B.yte.

Ai Camera device that **aids the blind** to
Identify, describe and locate food on a plate.

> Fried egg paired with steamed carrots, beans & mushrooms.

The **Direction**

Summary statements & Brief

**A solution to locating food
[Without hindering the senses]
improving the experience of eating**

Keen for a product that doesn't stand out but looks good. - Paul Person who is blind

A product that allows you to experience your surroundings. - Andy Person who is blind

**"If I'm unsure on what the food is it tastes wrong...
...the problem is knowing what the food is and where" - Andy**
Person who is blind

People who are blind have constant challenges in their daily life that sighted people don't experience. The task of eating is a regular and consistent part of the day. Byte can make this more accessible through assisting those who are blind with a tool to help tackle this issue.

The **Context**
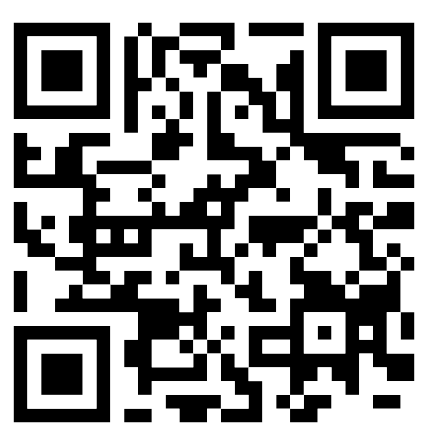
The **Current Problem**

Bowls are a common tool to separate out food and the clock method is used

340,000 people are registered blind or partially sighted in the UK.

There is **limited** existing support around eating food - even though you do it at least 3 times a day.

The problem is the person who is blind needs **assistance** knowing where and what is in front of them.

The **Journey**

Scan QR Code for video journey

1
> Your device is ready.

The product is set-up.
Headphones can be connected.

2
> Your plate consists of breaded chicken steak with fresh orange carrots, steaming broccoli and green beans

Hand gestures in-front of the plate trigger the **description**

3
> Carrots 12 O'clock, Green beans 3 O'clock, Chicken 6 O'clock, Broccoli 10 O'clock.

and a hand gesture to the right of the plate triggers **location.**

The **App**

Scan QR Code for App interface

Change the speed that the product talks to you.

Get updates on battery health and when to charge.

Connect your device.

Home screen with voice interaction for navigating the app.

20% 70%
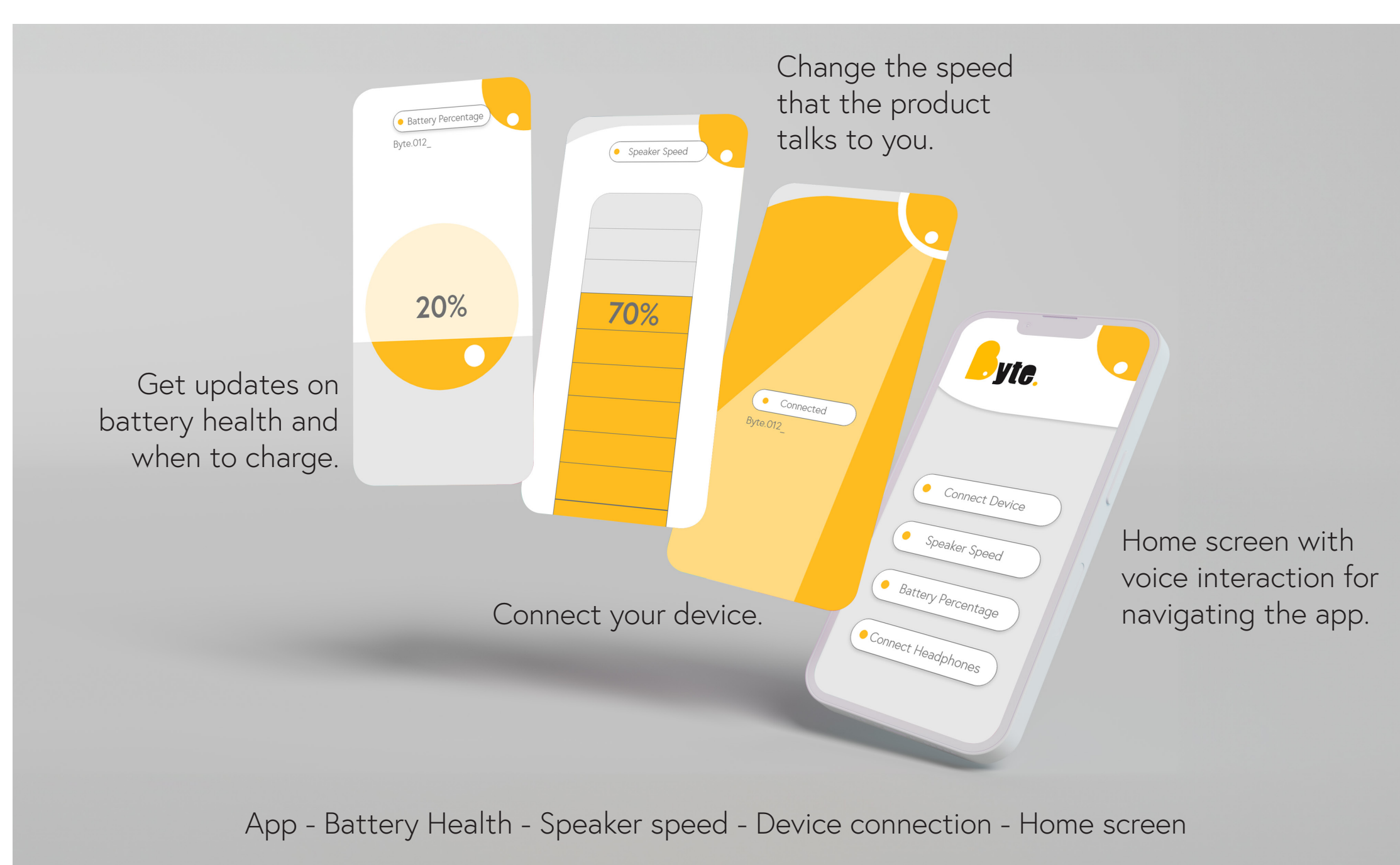
App - Battery Health - Speaker speed - Device connection - Home screen
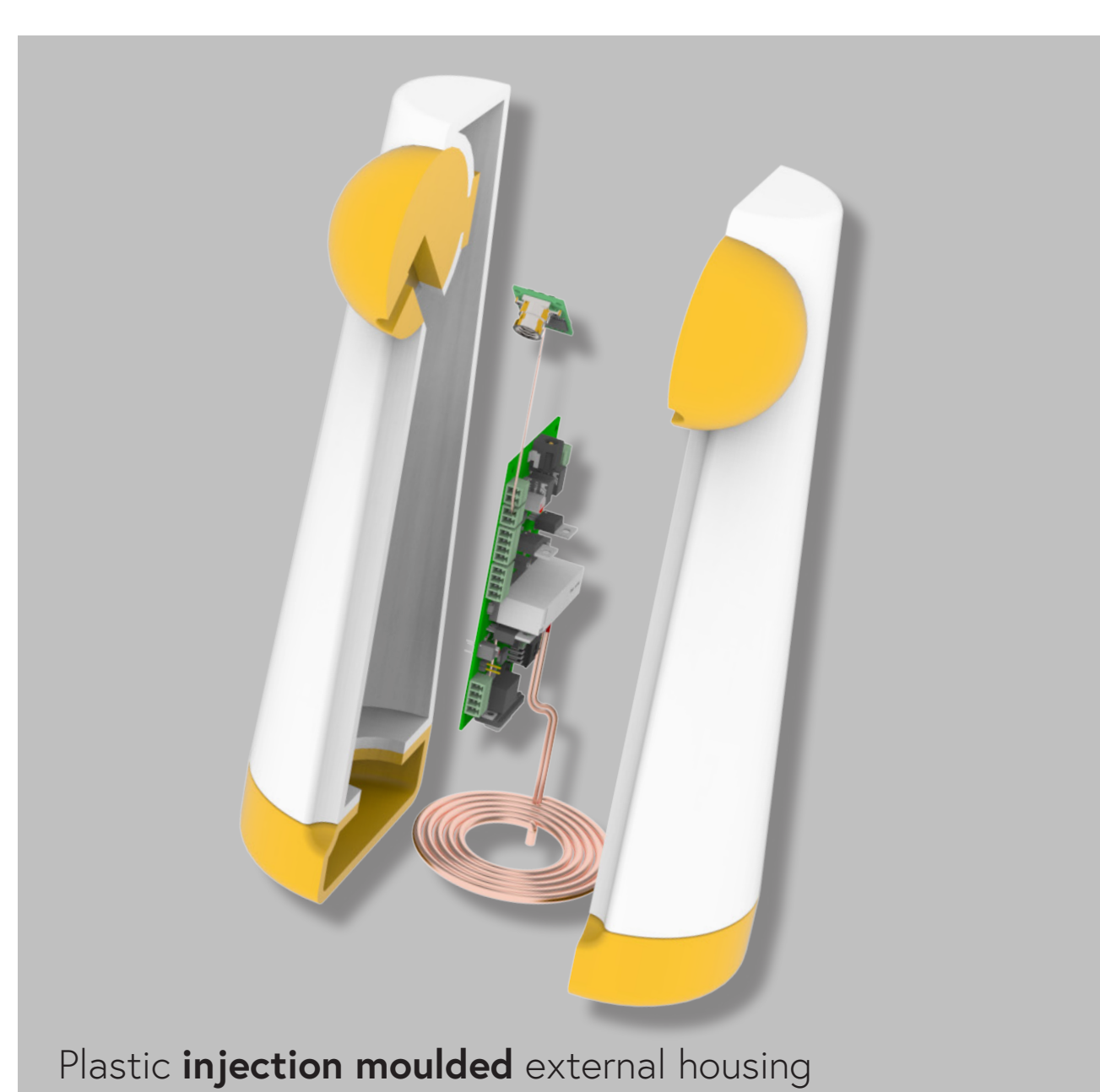
The **Product**

The product is designed to be taken anywhere - home, restaurant, cafe...

Portable bag - Tactile front - Rounded base

The **Technology**

Tech
- Processor
- Camera
- Ribbon cable
- Battery
- Charging circuit
- Wireless Charging coil
- Bluetooth (BLE)
- Wi-Fi
- Speaker

Plastic **injection moulded** external housing

The Ai device connects to the cloud to identify using a constantly evolving database. The product learns on the job with new foods and recipes.

The **Validation**

This is a cleverly designed product, and would make my life much easier - Andy
Person who is blind

There is a gap in this area and very importantly addressed - RNIB
Royal institute of the Blind

RNIB
See differently

It's very helpful knowing when you're finished, it is very practical - Paul
Person who is blind

A game changer to have food on one plate instead of blended or separated - Emma
Carer for the blind