Levodopa Tracker

# Contents

[Hypothesis 3](#_Toc130117572)

[Problem 3](#_Toc130117573)

[Objective 3](#_Toc130117574)

[Research Question 3](#_Toc130117575)

[Sub questions 3](#_Toc130117576)

[People involved 4](#_Toc130117577)

[Team Members 4](#_Toc130117578)

[Stakeholder 4](#_Toc130117579)

[End Users 4](#_Toc130117580)

[Requirements 5](#_Toc130117581)

[Must have’s 5](#_Toc130117582)

[Should have’s 5](#_Toc130117583)

[Could have’s 5](#_Toc130117584)

[Won’t have’s 5](#_Toc130117585)

# Hypothesis

## Problem

Parkinson's disease is a brain disorder caused by a loss of nerve cells in the part of the brain called the substantia nigra. This loss of nerve cells leads to a reduction in a chemical called dopamine. This causes both physical and psychological issues for a Parkinson’s patient. On the physical side patients may experience symptoms like unintended or uncontrollable movement, stiffness and difficulty with balance and coordination. To suppress these symptoms patients take a drug called Levodopa. Levodopa enters the brain and helps replace the missing dopamine. This helps performing daily activities. Levodopa is a drug that is taken orally. Important to know is that Levodopa is a protein building block, this means it competes for absorption with other proteins. Taking Levodopa with high-protein meals, such as meat and fish, may reduce how much of the drug gets into your system and affects how well a dose works. Because of this patients are instructed to not eat 30 minutes before, and 60 minutes after a meal. Parkinson’s in a progressive and incurable disease. This generally means that the longer a patient has Parkinson’s, the more Levodopa intakes a patient needs. Because of this the time between meals becomes shorter and shorter leaving little time to eat and drink. But also making it difficult to know when it is safe to eat.

## Objective

To be able for a Parkinson’s patient that uses Levodopa to know when it is safe to eat, I want to make an app that shows a patient that uses Levodopa when it is safe to eat or not.

## Research Question

How can I make an app that shows a patient that uses Levodopa when it is safe to eat or not?

## Sub questions

* Each patient has a different intake schedule, how can we make our app personal?
* Each patient takes a different amount of doses, how can our app adjust to this?
* Each patient takes doses at different times, how can our app adjust to this?
* Some patients use Levodopa at a set interval and some use an irregular schedule, how can our app adjust to this?
* How can our app inform a patient that it is not safe to eat at this moment?
* How can our app inform a patient that it is safe to eat at this moment?
* How can our app inform a patient that the situation of safe to eat has changed to not safe to eat?
* How can our app inform a patient that the situation of not safe to eat has changed to safe to eat?
* Sometimes a patient’s intake schedule changes, how can our app adjust to this?
* Do we have to take into consideration any physical or phychological symptoms that a patient experiences that may affect using the app?

# People involved

## Team Members

I am Mirna Beugels. I am a UI/UX designer and a web developer. When I noticed my partner Eric struggling with when to eat and not to eat because of his Parkinson’s disease medication I wanted to create an app that shows him when it is safe to eat.

## Stakeholder

#### Eric Gruisen

Eric is my partner. He has Parkinson’s disease. He struggles with when to eat or not to eat daily. He would like a system that makes it easier for him to know when to eat. He would like to be able to enter the amount of daily doses and the time at which he takes them.

## End Users

Other Parkinson’s disease patients.

# Requirements

## Must have’s

## Should have’s

## Could have’s

## Won’t have’s