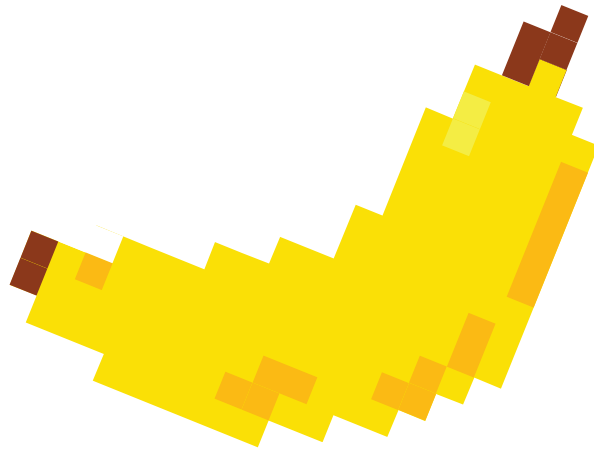


## A vibrant, pixelated illustration of various fruits and vegetables, including apples, bananas, carrots, kiwis, and mushrooms, arranged around the text "SUPERFOOD STORY". The style is reminiscent of 8-bit video game graphics, with a white background and a variety of colorful, blocky food items scattered throughout. The text "SUPERFOOD" is in a large, bold, black, pixelated font, and "STORY" is in a slightly smaller, similar font below it. The food items include red apples, yellow bananas, orange carrots, green kiwis, purple grapes, blueberries, and mushrooms, all rendered in a pixelated, 8-bit style. The overall composition is a dense, colorful collage of healthy food items.



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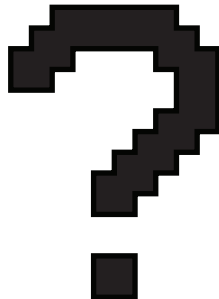


# INTRODUCTION

*The data experience class gave us an opportunity to work on a project of our choosing as long as it involved critical design and data. With such a broad description, the project could have taken any shape, an exhibition, a website, a book, it just had to be an experience.*

*As humans, we love stories and in the information era, our stories need data. So the central narrative of the project became a story. After months of research, the story finally took shape and from there it shifted from format to another until it landed on an article and a video game.*

*This is the making of Superfood Story.*



## BRIEFING

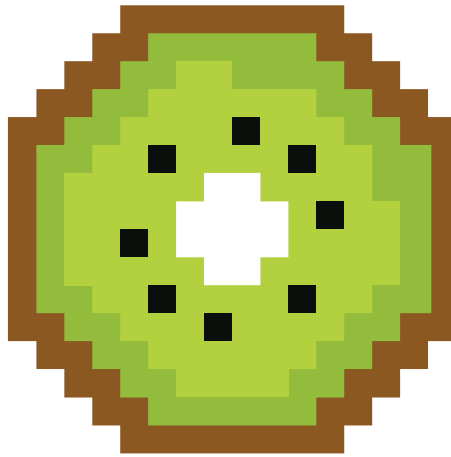
*If we can talk about anything, I want to talk about food.*

*I love food, not only eating and cooking but also thinking about where it comes from and how it arrived on my plate. I care a lot about sustainability and I like to think that all of our choices are intertwined with a great global network.*

*My research took me first to indigenous diets and the Aztecs and upon reading more about what happened during colonization, a story emerged. A dramatic story of what now is considered a superfood.*

*I continued to research about superfoods and found more and more common patterns.*

*I decided I had a very interesting story in my hands. So, I decided to tell the secret story of chia seeds as a way to explore 'superfoods'.*



## RESEARCH

*Research was at the heart of the project. From the initial inspiration to how carefully worded the final product is.*

*The original draft of the book had more than 40 pages of content. In this section I will highlight some of the excerpts of writing that are behind the visualizations.*

*The complete list of references can be found in the annex.*

## Superfoods

The term ‘superfood’ is given to foods that are considered nutritionally dense.

However, “Superfood” is not a scientific term but a marketing one.

It was first used by The United Fruit Company in 1917 as a part of a strategy to sell bananas. They published pamphlets that praised the fruit for its dietary benefits and suggested different ways to consume it.

The term gained more popularity when physicians used it to publish their research on a banana diet against celiac disease and diabetes. Subsequently, The United Fruit Company included these health benefits in their promotional materials and the media at the time published headlines on bananas.

With this, bananas became a synonym of health and sales and production grew.

This story wrote the script for future superfoods. As we will see, history tends to repeat itself.

There is a correlation between claiming a food is super to an increase in sales and production. Take the example of blueberries, they received their superfood status around 2003 and their availability and consumption dramatically increased in the USA in the following years. According to Mintel research, in 2015 there was a 36% increase of foods and drinks that claimed superfood status which makes sense since in 2018, the global superfood market was valued in 137 billion USD.

Marketers can use the term ‘superfood’ to stretch the nutritional value and place carefully worded statements that imply extraordinary health benefits.

To protect consumers from these predatory practices, Japan developed strict regulations and the European Union banned the term in 2007, unless it was accompanied by a specific authorised health claim.

However other areas of the world lack regulation against these types of false claims.

In 2017, a Canadian news agency, CBC News, found a granola-quinoa product that claimed it lowered cholesterol, controlled blood sugar and prevented cancer. Only after the news agency filed a complaint against them, the company was forced to change their marketing.

This example shows how lack of regulation allows companies to exaggerate the health benefits of a product, putting a lot of weight on the consumer's decisions. While some 'superfoods' might have more nutrients than others, no single product can cover all nutritional needs. The best diet is diverse, mostly plant based and local.

Looking at superfoods give us an insight of how food can be impacted by marketing.

## **Indigenous foods**

Things become even more complex when we consider crops that have an indigenous origin.

We will use this term to talk about fruits, vegetables and grains that are not from Europe or North America.

Their history is obscured due to colonization and with globalization, these foods have been completely detached from their original context.

Indigenous crops faced 3 potential scenarios: exploitation, neglect, or eradication.

1- Exploitation: Tomatoes - taken from mesoamerica and incorporated into western diets, nowadays they are associated with the Mediterranean cuisine and its cultures.

2- Neglect: Avocados - another mesoamerican crop was exported outside the region but it didn't gain popularity until the 1950's

3 - Eradication: Chia seeds - Due to its high value in various indigenous cultures, quinoa was prohibited and lost for almost 500 years. Since its 'rediscovery' it has become a very popular food, impacting farmers and global prices.



## Chia seeds

Chia was domesticated by indigenous groups in mesoamerica, around 3500 B.C.E and it played a key role in pre colonial diets. The Aztecs used chia as food for warriors on campaign, payment for widows, paints, medicine and religious ceremonies. During the colonization of mesoamerica, chia production was banned in the 1500s by the spanish colonizers.

Chia managed to survive in small, isolated communities in Mexico. There are a few records indicating chia exports to China but it wasn't until 1932 that it became a relevant crop in Mexico.

In the 1940s nutritional researchers pointed out chia as a good source of polyunsaturated fatty acids but its importance in cardiovascular health was unknown until further research in the 1970s pointed it out.

In 1977 Joe Peddott took some terracotta decorations made in Mexico and turned them into a novelty item to sell in the USA as chia pets. It took until the 1990s for chia to finally become an international crop, when researchers in the Western Argentina Regional Project took it to south america to test its nutritional value and resilience as a crop.

In 2009 the EU recognized chia as a novel food, authorizing advertisement in the region and in the same year, the documentary "Born to Run" was released, telling the story of the indigenous Tarahumara marathon runners who consumed chia before and during the race. Since then, chia has gained more and more popularity due to novel nutritional research and consequent discussion in media outlets, thus gaining the status of a superfood and increasing sales and production.

In 2018 the chia market worldwide was valued at 66.5 million USD with most of the world's chia production taking place in Bolivia, Paraguay and Argentina. In 2020 the biggest exporters were China, Canada and Germany and the biggest importers were the United States, Germany and Spain.

The global chia market is expected to continue to grow and the estimates are that it will be worth 4.7 billion USD in 2025.

Chia nutrition facts

Nutrition Facts	
Portion Size	168 g
Amount Per Portion	
Calories	897
% Daily Value *	
Total Fat 71g	91 %
Saturated Fat 6.2g	31 %
Sodium 50mg	2 %
Total Carbohydrate 49g	18 %
Dietary Fiber 46g	164 %
Sugar 2.6g	
Protein 31g	62 %
Vitamin D 0.00mcg	0 %
Calcium 428.40mg	33 %
Iron 9.63mg	54 %
Potassium 1366mg	29 %
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contribute to a daily diet. 2,000 calories a day is used for general nutrition advice.	

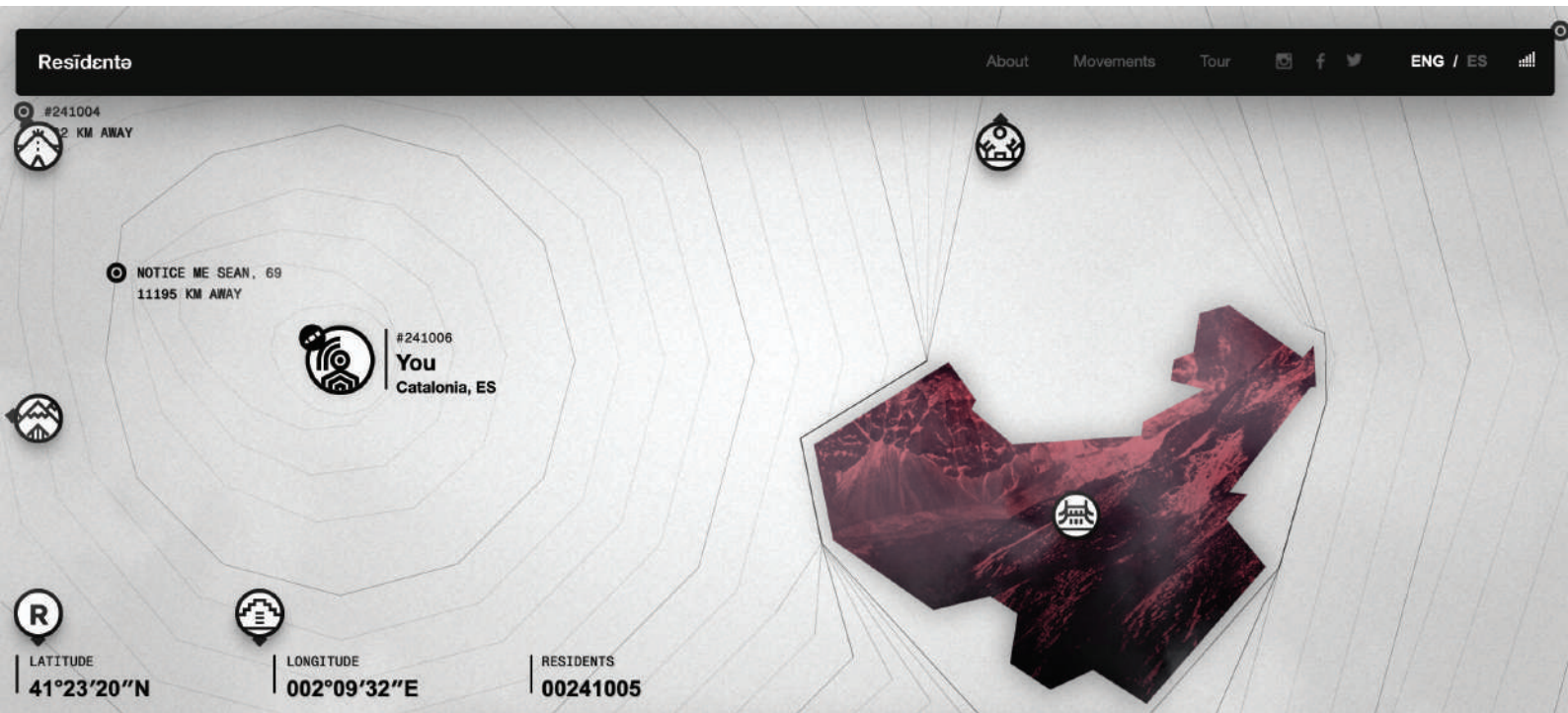


# DESIGN REFERENCES

*What inspired the project?  
Who were the great sources of inspiration?*

*It was through a combination of a love of food, video games and  
well constructed websites that the project was created.*





China rates second in world economic power. Several indicators point to it exceeding the United States by 2018. As Napoleon once said: "When China awakes, the world will tremble."

**Beijing**  
CAPITAL

**76 years**  
LIFE EXPECTANCY

**1.400 MM**  
POPULATION

**600 MM**  
MOBILE PHONES

**Communist**  
POLITICAL PARTY

**18.48%**  
SHARE OF GLOBAL GDP

# Finding ctrl:

Visions for the future internet

EXPLORE ↘



NEXT  
GENERATION  
INTERNET

## Internet timeline

INDEX ○

This timeline shows some of the internet's most important milestones so far, and speculates on where we might go next...



? How has the internet changed society?

Over the past few decades, the internet has become the most important infrastructure of our time, radically rewiring how our societies work and how we interact. We asked the BBC to find out how ordinary people feel about these changes – watch their varied answers in the video below.

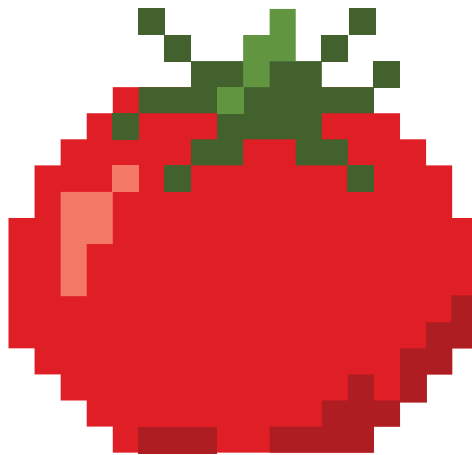












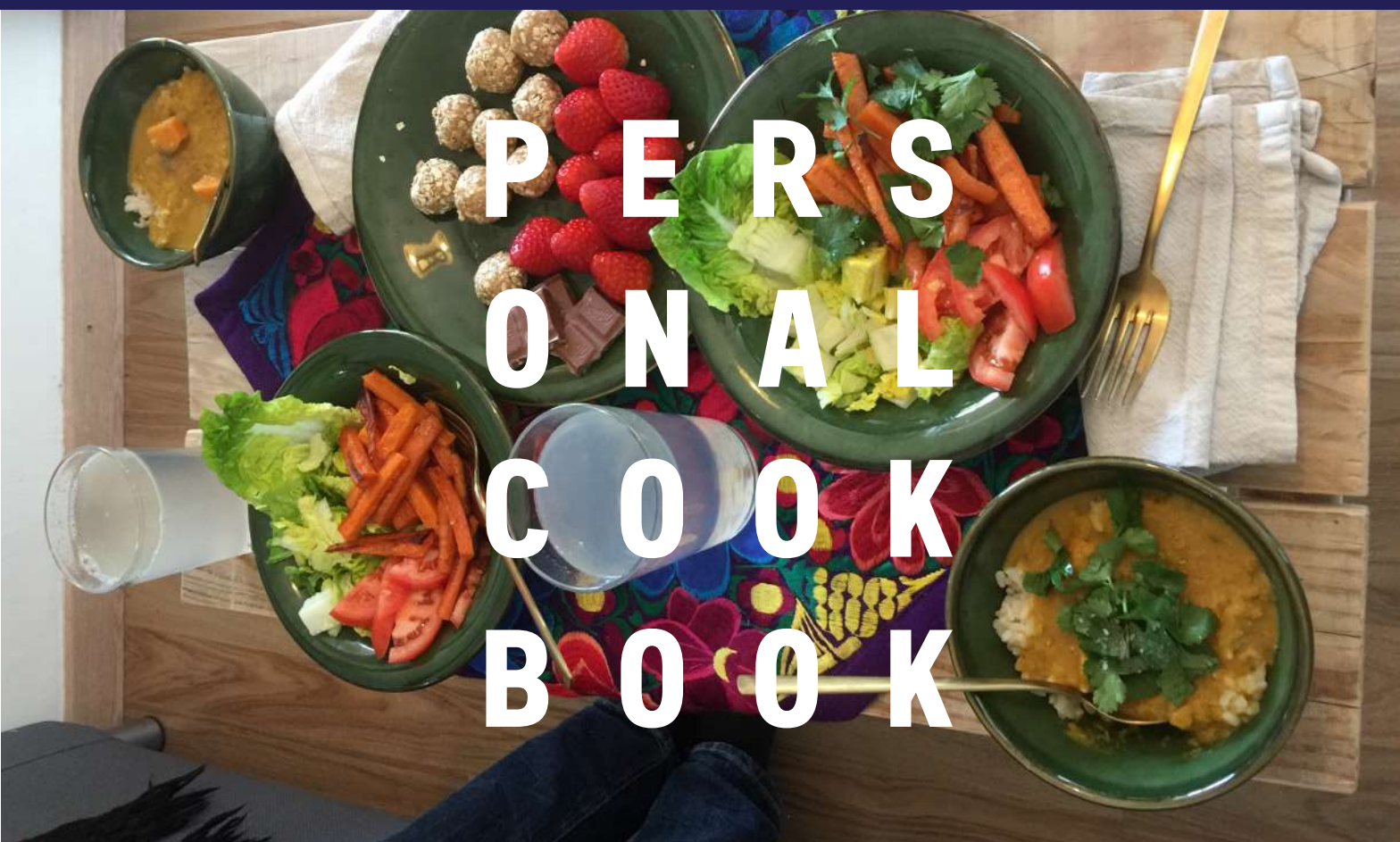
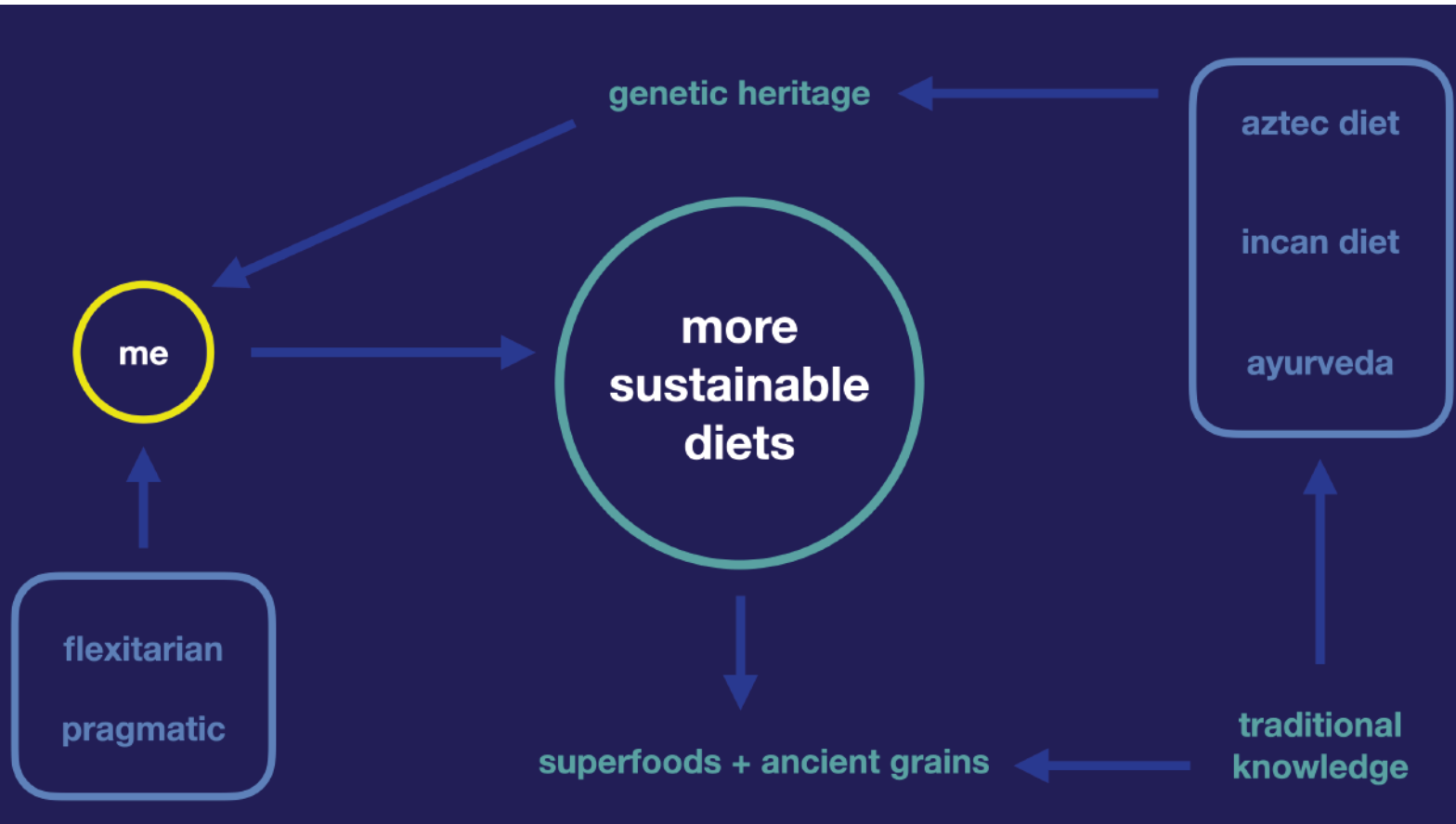
## PROCESS

*The process for the Superfood story was not straightforward.*

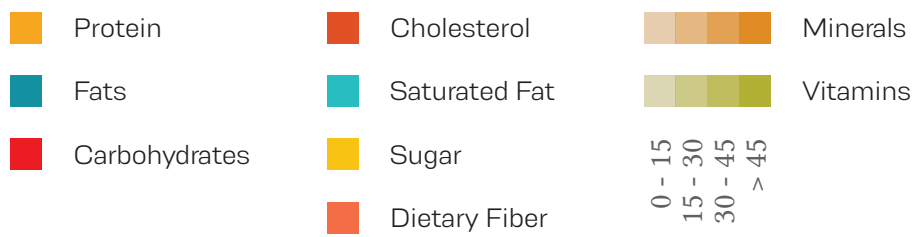
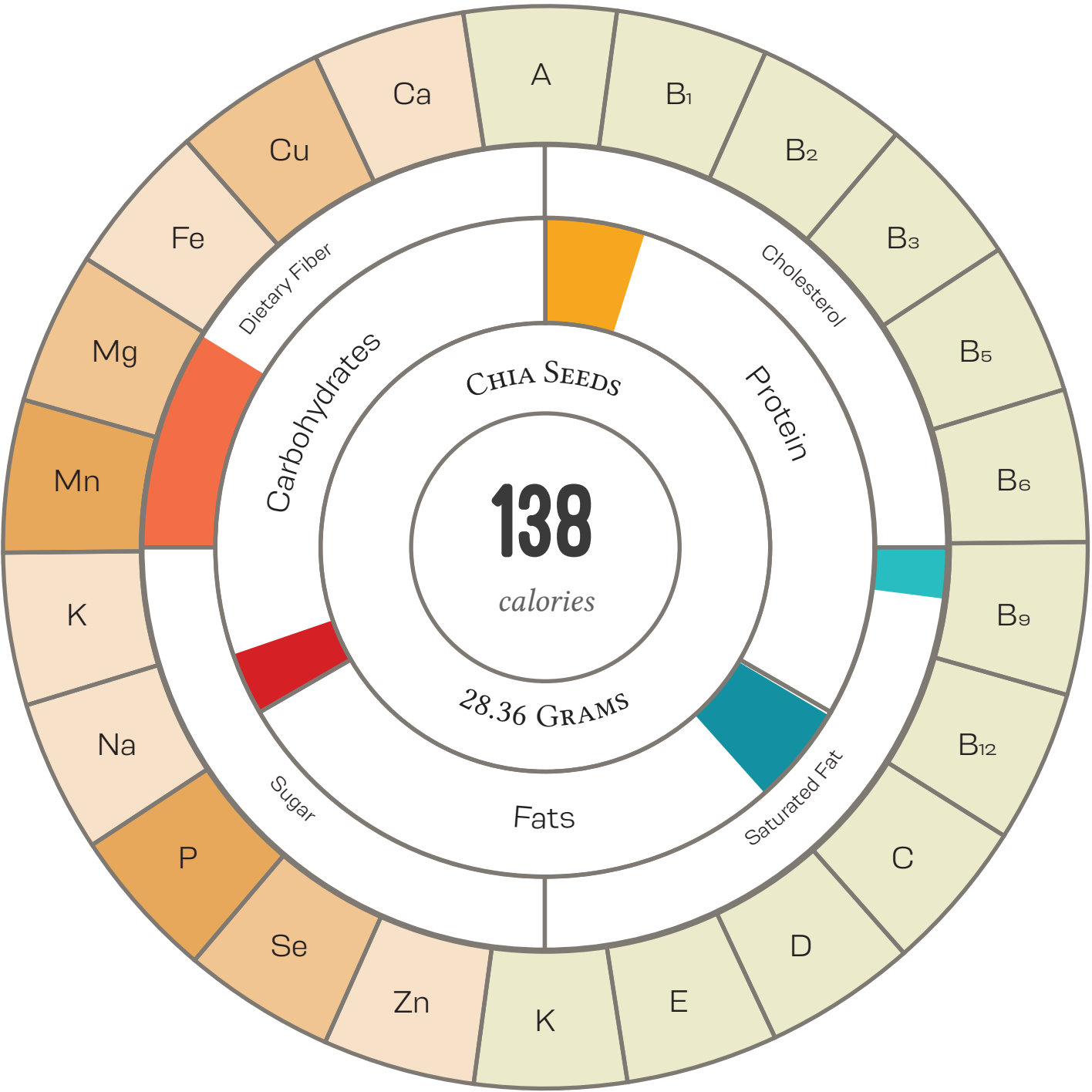
*The project was originally conceptualized as a book, then a deconstructed book, then into a website with a videogame using a simplified pixel art aesthetic.*

*Here are the trials and errors before arriving at the final version of the design.*





Original sketch for nutritional information of chia seeds.



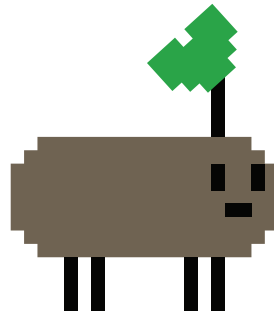
*Exploratory food photograph*



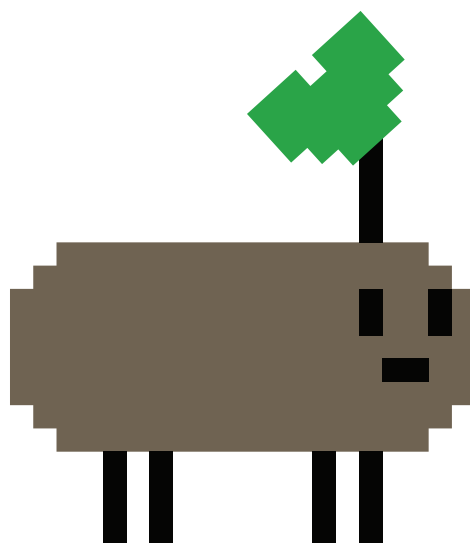
## CHOOSE YOUR SUPERFOOD !



CHIA SEED

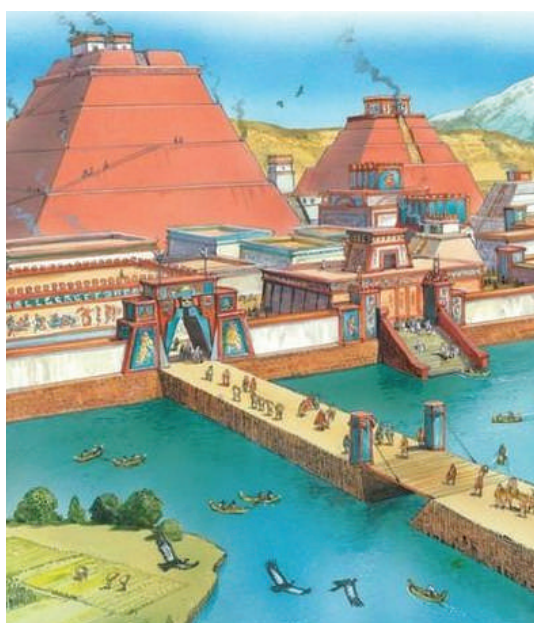
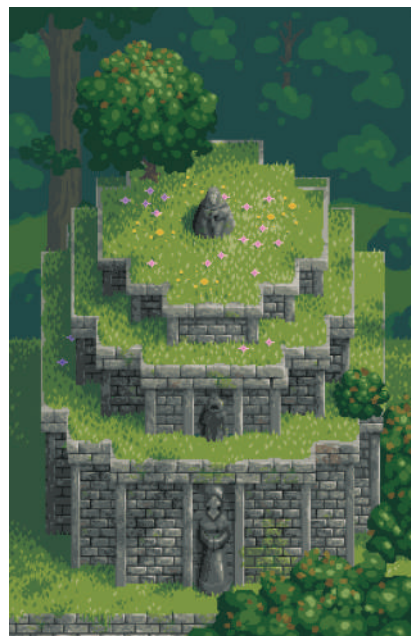
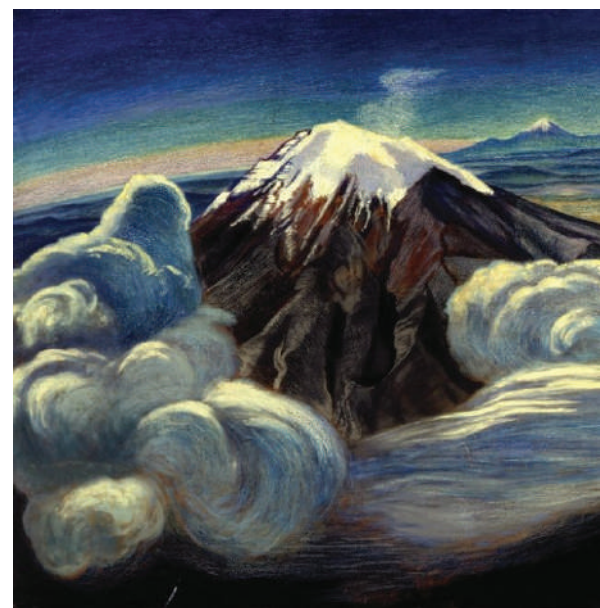
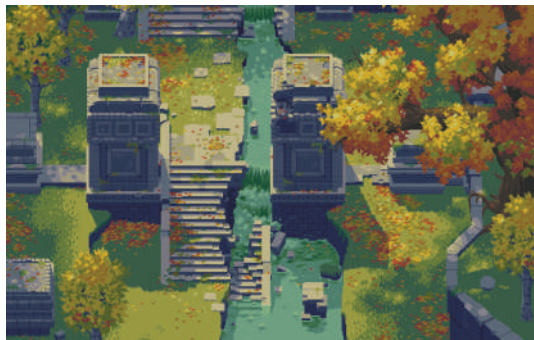
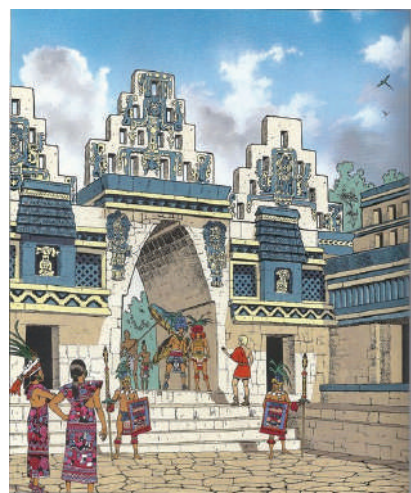
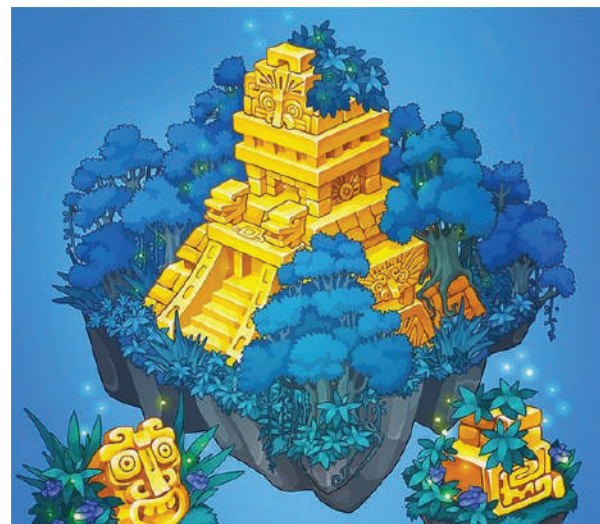
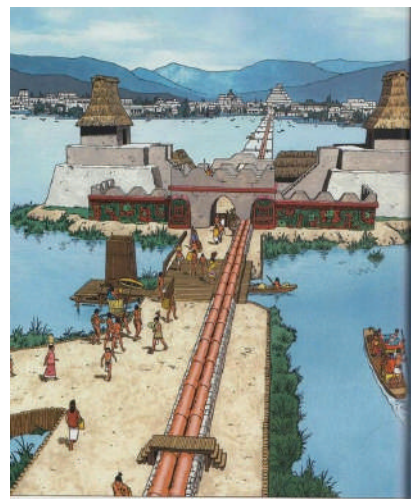


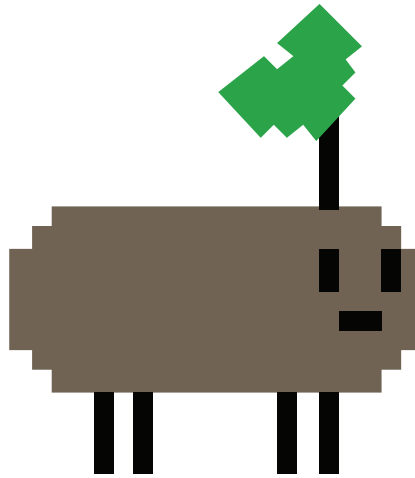
START





## Conceptual moodboards





# FINAL RESULTS

*Well, after all that work, what is the result?*

*Let's find out.*

***Article:***

*[https://ana-sifuentes.github.io/superfood\\_story/article](https://ana-sifuentes.github.io/superfood_story/article)*

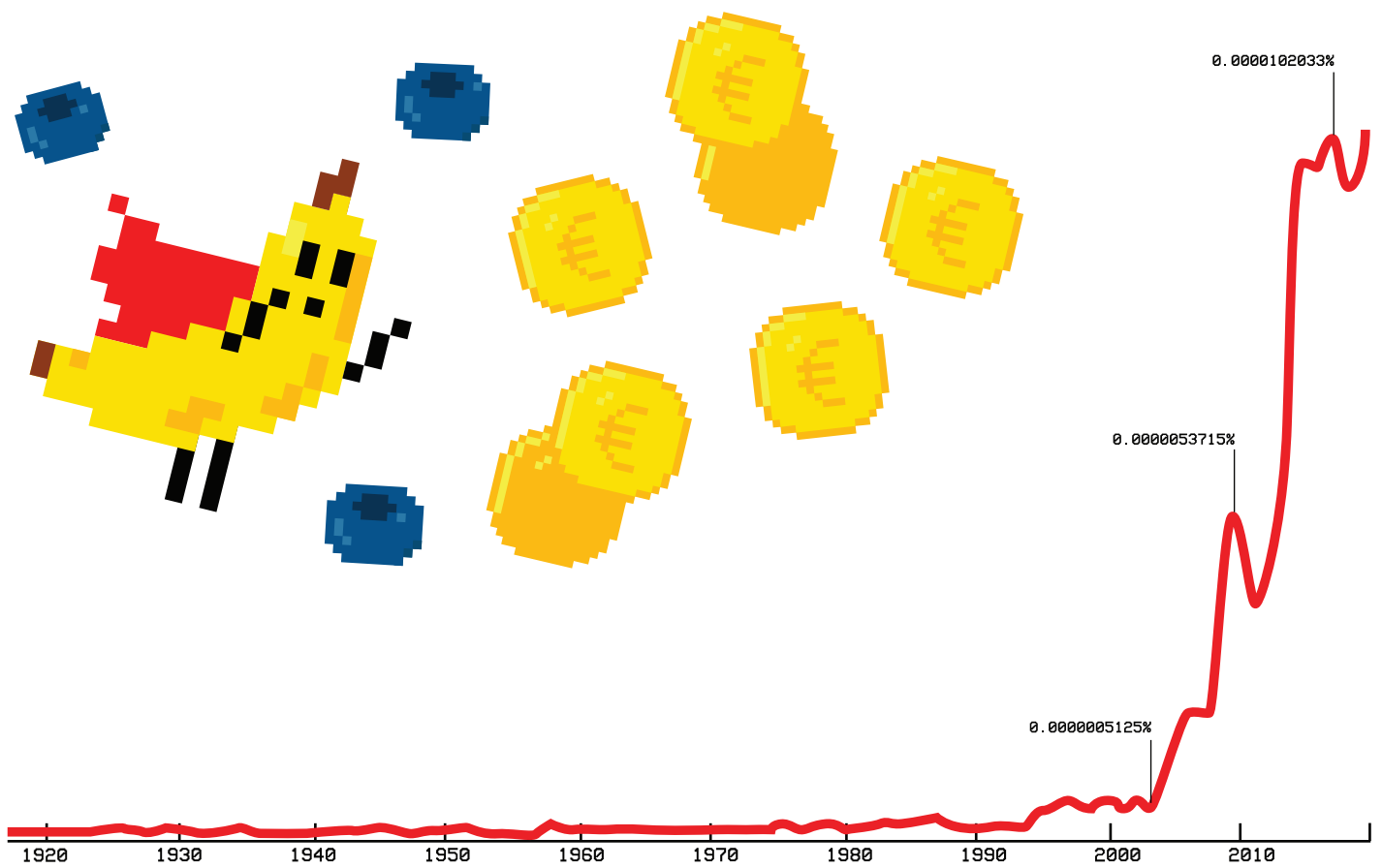
***Videogame:***

*[https://ana-sifuentes.github.io/superfood\\_story/](https://ana-sifuentes.github.io/superfood_story/)*

*Chicomecoatl, goddess of the harvest and Quetzalcoatl, god of wisdom.*



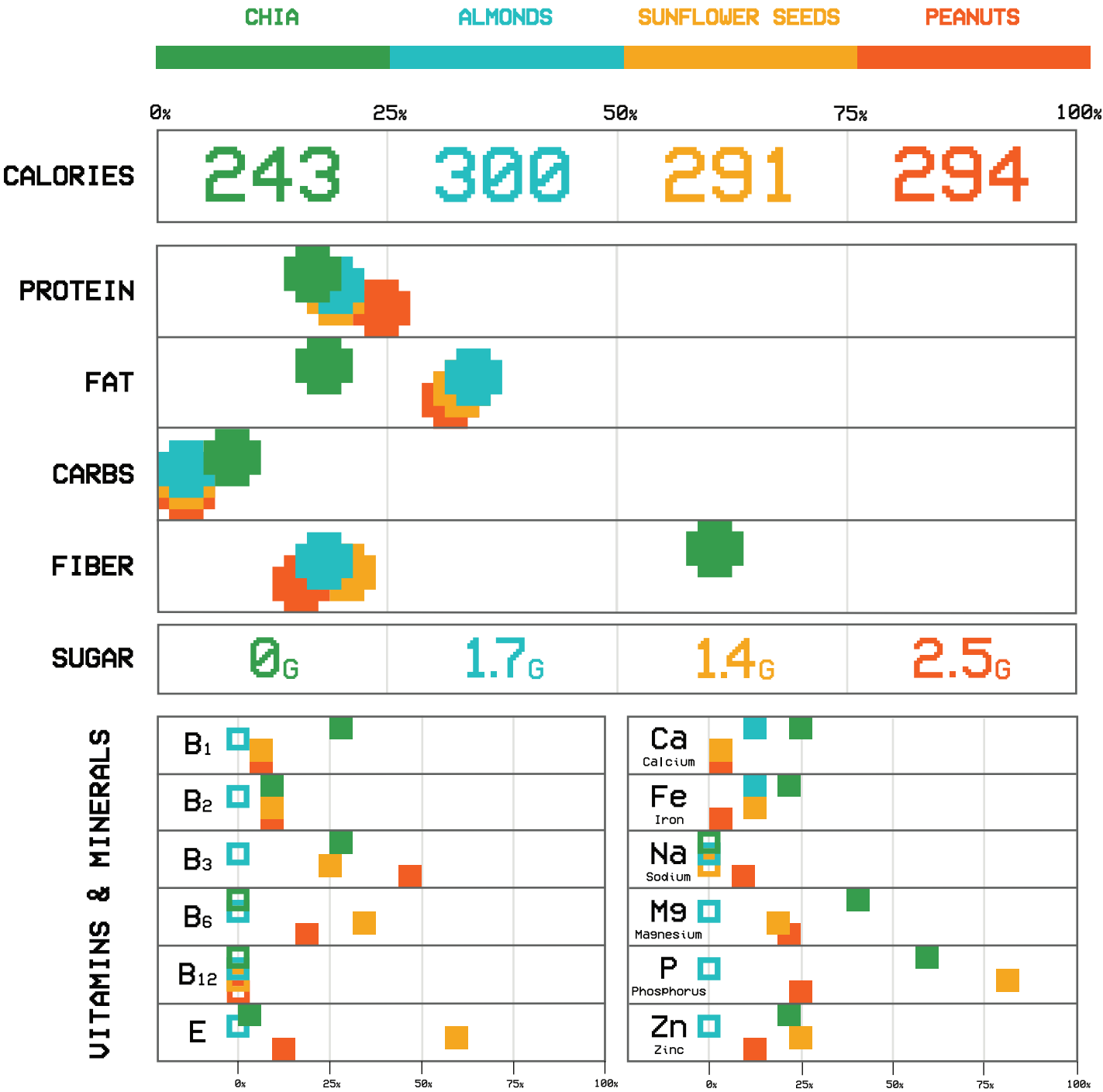
*Graph showing the increase of the term 'superfood' in media.*



**USE OF 'SUPERFOOD'**  
**(1917 - 2019) GOOGLE NGRAM**



Visualization comparing the nutritional content of chia seeds  
and other 3 similar foods.

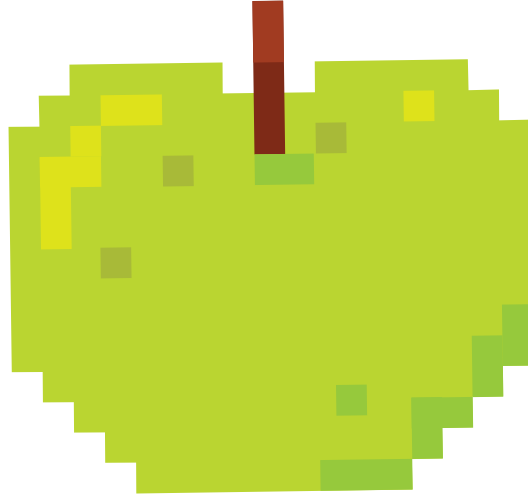


*Illustration of Moctezuma, last Aztec emperor.*



*Level from the videogame*





## CONCLUSIONS

*The goal of this project was to explore how complex food is and to see what factors influence our modern food systems.*

*While doing research it became evident that there was a very dramatic story hidden in the pages of history and that that story needed to be brought to light. Sadly, the story of chia is not unique as other foods faced similar situations due to colonization. And while we can't turn back time and change this, we can look to the future with new eyes.*

*I hope this project is fun, interesting and leaves the audience with more questions than answers.*

*Thank you!*

## Annex

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Chia Crop (*Salvia hispanica* L.): its History and Importance as a Source of Polyunsaturated Fatty Acids Omega-3 Around the World: a Review  
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