Ingredient Matrix CodeBuilder

TECHNICAL GUIDANCE

App Information

- This is an R Shiny app built by Minnesota Department of Health (MDH) MN.IT.

  - https://ingredient-matrix-codebuilder.web.health.state.mn.us/

Uses

- Develop programming code (SAS, R, or Python) to update menu-level datasets to include ingredient information for analysis.

Notes

Ingredient and menu item names cannot have spaces or special characters

- The "Ingredients" column can also be used for categories/groups of food items (e.g., indicating which menu items are from the hibachi, or creating an "any salad" grouping).

- Code Logic:

  - If a patron reports ANY menu item that includes ingredient X, then Ingredient X = Yes.
  - If a patron denies ALL menu items that include ingredient X, then Ingredient X = No.
  - Otherwise, if a patron reports a combination of "No" and Unknown/blank responses regarding menu items that include ingredient X, then Ingredient X = blank.
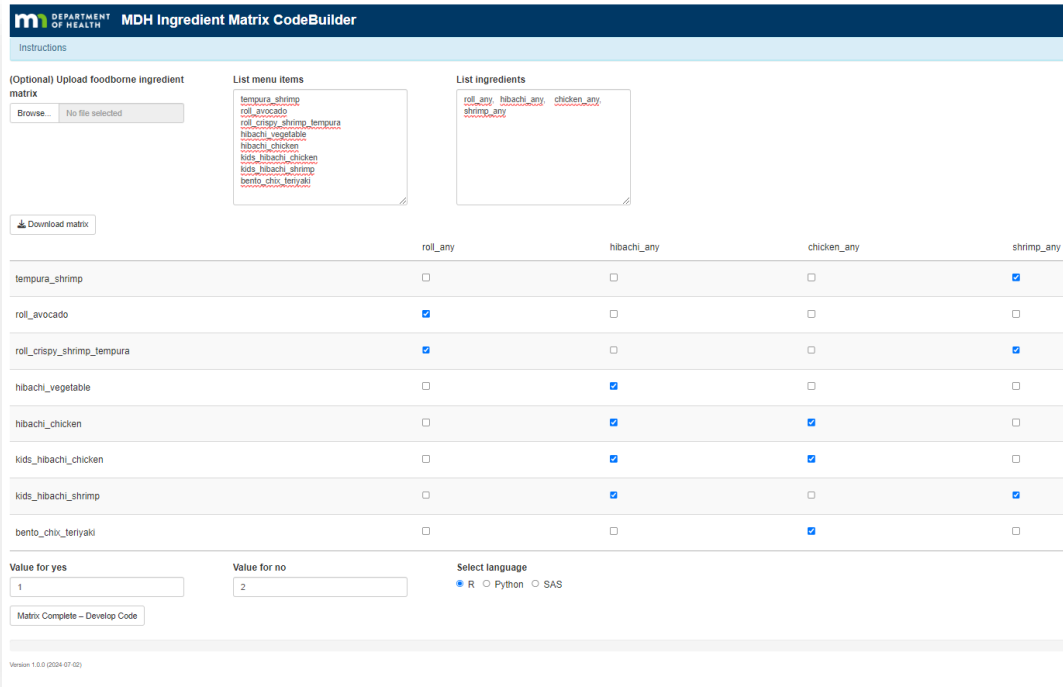
Develop an Ingredient Matrix (i.e., mapping)

1. **Upload an existing matrix**

   - In the top left corner of the page, choose "Browse…" and navigate to your saved matrix.

   - To successfully import, the ingredient matrix must be saved as a CSV file.

   - The ingredient matrix must have "Menu item" (case sensitive, no quotation marks) in cell A1.

2. **Build (or update) a matrix in the app**

   - Type, or paste in, the menu items (separated by commas, or each on its own line).

   - Type, or paste in, the ingredients (separated by commas, or each on its own line).

   - Add checkmarks to the corresponding boxes.

Example:

Develop Code

- Choose a value for "yes" and a value for "no" for the code output, matching what is in your exposure database.

- When you are satisfied with your matrix, select your desired programming language (R, Python, or SAS).

- Click "Matrix Complete – Develop Code"

- Copy the code. Minor edits (e.g., table names) may be required to match your existing code.

Download a Matrix (optional)

▪ After entering (or updating) your menu items and ingredients, you may wish to download the empty (or partial matrix), populate the matrix, and then upload it back into this tool.

▪ You may also wish to save your matrix as part of outbreak documentation.

▪ Click "Download matrix" to download the current matrix.

Get Help

▪ If you need assistance with the CodeBuilder app, would like to chat with someone about building your matrix, or there is a problem with the app, feel free to contact us!

  ▪ https://mnfoodsafetycoe.umn.edu/contact-us/