



# 03 HugMe

Engineering design | Interaction design

Project brief:  
This project combines an app and a device design to manage **binge eating** by providing distraction, group support, motivation, and monitoring food-related behavior, while the device tracks binge eating and transmits care.

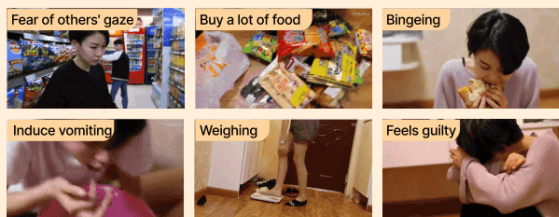
2024. 9 - 2024. 10  
Individual project



## RESEARCH

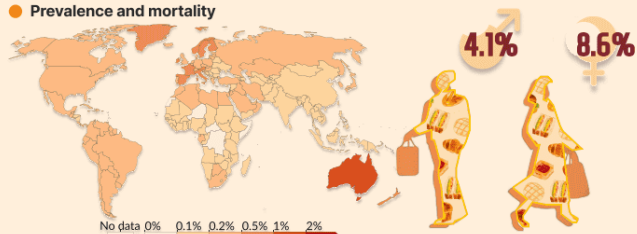
### ● Inspiration

I've personally struggled with binge eating disorder in the past, and one time, while watching a documentary on bulimia nervosa, I was reminded of the painful experiences I went through. That moment made me realize how much I want to help others facing these challenges, as I truly understand what they are experiencing.



Binge Eating Disorder Documentary: It's Food • Not Love

### ● Prevalence and mortality



Over **3.3 million** healthy life years worldwide are lost yearly because of eating disorders.

Rates of eating disorders in males are increasing at a **faster rate** than those in females.

### ● Understanding Bingeing

#### Why dieting?

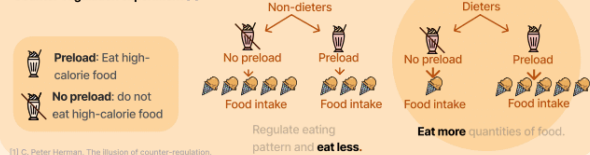
Patients often set **strict rules** regarding the types of food, quantity, and meal times.



#### Dietary restraint theory

Once any of these rules are **violated**, it can uncontrollably lead to binge eating.

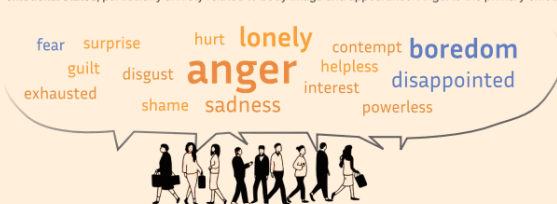
#### Counter-regulation experiment [1]



[1] C. Peter Herman, The Illusion of counter-regulation.

#### Emotional factors

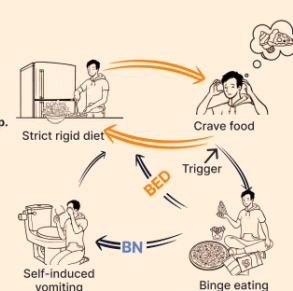
It is also a form of emotional eating. In a study, **47.7% of binge eating** was attributed by the participants to **emotional states**, particularly anxiety related to body image and appearance. Anger is the primary emotion. [2]



[2] A. Zeeck, Emotion and eating in binge eating disorder and obesity.

### ● Repeated loop

Patients follow **strict dieting** while their bodies **crave food**. A **trigger event** causes a **counter regulation**, leading to **binge eating**. Afterward, they return to strict dieting, creating a **vicious loop**.



#### BN and BED

- Binge Eating Disorder (BED) patients **do not purge**.
- Bulimia Nervosa (BN) patients use **purging behaviors** like vomiting to compensate.

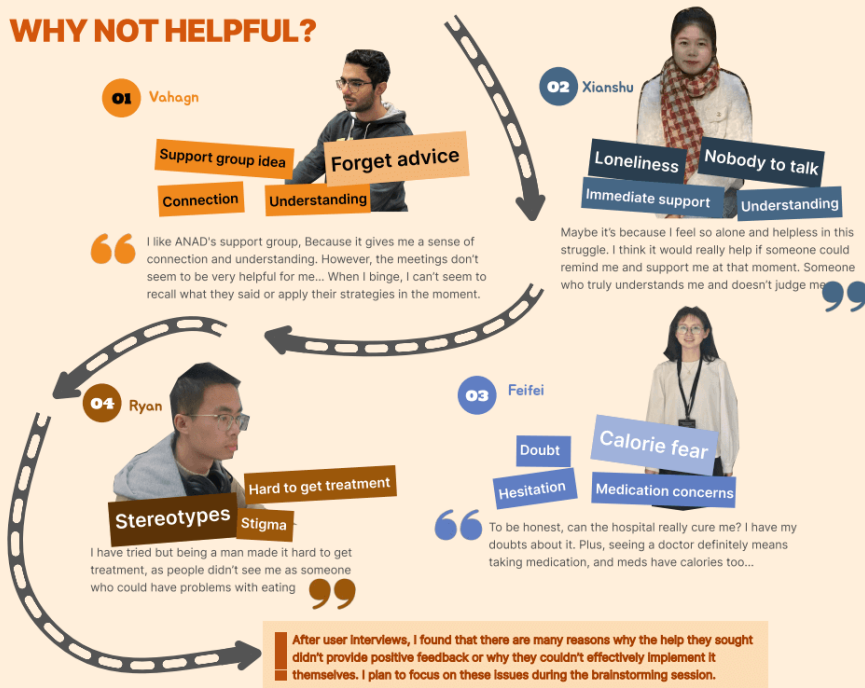
These eating disorders are common, dangerous, and difficult to control. When patients become aware of the problem, they seek help from the outside world. So, how effective is this help?

### ● Available help

When facing an eating disorder, patients can seek help through two options.



## WHY NOT HELPFUL?



## PERSONA



## JOURNEY MAP





