**Category Classifier Model v3**

The model classifies textual data (comments) from the lowcarb subreddit [r/lowcarb](https://www.reddit.com/r/lowcarb/) into the following categories: Health Response, Barriers, Advice and Other. The aim is to automate the separation of the dataset by each area of interest, ensuring that analysis targeted to specific aspects is conducted on meaningful and relevant data. **Each post may be assigned to one or more category.** The exception is that a post of the “Other” category cannot be simultaneously classified as anything else.

The following guideline defines the specific annotation criteria for each class of the model.

**Annotation Guideline**

**Health Response (H)**

General Definition:

The Health Response category encompasses the texts that refer to/ mention an **experienced** or **perceived** physiological or psychological **response/ effect**.

Specifics:

1. Experienced/ perceived – The comment is **not required to speak from experience**, a general statement on a health effect or response also lies within this class. Comments speaking from **experience does not have to be personal**, it can refer to the experience of a related or associate individual.
2. The response/ effect is **not required to be caused by low carb diets**, any mentioned health response/ effect falls within this category whether it be from other diets, low carb diets or unhealthy eating.

Examples of Health Responses:

* Changes in weight
* Changes in body composition and body fat levels
* Changes in blood sugar metrics (HbA1c, A1c, glucose spikes and variability, post-prandial glucose, hypoglycaemia, etc.)
* Changes in Blood lipid (fat) levels
* Changes in Blood pressure
* Changes in medication requirements
* Kidney health/ function
* Risks or side effects (e.g. constipation, insomnia, hair loss, diseases)
* **Emotional responses** – happy, sad, frustration
* Mental Health – anxiety, depression
* **Other responses** – craving sugar

**Barrier (B)**

General Definition:

The text identifies a distinct **barrier** or **obstacle** eliciting apprehension/ uncertainty/ concern, that **impedes** the **initiation** or **progress** of a low carb diet.

Specifics:

1. The Barrier/ Obstacle must **relate to a low carb diet** – it hinders/ provokes aversion to a low carb/ keto/ very low carb diet.

Examples of Barriers:

* Support (e.g. Lack of professional or family support)
* Accessibility of resources
* Availability of food (e.g. Lack of desirable food)
* Lack of knowledge or understanding
* Craving sugar/ carbs
* Mental Health

**Advice (A)**

General Definition:

Poses an advice/ recommendation/ suggestion/ tip of course of **actions to take**. The **intent** of the text is to **assist**.

Specifics:

1. Suggestion of **action** – the comment can be posed as a recommendation to do something (i.e. “how to”, “do this”, “go to”, “try this” etc.).
2. **Seeking advice** with information on their situation (e.g. what they have done to get to this point).
3. **Implicit/ passive** advice – the post may not be direct but can be interpreted/ implied as advice or recommendation. For example, comments that passively push for an opinion or stance with researched or anecdotal evidence. Such comments may express agreement/ disagreement to an action or recommendation based on research or experience (opinion is expressed with substance and the action/ recommendation is identifiable within the post, rather than a simple “Yes, I agree”).
4. The intent is to assist – provides a suggestion to deal with/ cope with or a solution to a common or general concern or a specific concern prompted by a previous enquiry. Advice may be prompted (in response to a query or concern) or unprompted (initiating discussion by providing advice or sharing tips including food lists to circumvent/ deal with common/ general concerns).
5. The **stance** of the advice can be **for or against low carb diets**. The content of the advice can go against low carb diets.
6. Food suggestions/ **Food list with a narrative** – suggestions of food to eat or substitutes for high carb food fall under this category if the nature/ context of the comment is advisory: it is clearly recommending or suggesting someone to eat or purchase the food or can be rearranged/ posed as a recommendation/ suggestion and the intent of the post is to assist. This can be in the form of food/ ingredient lists in recipes where provided. **Without enough context** or when the commenter’s intention for the food post is unclear, it is not assumed that the nature of the post is advisory and hence labelled as **“Other”** instead of “Advice”. (For example, a comment of “Cheesy Smoked Sausage Soup” or “Salt and Vinegar Almonds” is labelled as “Other” as provision of recipe title only is incomplete information).
7. **Recipes without food / ingredient lists are excluded** from Food Suggestions**.** Recipes are often distinguished by the length and format: recipes tend to be a long list of Food lists /ingredients with methods/ instructions, whereas food suggestions are short mentions of food to try within the text.
8. Resources – Comments that **mention the name of a resource** (e.g name of a book/ organisation), with the intent of assisting/ directing someone to the resource to provide information or advice. Comments that are **only links** to a website/ resource is **not included**. Links that appear in comments with a mention of the name of a resource is included.

Examples of Advice:

* Methods/ solutions to cope/ deal with challenges and barriers
* Low carb food suggestions/ substitutes
* Recipes with Ingredient/ Food list
* Recommended medications or recommended cessation of medication
* Resources (Specific mentions of certain resources, excluding links)

**Other (O)**

General Definition:

Posts that **do not satisfy the criteria** of the Health Response, Barriers and Advice categories fall under “Other”. This embodies the texts containing information that is not of interest to the research or in a format suitable for effective NLP analysis.

Examples of Other:

* Texts **without discernible context or content**. (e.g. Short 1-2 word answers such as “Yes”, Thank you”, etc.)
* Links to websites, videos or images
* Recipes that do not satisfy the requirements (see: Advice, Food Suggestions)