

# Macros

## what are Macros?

Macros, short for macronutrients, are the nutrients your body needs in large amounts to function properly. They include **carbohydrates**, **proteins**, and **fats**, which provide energy and are essential for maintaining your body's structure and functions <sup>1</sup> <sup>2</sup>. Each macronutrient has a specific calorie content: carbs and proteins provide 4 calories per gram, while fats provide 9 calories per gram <sup>2</sup>.

as it pertains to Microsoft Office applications?

In Microsoft Office applications, macros are sequences of commands and instructions that automate repetitive tasks. They are created using **Visual Basic for Applications (VBA)**, a programming language integrated into Office. Macros can be used to perform tasks like formatting documents, analyzing data, or creating custom workflows with just a single click or shortcut <sup>1</sup> <sup>2</sup>.

For example, in Excel, you might use a macro to automate data entry or calculations across multiple sheets. In Word, macros can help with formatting or inserting predefined text. They save time and reduce errors by streamlining processes.

which office applications have Macros capability?

Microsoft Office applications that support macros include:

- **Excel:** Widely used for automating data analysis, calculations, and repetitive tasks.
- **Word:** Useful for automating formatting, document creation, and text manipulation.
- **PowerPoint:** Allows automation of slide creation, formatting, and presentation tasks.
- **Access:** Enables database management and automation of queries and reports.
- **Outlook:** Supports automation of email management, scheduling, and custom workflows.
- **Publisher:** Though less common, it can also utilize macros for specific tasks.

do all of these applications support recording macros?

Not all Microsoft Office applications support recording macros. The **Macro Recorder** is available in **Excel**, **Word**, and **PowerPoint**, allowing you to record actions and convert them into VBA code. However, applications like **Access** and **Outlook** do not have a built-in Macro Recorder; you need to write VBA code manually to create macros in these programs **1 2 3**.

## **What is the purpose of a Macro?**

- **It contains an instruction or series of instructions that replace the user's manual interaction. A macro could be called a robot.**
- **Once created it can be played over and over to eliminate repetitive tasks**
- **For very complex tasks this also eliminates human error, as it can be tested, then replayed flawlessly many times thereafter.**

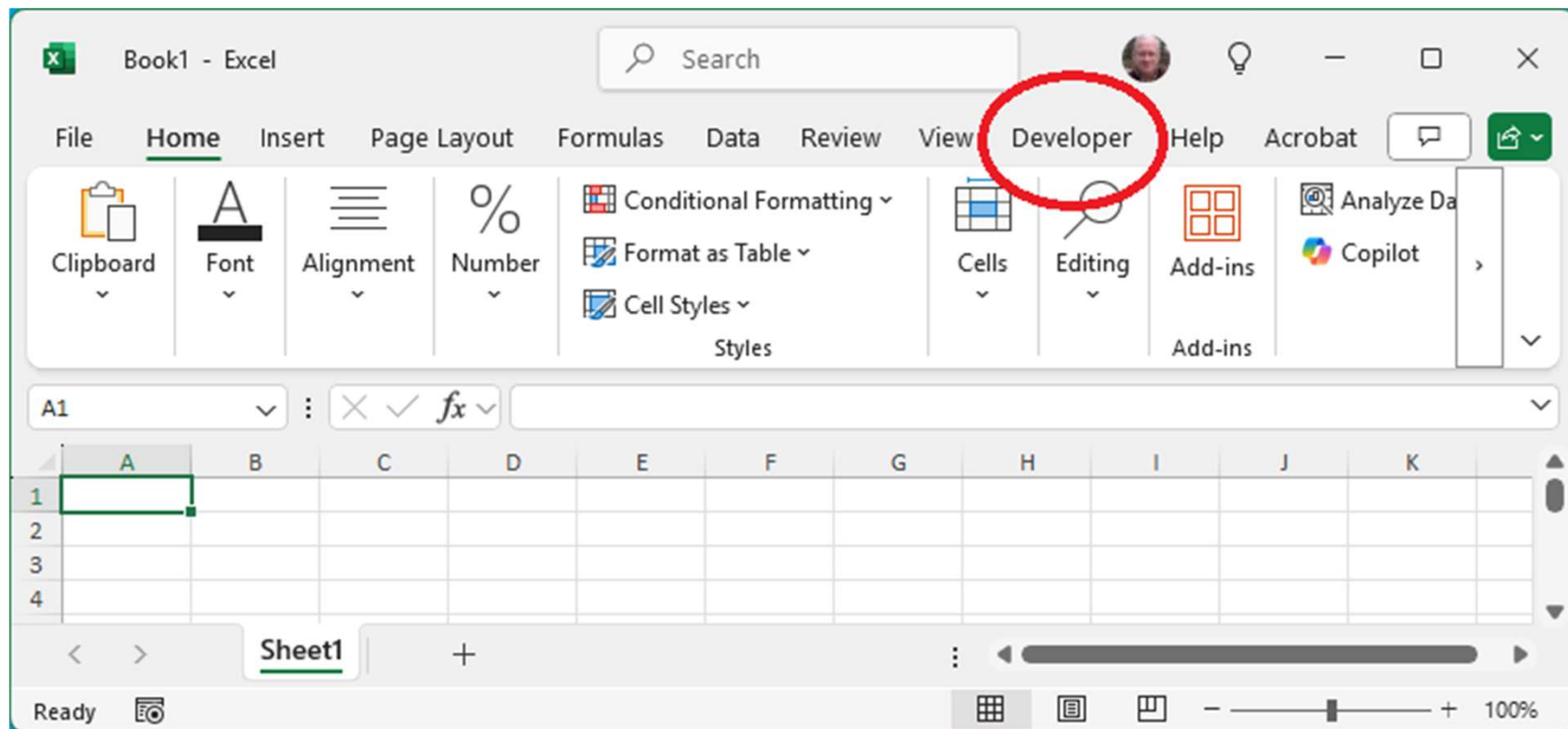
## **How do I create a Macro?**

- **Excel has a macro recorder. Using this, the user's actions can be recorded and saved for future use.**
- **Or using Visual Basic(VBA) programming language the user can write the code that performs the user's actions.**
- **Since the recorder creates VBA code, once a macro has been recorded it can be modified or enhanced via programming modification.**
- **Macros can also use any function in the Excel library.**

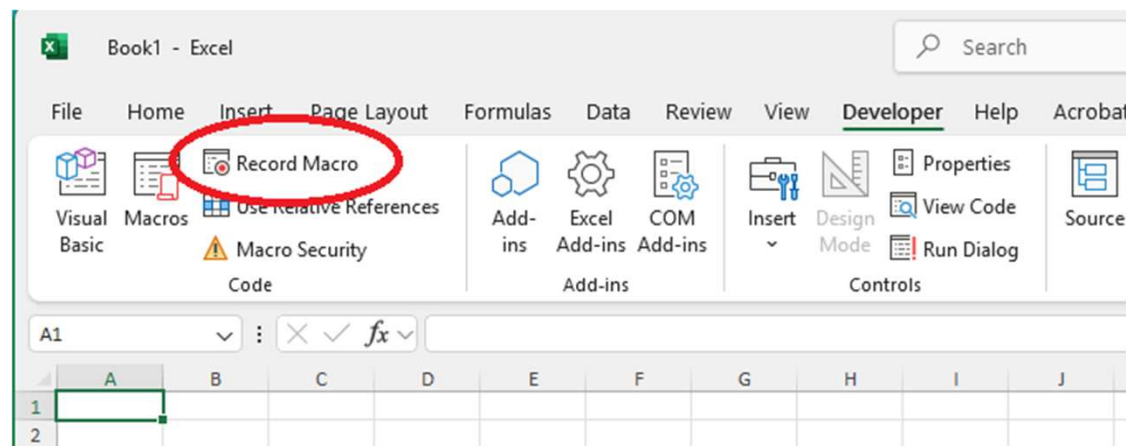
## **Where do the macros reside?**

- **The macros that are created can remain with the excel worksheet. If so, then the worksheet must be saved as an XLSM file instead of a XLSX file.**
- **Macros can be saved into another worksheet which can be open and accessible to the user's task worksheet.**

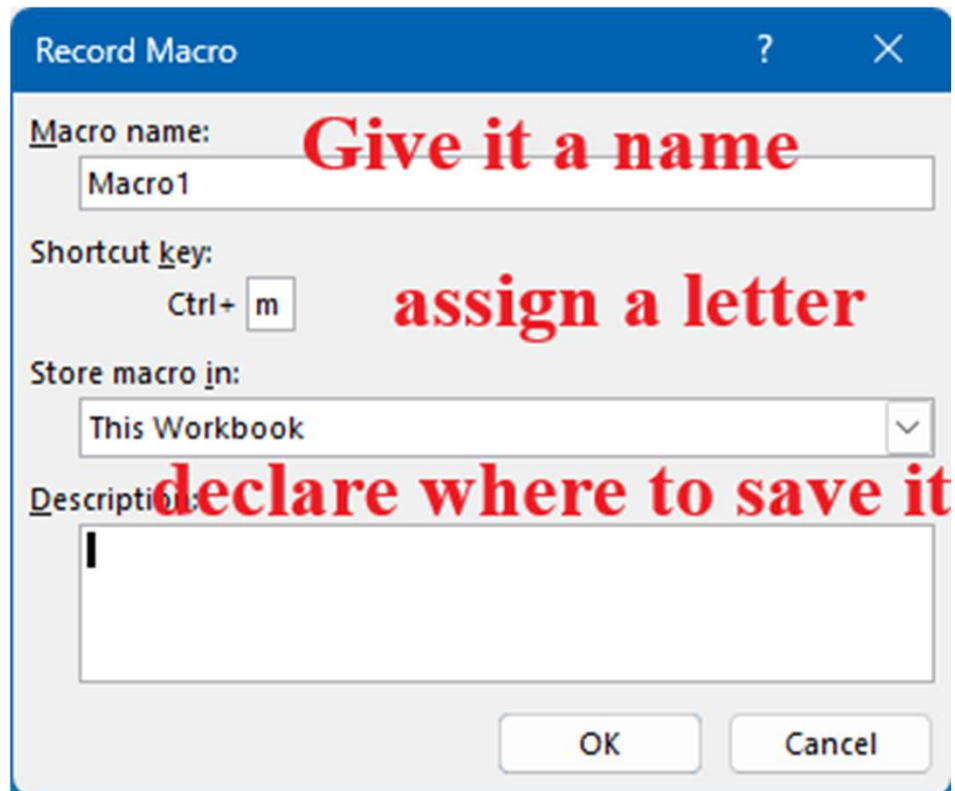
To record a macro select menu item **Developer**



**When ready to record select menu icon Record Macro**



**When ready to record select menu icon Record Macro**



The image shows the 'Record Macro' dialog box in Microsoft Excel. It has a blue title bar with the text 'Record Macro' and standard window controls. The dialog contains four main sections: 'Macro name:' with a text box containing 'Macro1' and a red annotation 'Give it a name'; 'Shortcut key:' with a text box containing 'Ctrl+' and a button with 'm', and a red annotation 'assign a letter'; 'Store macro in:' with a dropdown menu showing 'This Workbook' and a red annotation 'declare where to save it'; and 'Description:' with a large empty text area. At the bottom are 'OK' and 'Cancel' buttons.

**Record Macro**

Macro name: **Give it a name**  
Macro1

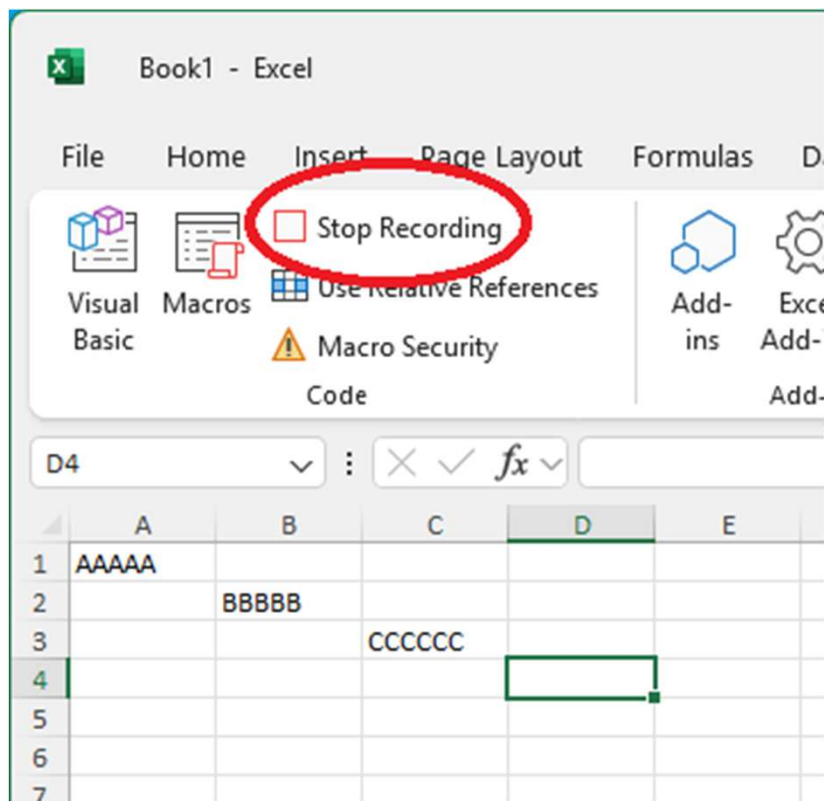
Shortcut key: **assign a letter**  
Ctrl+ m

Store macro in: **declare where to save it**  
This Workbook

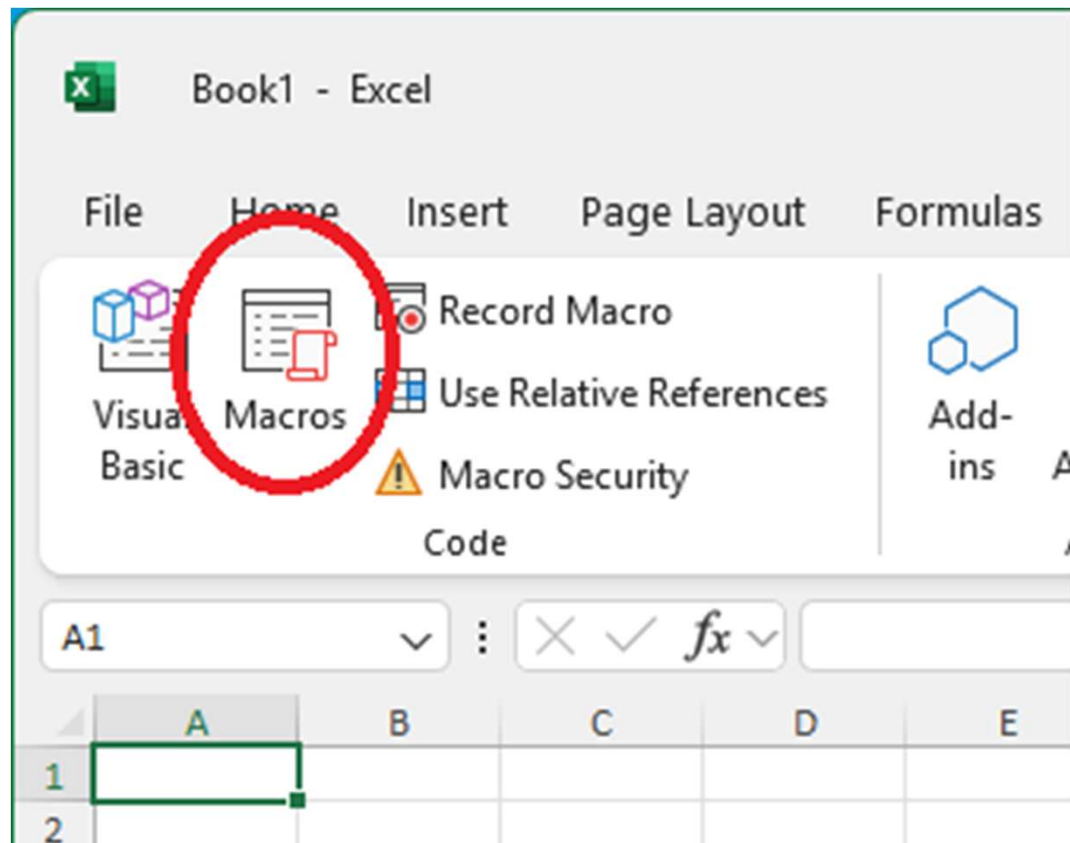
Description:

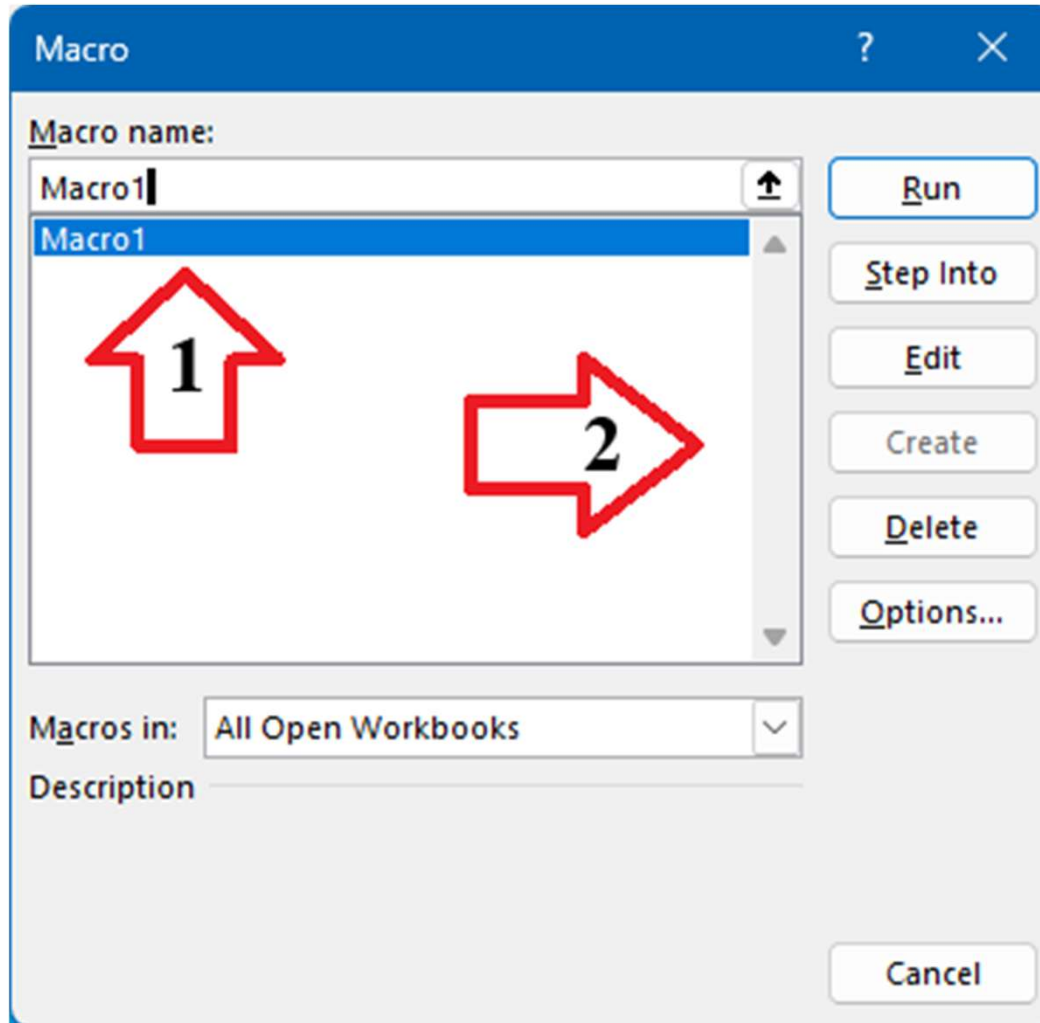
OK Cancel

**When ready to record select menu icon Record Macro**



## To find or execute Macros





1. Select to macro to work with
2. Select the action to perform

- **Enter a new name to create a VBA macro**
- **Select EDIT to open an editor to work in**
- **Use the menu SAVE**
- **To run the macro open the Macros box select it and RUN**

**The AI copilot can produce typical program code for VBA macros**

**Just describe the task you would like a VBA macro for**

**Copy the code and go to Macros – Create – then paste code in**

what is the VBA code needed to copy all the tab names into a new tab

Here's a VBA code snippet that will copy all the worksheet tab names in your Excel workbook into a new sheet. This code creates a new worksheet and lists the names of all the tabs in the workbook there:

Vba

 Copy

```
Sub ListWorksheetNames()  
    Dim ws As Worksheet  
    Dim newSheet As Worksheet  
    Dim i As Integer  
  
    ' Add a new sheet for the tab names  
    Set newSheet = ThisWorkbook.Sheets.Add  
    newSheet.Name = "Tab Names"  
  
    ' Initialize row counter  
    i = 1  
  
    ' Loop through all worksheets in the workbook  
    For Each ws In ThisWorkbook.Sheets  
        ' Copy the sheet name into the new sheet  
        newSheet.Cells(i, 1).Value = ws.Name  
        i = i + 1  
    Next ws  
End Sub
```