

# Biosensor proposal to detect vitamin C degradation in juice

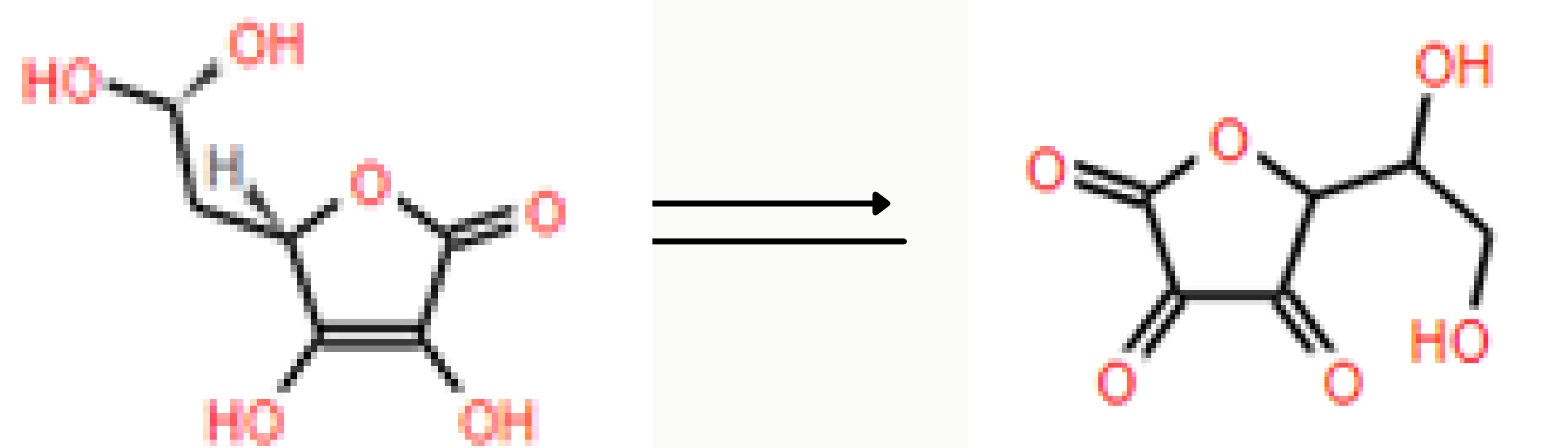
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## Objectives

- Develop a biosensor capable of detecting the degradation of vitamin C.
- Know the pathways of degradation and methods of detection and quantification of vitamin C.

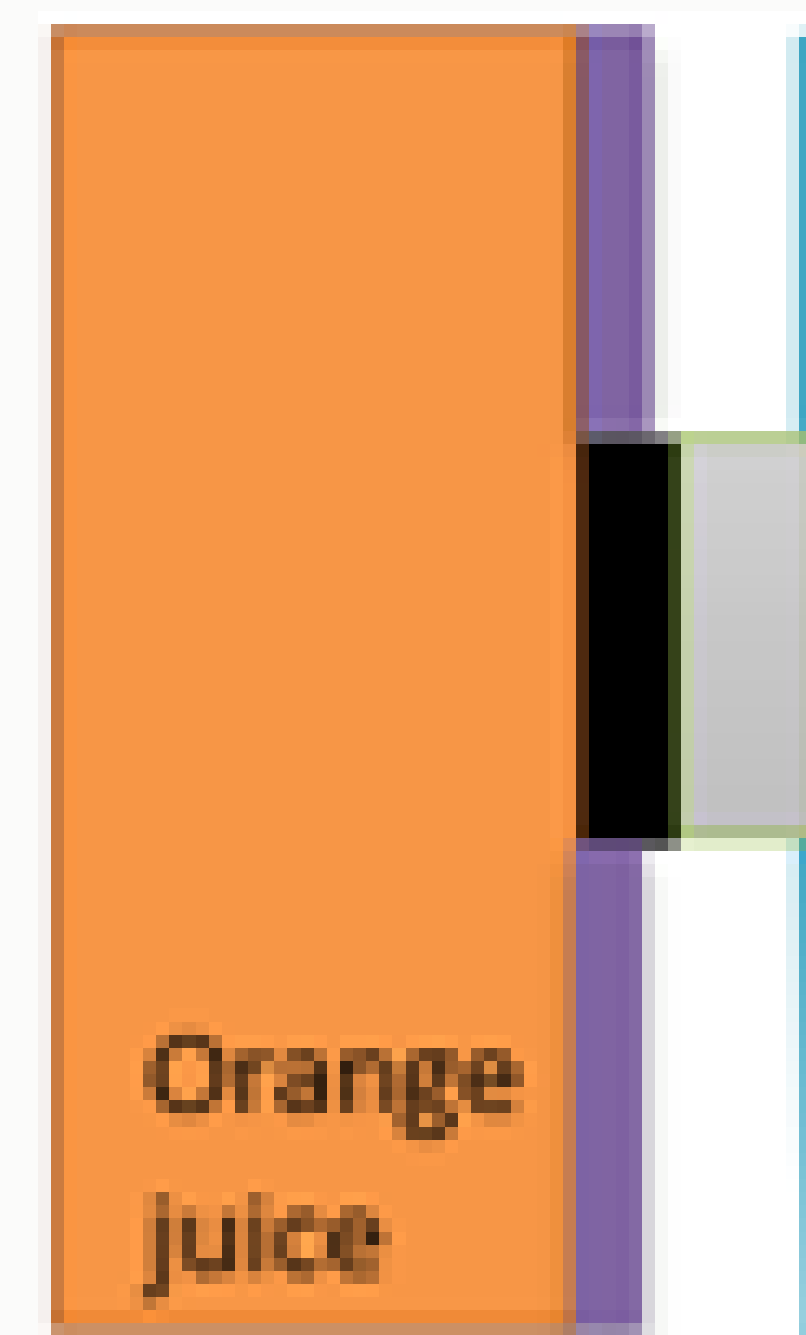
## Compound of interest

- The interest of measuring this molecule is given by the consumer.
- There are different ways to measure the concentration of this molecule. For example:
  - Iodometric determination
  - Enzymatic
  - Fluorometric
  - Voltammetric



## Proposals to solve the problem

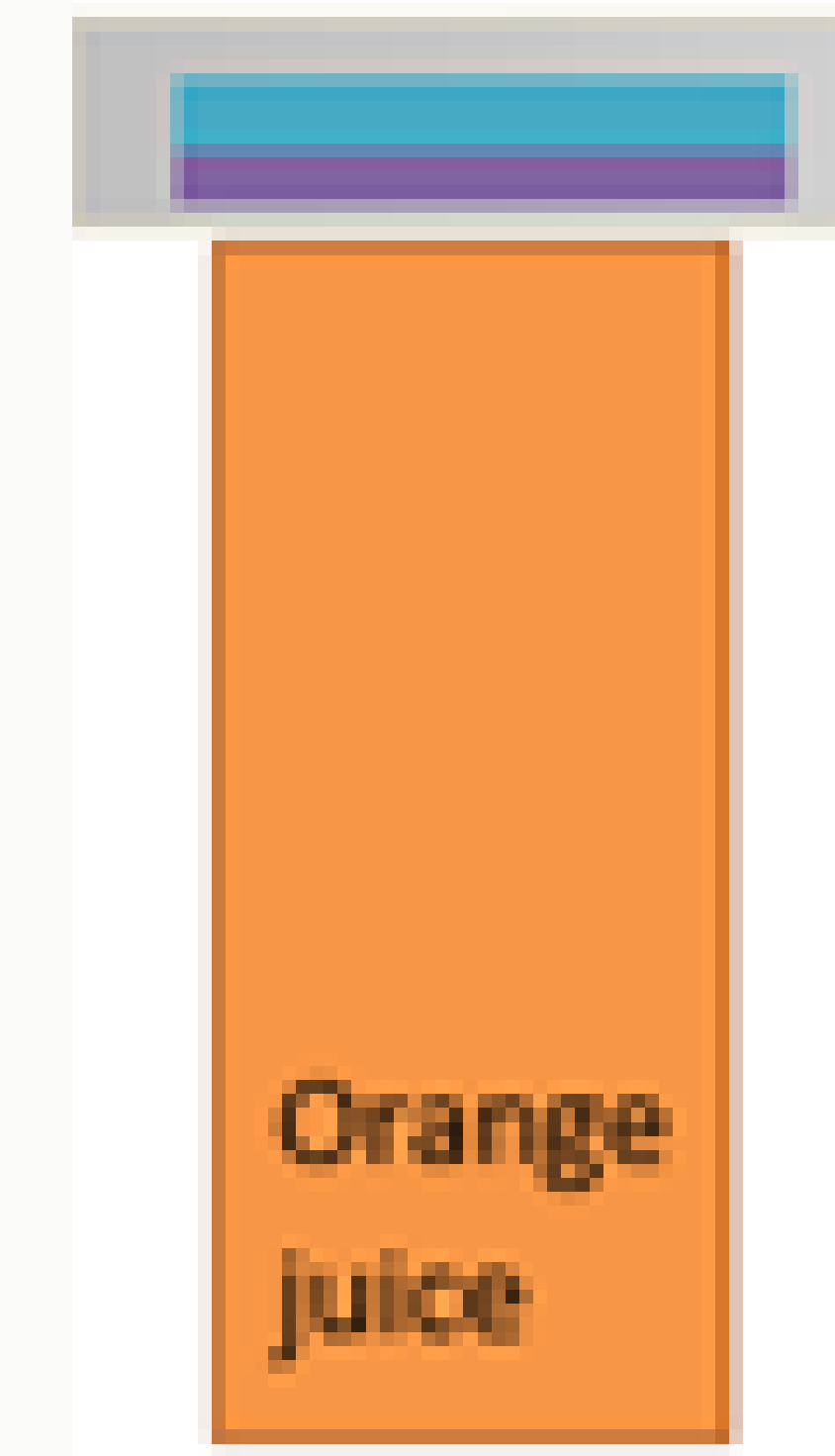
1



- Adaptation of a sensor designed to solve a clinical problem.
- Designed for a tetrabrick container.

Packaging material
  Biosensor  
 Polyurethane
  Outer material

2



- Adaptation of a method used for quality control
- Designed for bottles

Plug
  Protection material to allow it to be for food use  
 Sensor

## Conclusions

1

- Online reading .
- Operation throughout the life of the product.
- Difficult adaptation in a container.

2

- Single use only.
- The consumer is obliged to use it when starting the juice.
- Easily adapts to packaging design.