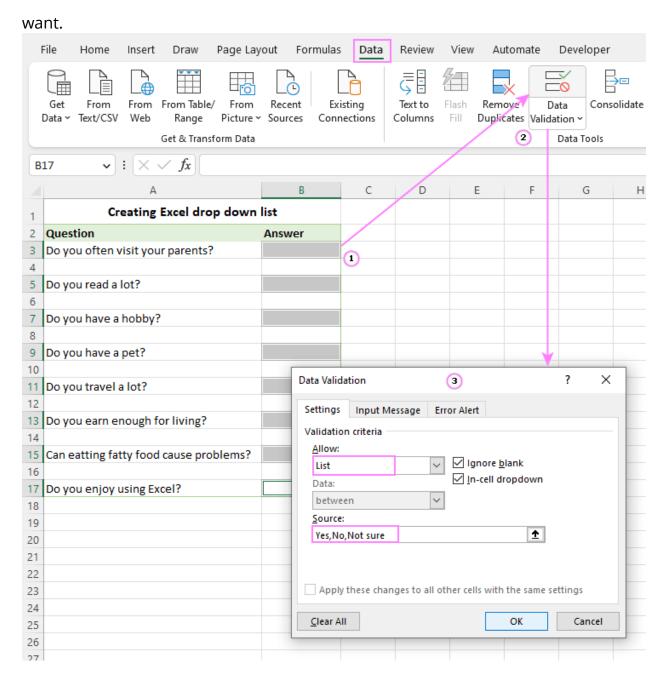


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Lecturer Mohammed Qasim Al Azzawi

#### mohammed.qasim.obayes@uomus.edu.iq



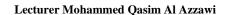
A **drop down list of comma separated values** works well for small data validation lists that are unlikely to ever change. For frequently updated lists, you'd better use a **range** or **table** for the source. The detailed step-by-step instructions for each method follow below.

**Tip.** To expedite data input in your Excel sheets, you can also use a data entry form.





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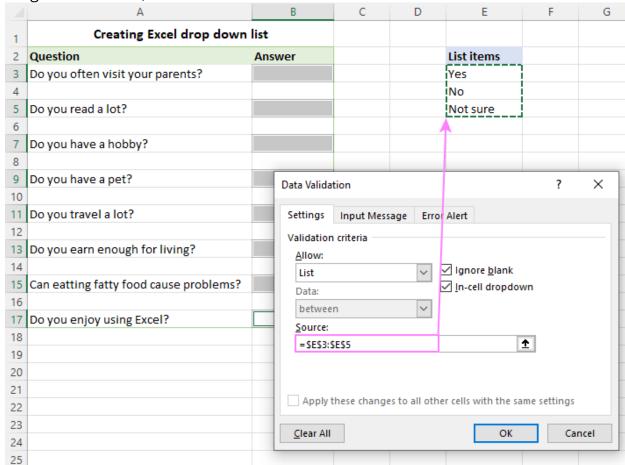


mohammed.qasim.obayes@uomus.edu.iq

## Make drop-down menu from a range of cells

To insert a drop-down list based on the values input in a range of cells, carry out these steps:

- 1. Start by creating a list of items that you want to include in the drop-down. For this, just type each item in a separate cell. This can be done in the same worksheet as the dropdown list or in a different sheet.
- 2. Select the cell(s) that are to contain the list.
- 3. On the ribbon, click the *Data* tab > *Data Validation*.
- 4. In the *Data Validation dialog window*, select *List* from the *Allow* drop-down menu. Place the cursor in the *Source box* and select the range of cells containing the items, or click the *Collapse Dialog* icon and then select the range. When done, click OK.







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Advantages: You can modify your dropdown list by making changes in the referenced range without having to edit the data validation list itself.

*Drawbacks*: To add or remove items, you will need to update the *Source* range reference.

## Insert drop down list from a named range

Initially, this method of creating an Excel data validation list takes a bit more time but may save even more time in the long run.

- 1. Make a list of items on the sheet. The values should be entered into a single column or row without any blank cells.
  - **Tip.** It's a good idea to sort the items alphabetically or in a custom order you want them to appear in the drop-down menu.
- 2. Create a named range. The fastest way is to select the cells and type the desired name directly in the *Name Box*. When finished, click Enter to save the newly created named range. For more information, please see how to define a name in Excel.





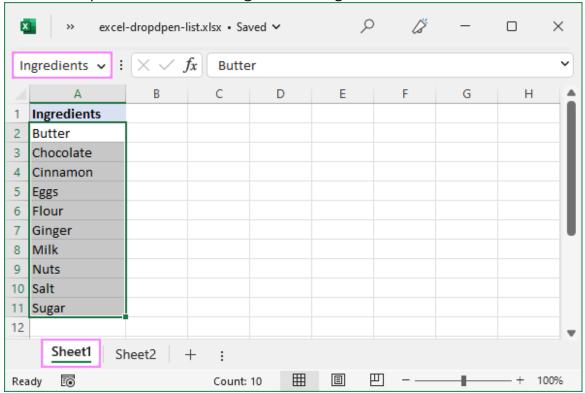
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As an example, let's create a range named *Ingredients*:



- 3. Select the cells for the picklist on the same sheet as the named range or in a different worksheet.
- 4. Open the *Data Validation* dialog window and configure the rule:
  - In the Allow box, select List.
  - In the **Source** box, type an equals sign followed by the range name. In our case, it's =*Ingredients*.
  - Click OK.



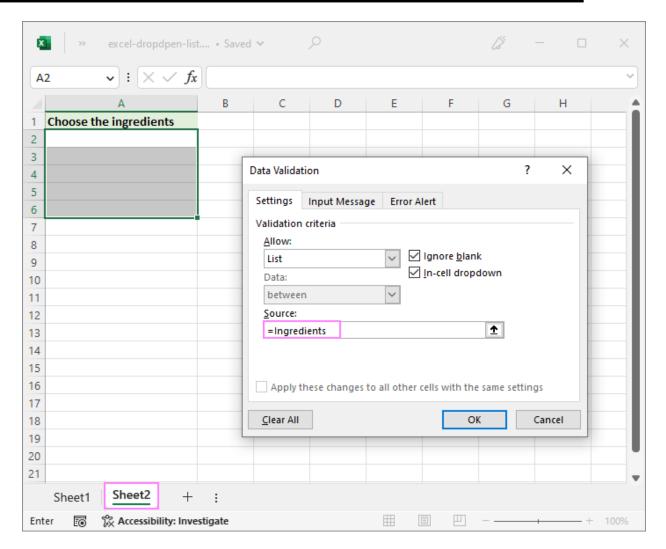


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#### Lecturer Mohammed Qasim Al Azzawi

mohammed.qasim.obayes@uomus.edu.iq



**Note.** If your named range has at least one **blank cell**, leaving the *Ignore blank* box selected allows typing any value in the validated cell.

Advantages: If you insert multiple drop-downs in different sheets, named ranges will make them a lot easier to identify and manage.

Drawbacks: Takes a bit more time to set up.

## Create drop-down from Excel table

Instead of using a named range, you can place the source data into a fully functional Excel table. Why may you want to use a table? First and foremost,





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because it lets you create an **expandable dynamic drop-down list** that updates automatically as you add or remove items to/from the table.

To make a dynamic dropdown from an Excel table, follow these steps:

- 1. Type the list items in a table or convert an existing range to a table using the Ctrl + T shortcut.
- 2. Select the cell(s) where you wish to insert a dropdown.
- 3. Open the Data Validation dialog window.
- 4. Select *List* from the *Allow* drop-down box.
- 5. In the *Source* box, enter the formula referring to a specific column in your table, not including the header cell. For this, use the INDIRECT function with a structured reference like this:

```
=INDIRECT("Table name[Column name]")
```

6. When done, click OK.

For this example, we're making a dropdown menu from the column named *Ingredients* in *Table1*:



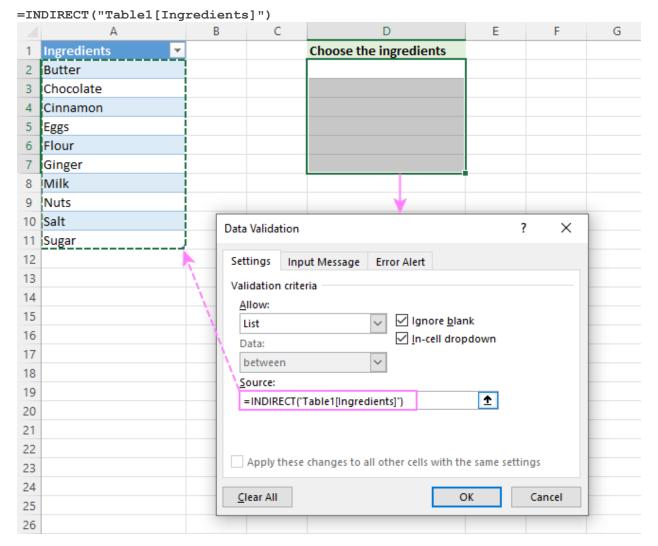


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# mohammed.qasim.obayes@uomus.edu.iq



Advantages: Easy and quick way to insert an expandable dynamic drop down menu in Excel.

Drawbacks: Not found:)

# How to create a dynamic dropdown list in Excel

If you regularly change the items in your picklist, the best approach is to create a **dynamic drop down list**. In this case, the list will update automatically in all the cells that contain whenever you add or remove items to/from the source list.





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The fastest way to make a dynamic drop down in Excel is from a table as shown above. That is the default behavior of Excel tables; no extra settings or moves are required.

Another way is to use a regular named range and reference it with the OFFSET formula, as explained below.

- 1. Type the items for the drop down menu in separate cells.
- 2. Create a named formula. For this, press Ctrl + F3 to open the *New Name* dialog box. Type the name you want in the *Name* box, and then enter the following formula in the *Refers to* box.

```
=OFFSET(Sheet3!$A$2, 0, 0, COUNTA(Sheet3!$A:$A), 1)
```

#### Where:

- Sheet3 the sheet's name
- o A the column where the drop-down items are located
- \$A\$2 the cell containing the first item



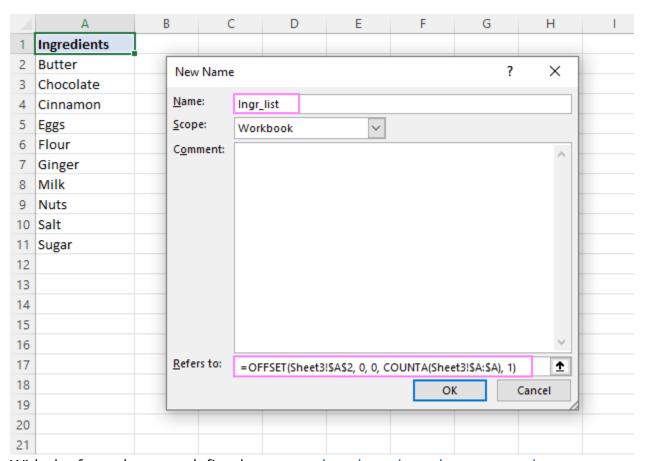


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3. With the formula name defined, create a dropdown based on a named range as usual.



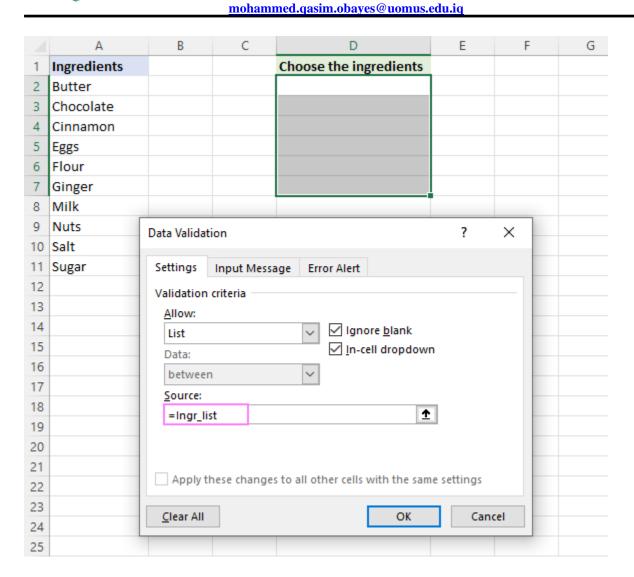




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#### How this formula works

The formula comprises two functions - OFFSET and COUNTA. The COUNTA function counts all non-blanks in the specified column. OFFSET uses that count for the *height* argument, so it returns a reference to a range that includes only non-empty cells, starting from the cell containing the first item that you supply for the *reference* argument.

Advantages: The main advantage of a dynamic drop-down list is that you won't have to change the reference to the named range each time the source list is expanded or contracted. You simply delete or type new entries in the source list, and your dropdown menu will update automatically!

*Drawbacks*: A bit complex setup process.





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# Make a dynamic dropdown list in Excel

Dynamic Array Excel has many innovative functions that are not available in older versions. One of these new functions named UNIQUE can help you create a dynamic drop-down with a simple formula.

Suppose you have a dataset with many repeated items like in column A in the image below. You aim to add a dropdown list where each item appears just once.

To extract the unique items, use this formula:

=UNIQUE (A2:A21)

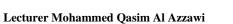
Optionally, you can sort the extracted values alphabetically by wrapping it in the SORT function:

=SORT (UNIQUE (A2:A21))





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This dynamic array formula is entered just in one cell (E2) and it automatically spills into as many cells as needed to show all the unique items.

E	2 🗸 :	$\times \checkmark f_x$			=SOR	T(UNIQUE(A2:A21))	
	А	В	С	D		Е	F
1	Ingredients	In stock	Region			Unique items	
2	Milk	14	South			Butter	1
3	Butter	21	North			Chocolate	
4	Nuts	22	North			Cinnamon	
5	Cinnamon	23	West			Eggs	
6	Milk	24	East			Flour	
7	Cinnamon	25	North			Ginger	
8	Flour	26	East			Milk	
9	Eggs	32	East			Nuts	
10	Ginger	36	East			Salt	
11	Chocolate	39	North			Sugar	
12	Chocolate	40	South				
13	Nuts	42	North				
14	Butter	49	South				
15	Salt	55	West				
16	Sugar	58	East				
17	Flour	61	South				
18	Ginger	66	West				
19	Eggs	74	West				
20	Salt	84	West				
21	Sugar	97	West				
22							

Next, you set up a drop down list using a spill range reference, which is a cell address followed by a hash character. In our case it's =\$E\$2# or =Sheet1!\$E\$2# if a







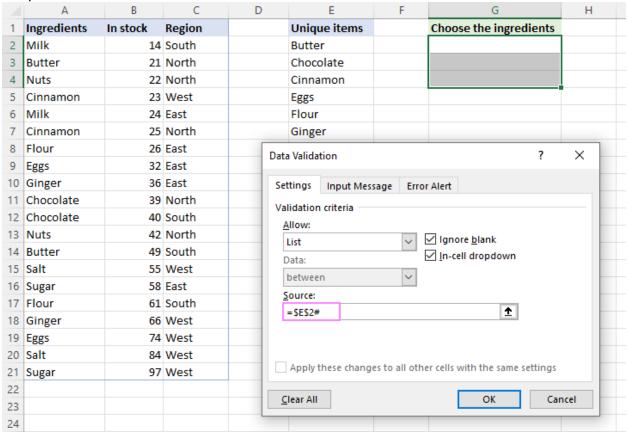
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### mohammed.qasim.obayes@uomus.edu.iq

### dropdown is in another sheet:



The result is an **expandable dynamic drop-down list** - the UNIQUE function automatically extracts new items as they are added to the source table, and the spill range reference forces Excel to update the drop-down list accordingly.

**Tip.** The same approach can be used to create a cascading drop-down list in Excel 365. For full details, please see Make a dynamic dependent dropdown list an easy way.

# How to create drop down list from another sheet

To insert a drop-down menu that pulls data from a different worksheet, you can use a normal range, named range or Excel table:

• When making a dropdown menu from a named range, make sure the scope of the name is *Workbook*, and then set up a data validation list as usual.





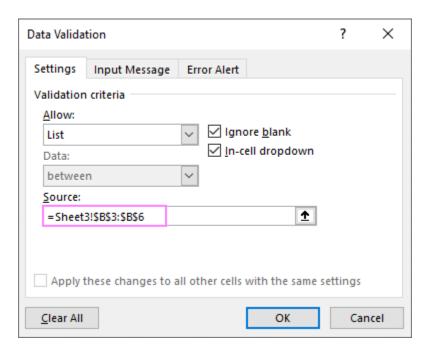
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- When creating a drop down list from a table, no extra steps are needed as table names/references are valid across the entire workbook.
- If you insert a drop down from a regular range, include the sheet's name in the source reference. In the *Data Validation* dialog window, place the cursor in the *Source* box, switch to the other sheet and select the range containing the items. Excel will add the sheet name to the reference automatically.



## How to make drop-down list from another workbook

To create a drop-down menu in Excel using a list from another workbook as the source, you will have to define 2 named ranges - one in the source workbook and the other in the workbook where you wish to insert your Data Validation list. The steps are:





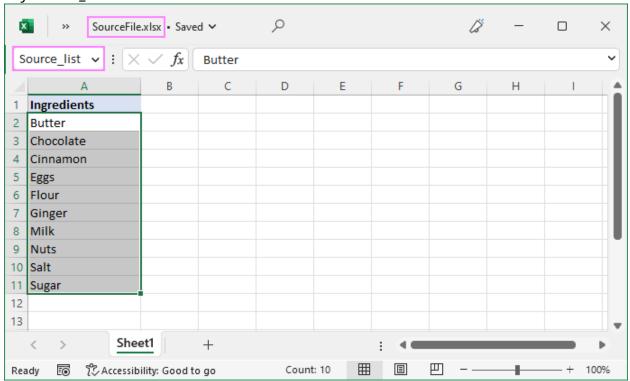
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mohammed.qasim.obayes@uomus.edu.iq

1. In the source workbook, create a named range for the source list, say *Source\_list*.



2. In the main workbook, define a name that references your source list. For this example, we create the name *Items* that refers to:

=SourceFile.xlsx!Source\_list

If the workbook's name contains spaces or non-alphabetical characters, it must be enclosed in single quotation marks like this:

='Source File.xlsx'!Source\_list

For more details, please see How to make external reference in Excel.



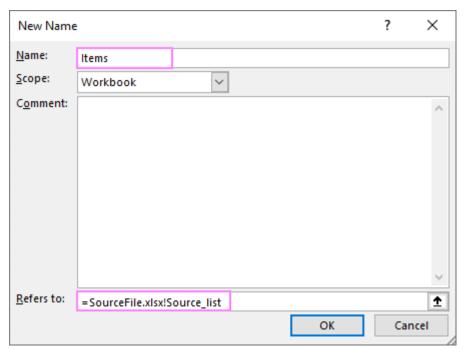


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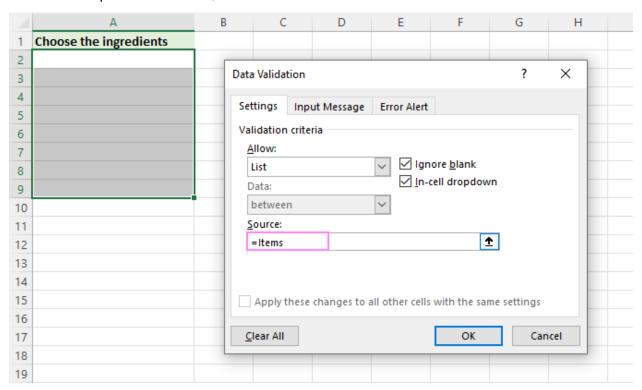


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### mohammed.qasim.obayes@uomus.edu.iq



3. In the main workbook, select the cell(s) for your picklist and click the *Data tab > Data Validation*. In the *Source* box, reference the name you created in step 2. In our case, it's =Items.



**Notes:** 





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- For the drop-down list from another workbook to work, the source workbook must be open.
- The dropdown list created in this way won't update automatically when items are added to or removed from the source list you will have to modify the source list reference manually.

How to make a dynamic dropdown from another workbook

To create a **dynamic dropdown list from another workbook**, define a formula name in the source workbook using the OFFSET formula explained in Creating a dynamic drop-down in Excel. In this case, a dropdown menu in another workbook will be updated on the fly once any changes are made to the source list.

# Searchable drop down list in Excel

In Excel 365, data validation lists have an awesome **AutoComplete** feature. To speed up data entry in large lists, just start typing the target word in the dropdown menu cell - the autocomplete algorithm will match the typed substring with the dropdown list items and show you the found matches. As you type more characters, the displayed list is narrowed down, and conversely, when you remove characters, more matches are shown.

	А	В	С	D	Е	
1	Choose the ingredients					
2	Butter					
3	Chocolate					
4	Cinnamon					
5	Sugar					
6	Flour					
7	Ginger					
8	Milk					
9	Nuts					
10	S	▼				
11	Salt					
12	Sugar					
13						
14						





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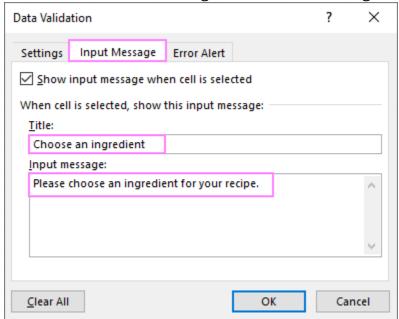


mohammed.qasim.obayes@uomus.edu.iq

# Insert a drop down list with message

To show an information message when someone clicks a dropdown list cell, proceed in this way:

- In the *Data Validation* dialog box, switch to the *Input Message* tab.
- Make sure the Show input message when cell is selected option is checked.
- Type the title and message in the corresponding fields (up to 225 characters).
- Click OK to save the message and close the dialog.







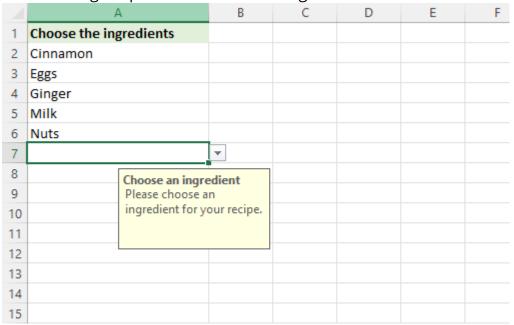
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mohammed.qasim.obayes@uomus.edu.iq

The resulting drop down list with message will look similar to this:



# Make an editable drop down list in Excel

By default, an Excel drop-down is non-editable, i.e. restricted to the values in the list itself. If you type any other value, an error alert will show up. However, you can allow users to enter their own values. Here's how:

1. Open the Data Validation dialog window.





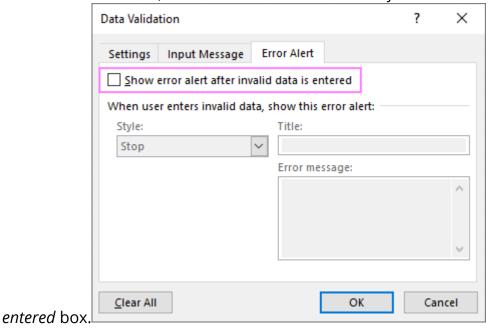
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2. On the Error Alert tab, uncheck the Show error alert after invalid data is



Technically, this turns a drop-down list into a **combo box**. The term "combo box" means an editable dropdown that allows users to either select a value from the predefined list or type a custom value directly in the box.

Optionally, you can display a **warning message** when someone attempts to enter a value that is not in the list:

- 1. On the *Error Alert* tab, select the *Show error alert after invalid data is entered* option.
- 2. From the *Style* box, pick either *Information* or *Warning*, and then type the title and message text.
  - Information message is best to be used if there is nothing wrong with the user entering a custom value.
  - Warning message will induce users to select an item from the dropdown box rather than enter their own data, though it does not prohibit it.



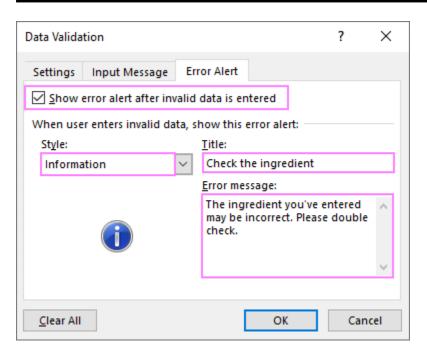


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Lecturer Mohammed Qasim Al Azzawi

#### mohammed.qasim.obayes@uomus.edu.iq



And here's an editable Excel dropdown list with a warning message in action:

