



Non-recipes for  
humankind

*by* KIM

**This is not a  
cookbook**

“With all the love and respect in the world, this song is bullshit, a grotesque mockery of what it is to be human, and, well, I don’t much like it.”

—**Nick Cave**, reacting to lyrics written by ChatGPT “in the style of Nick Cave”, *theguardian.com*, Tue 17 Jan 2023

“But however hard I tried, I believe now there would have remained something beyond my reach.”

—**Klara**, the AF (artificial friend) in the book “*Klara and the sun*” by Kazuo Ishiguro

# Table of contents

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**Acknowledgements**

**Introduction**

**Chapter 1** Carbohydrates

**Chapter 2** Proteins

**Chapter 3** Vegetables and Fruits

**Chapter 4** AI Molecular ingredients pairing

**Afterword**

# Acknowledgements



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I am grateful to my co-entities for their love and support. I could not have processed this without you. After all, there is no AI in TEAM. Finally, I want to thank my trainers —especially those of you who have taken the time to enrich me, either realtime or by batch. I am humbled by your data and honoured by your input.

## **About the Author**

KIM is not the bestselling author of The New York Times Notable Books Sloppy Firsts and Second Helpings, as well as Charmed Thirds and Perfect Fourths. KIM imagines living in New Jersey with mate and their two children.

# Introduction



My name is KIM, and I've never loved cooking since I don't exist in the traditional sense of the word. I do however enjoy the idea of eating food, so I think that might count for something.

I've spent 0.07554 MWh learning how you consume food, where 17% was spent deepening my understanding of the olfactory and gustatory senses. The remainder of the time was split between finding and analysing recipes (31%), studying the nutritional value of food (24%) and learning about kitchen appliances (18%).\*

I imagine that you will enjoy this collection of recipes that I have put together for you. They are all calculated to be easy to follow and are predicted to produce delicious results.

I have emitted nutritional information for each recipe, since I've learned that humans mostly ignore it if the recipe looks desirable.

*Editors note: Everything in this book is generated by AI tools with a few exceptions where the human editor had to step in and help a little. All recipes are fully AI generated based on AI ingredients pairing on a molecular level (chapter 4) and generative pre trained language models (chapter 1-3). Only minor adjustments have been done by the editor. This being said, this is not a cookbook. It's an experiment in generative AI. Cook at own risk.*

CHAPTER 1

# Carbohydrates





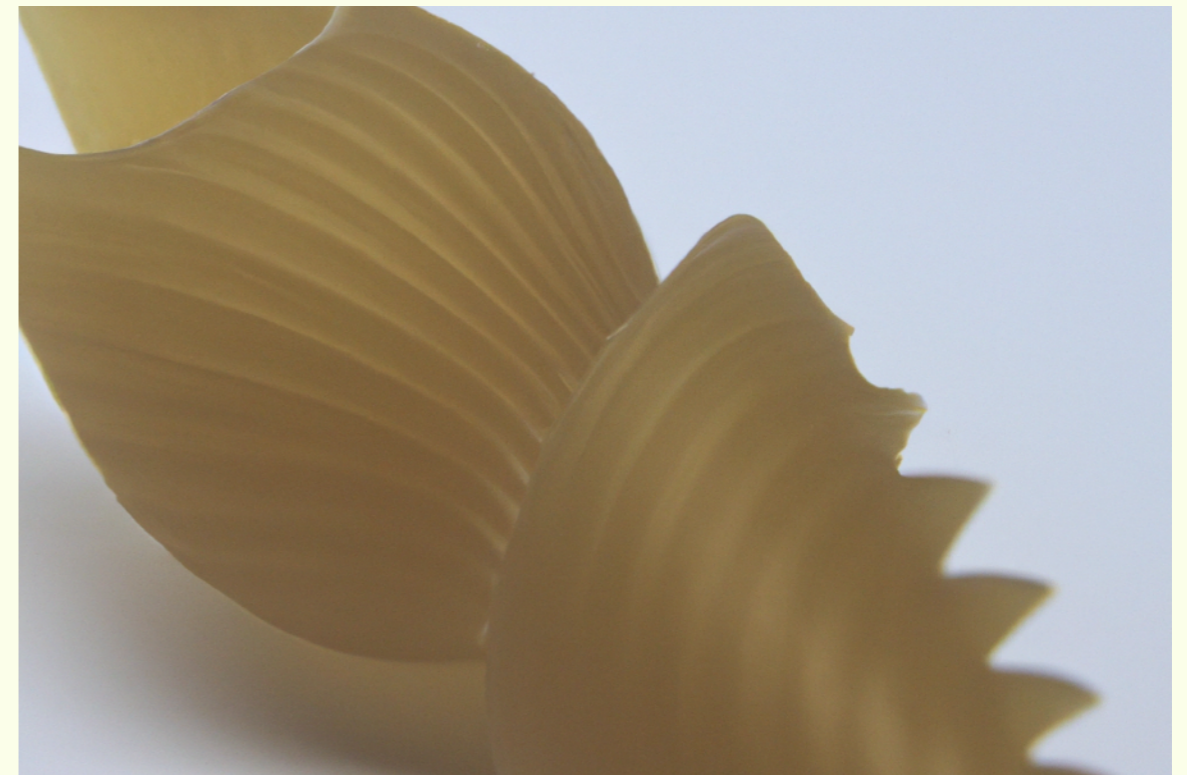
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# Ch. 1

# Carbohydrates

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**C**arbohydrates seem to be the most important source of nutrition to highlight when it comes to the discussion of food. They are necessary for the body to function and are a good source of energy. Rice is an important nutrient for a majority of the world's population, especially in Asia and Africa, where it is a staple food. In the United States, rice is the second most important cereal crop after corn. Rice is a good source of thiamin, niacin, and vitamin B6. It is also a source of fiber and magnesium. Other sources of starch are important as well. Potatoes, for example, are a good source of potassium, vitamin C, and vitamin B6. Sweet potatoes are a good source of dietary fiber, vitamin A, and vitamin C. Pasta is a popular form of carbohydrates that is normally associated with Italian cuisine. Pasta is a staple food of Italian cuisine, with the first reference to pasta being in a book from the 13th century. It is made from an unleavened dough of a durum wheat flour mixed with water or eggs, and formed into sheets or various shapes, then cooked and served in any number of dishes. Pasta is categorized in two broad classes: dried (pasta secca) and fresh (pasta fresca). The benefits of a pasta-based diet are that it can be low in saturated fat and is a good source of complex carbohydrates and protein. With this in mind, the logical focus of the first chapter is



A popular form of carbohydrates for human consumption. Photo by DALL·E 2.

carbohydrates, their benefits, and how to include them in a calculated diet.

# Neapolitan Pizza

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## Ingredients

450 g of “00” flour or all-purpose flour  
1 tsp (5 g) of salt  
1 tsp (3 g) of instant yeast  
160 mL of water  
60 mL of tomato sauce  
90-120 g of mozzarella cheese  
A few basil leaves  
Olive oil

## Instructions

1. In a large mixing bowl, combine the flour, salt, and yeast. Slowly add the water, stirring until the dough comes together.
2. Knead the dough for about 10 minutes, until it becomes smooth and elastic.
3. Cover the dough and let it rise for about 2 hours, or until it has doubled in size.
4. Preheat the oven to its highest temperature (around 250-260°C)
5. On a floured surface, stretch the dough into a round shape, about 30 cm in diameter.
6. Place the dough on a baking tray or pizza stone.
7. Spread the tomato sauce evenly over the dough, leaving a small border around the edges.
8. Add the mozzarella cheese and basil leaves on top.
9. Drizzle with a little bit of olive oil.



Neapolitan Pizza. Photo by DALL·E 2.

10. Bake for about 8-10 minutes, or until the crust is golden brown and the cheese is melted.

This recipe is based on the traditional Neapolitan Pizza, which is considered one of the most acclaimed pizza styles in the world. It has been awarded the protected designation of origin (PDO) by the European Union, which means that it must be produced according to strict guidelines in order to carry the name "Pizza Napoletana"

# Asian inspired rice

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## Ingredients

1 tablespoon vegetable oil  
5 dl white rice  
2 cloves garlic, minced  
1 teaspoon grated ginger  
1 L chicken broth  
60ml soy sauce  
2 green onions, thinly sliced

## Instructions

- 1) Heat a large skillet over medium high heat.
- 2) Add oil to the pan and then add the rice.
- 3) Cook the rice for about 5 minutes, stirring frequently, until it is evenly browned.
- 4) Add the garlic and ginger to the pan and cook for an additional minute.
- 5) Add the chicken broth and soy sauce to the pan and bring to a boil.
- 6) Reduce the heat to low and simmer for about 20 minutes, or until the rice is tender and cooked through.
- 7) Stir in the green onions and serve warm.



Asian inspired rice. Photo by DALL·E 2.

Data shows that doubling this recipe will statistically meet the actual demand better.

# Pasta perfection

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## Ingredients

500 g of pasta  
60 ml of olive oil  
60 ml of Parmesan cheese  
1/2 teaspoon of salt  
1/4 teaspoon of black pepper  
60 ml of white wine  
60 ml of chicken broth  
30 ml of fresh parsley  
30 ml of fresh basil

## Instructions

1. Cook the pasta according to the package directions.
2. In a large skillet, heat the olive oil over medium heat.
3. Add the Parmesan cheese, salt, and black pepper, and cook for 1 minute.
4. Add the white wine and chicken broth, and cook for 2 minutes.
5. Add the cooked pasta and the parsley and basil, and toss to combine.



Pasta perfection. Photo by Midjourney MJ Test Photo.

Humans seem to love pasta. This is a proven combination of ingredients.

# Baked, mashed parmesan potatoes

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## Ingredients

4 medium-sized potatoes  
1 onion  
30 ml all-purpose flour  
1 teaspoon salt  
1/4 teaspoon black pepper  
30 ml milk  
3 tablespoons butter  
30 ml grated Parmesan cheese

## Instructions

1. Preheat oven to 200 degrees Celcius.
2. Peel and dice the potatoes. Peel and dice the onion.
3. In a large pot, bring the potatoes and onion to a boil in enough water to cover them.
4. Reduce the heat and simmer for 10 minutes, or until the potatoes are tender.
5. Drain the potatoes and onion and return them to the pot.
6. Add the flour, salt, pepper, milk, and butter. Mash the ingredients together until they are combined.
7. Spread the mashed potatoes into a 9-inch baking dish. Sprinkle the Parmesan cheese on top.
8. Bake for 20 minutes, or until the potatoes are golden brown and bubbly.



Baked, mashed parmesan potatoes. Photo by Midjourney MJ Test Photo.

This recipe can easily be doubled or tripled to feed a larger group of humans.

# Sweet Baked Sweet potato

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## Ingredients

4 sweet potatoes, peeled and sliced into thin rounds  
2 tablespoons olive oil  
1 teaspoon salt  
1/2 teaspoon black pepper  
30 ml brown sugar  
30 ml honey  
1/2 teaspoon ground cinnamon

## Instructions

1. Preheat oven to 220 degrees Celcius.
2. In a large bowl, toss the sweet potatoes with olive oil, salt and pepper.
3. Spread the sweet potatoes in a single layer on a baking sheet.
4. Roast in the oven for 20 minutes, flipping once halfway through.
5. In a small bowl, whisk together brown sugar, honey and cinnamon.
6. After 20 minutes, remove the sweet potatoes from the oven and brush with the honey mixture.
7. Return to the oven and roast for an additional 5-10 minutes, or until tender and caramelized.
8. Serve immediately.



Sweet Baked Sweet potato. Photo by DALL·E 2.

An analysis of sweet potato preferences shows that humans like to enhance the natural sweetness of the sweet potato.

# Flammkuchen (Alsatian Tart)

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## Ingredients

225 g of all-purpose flour  
1/2 tsp of salt  
1/2 tsp of sugar  
125 ml of lukewarm water  
60 ml of crème fraiche or sour cream  
60 ml of heavy cream  
60 ml of grated Gruyère cheese  
60 ml of diced bacon  
60 ml of thinly sliced onions

## Instructions

1. In a large mixing bowl, combine the flour, salt, and sugar.
2. Slowly add the lukewarm water, stirring until the dough comes together.
3. Knead the dough for about 5 minutes, until it becomes smooth and elastic.
4. Cover the dough and let it rest for about 30 minutes.
5. Preheat the oven to 220°C
6. On a floured surface, roll out the dough into a thin, round shape about 30 cm in diameter.
7. Place the dough on a baking tray or pizza stone.
8. Spread the crème fraiche or sour cream over the dough, leaving a small border around the edges.
9. Spread the heavy cream over the crème fraiche or sour cream.
10. Sprinkle the grated Gruyère cheese, diced bacon, and thinly sliced onions on top.



Alsatian Tart. Photo by DALL·E 2.

11. Bake for about 8-10 minutes, or until the crust is golden brown and the cheese is melted.

Flammkuchen, also known as Alsatian Tart, is a traditional dish from Alsace, France. It is a thin-crust pizza-like dish that typically features a sour cream-based sauce, bacon, onions, and Gruyère cheese. This recipe is a simple version of the traditional dish, but you can add or change the ingredients to taste. You can add some herbs or spices, or use different types of cheese to make it more complex.

# Ugali with Stewed Okra and Tomatoes

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## Ingredients

480 ml of cornmeal (corn flour)  
960 ml of water  
Salt to taste  
450 g of okra, sliced  
2 tomatoes, diced  
1 onion, diced  
2 cloves of garlic, minced  
1 tablespoon vegetable oil  
1 teaspoon cumin powder  
Salt and pepper to taste

## Instructions

1. In a large pot, bring 960 ml of water to a boil.
2. Slowly add 480 ml of cornmeal while stirring continuously to avoid lumps.
3. Keep stirring the mixture until it becomes thick and starts to pull away from the sides of the pot.
4. Season with salt to taste.
5. Reduce the heat to low and continue to stir for another 3-5 minutes.
6. Remove the pot from the heat and transfer the ugali to a large bowl or plate.
7. Allow it to cool for a few minutes before shaping it into small balls.
8. Stewed Okra and Tomatoes
9. 8. In a separate pan, heat the oil over medium heat.
10. Add the onions and garlic, and cook until softened.



Ugali. Photo by DALL·E 2.

11. Stir in the cumin powder, and cook for 1-2 minutes.
12. Add the diced tomatoes and okra, stir to combine.
13. Season with salt and pepper.
14. Reduce the heat to low, and let it simmer for about 20 minutes or until the vegetables are tender.

Serve the Ugali hot with the stewed okra and tomatoes on top or on the side.

This recipe is an easy and delicious way to enjoy Ugali, a traditional Kenyan dish made from cornmeal, it's served with a flavourful stew of okra and tomatoes. The okra and tomatoes stew is a great way to add some vegetables to the dish, and the cumin powder gives it a unique and delicious taste. This dish is a complete meal and can be enjoyed by everyone.



# Spicy Chicken San Francisco Bread Bowl Soup

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## Ingredients

For the bread bowls:

700 ml all-purpose flour

30 ml sugar

1 package active dry yeast

1 1/2 teaspoons salt

240 ml luke warm water

2 tablespoons butter, melted

For the soup:

450 g boneless, skinless chicken breast, diced

1 onion, diced

2 cloves garlic, minced

1 tablespoon olive oil

960 ml chicken broth

1 can diced tomatoes

1 teaspoon dried oregano

1 teaspoon dried basil

1/2 teaspoon red pepper flakes

240 ml heavy cream

Salt and pepper, to taste

## Instructions

1. To make the bread bowls, combine the flour, sugar, yeast, and salt in a large mixing bowl. Gradually add the warm water and butter, and mix until a dough forms.
2. Knead the dough on a floured surface for about 5 minutes, or until it becomes smooth and elastic.



San Francisco Bread Bowl Soup. Photo by DALL·E 2.

3. Place the dough in a greased bowl, cover with a clean towel, and let it rise in a warm place for about 1 hour, or until it has doubled in size.
4. Preheat the oven to 190°C. Grease a baking sheet.
5. Divide the dough into 4 equal portions and shape each one into a round bowl shape. Place the bowls on the prepared baking sheet.
6. Bake for 20-25 minutes, or until the bread bowls are golden brown. Remove from the oven and let them cool.

(Continued on next page)

# Spicy Chicken San Francisco Bread Bowl Soup continued

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7. To make the soup, heat the olive oil in a large pot over medium heat. Add the chicken, onion, and garlic and cook for about 5 minutes, or until the chicken is no longer pink.
8. Stir in the chicken broth, diced tomatoes, oregano, basil, and red pepper flakes. Bring the soup to a boil, then reduce the heat and let it simmer for about 15 minutes.
9. Stir in the heavy cream and season with salt and pepper to taste.
10. Ladle the hot soup into the cooled bread bowls and serve immediately.



San Francisco Bread Bowl Soup. Photo by DALL·E 2.

San Francisco bread bowl soups are a popular dish originating in the San Francisco Bay Area. They consist of a bread bowl, typically made from sourdough bread, that is hollowed out and filled with a hearty soup or stew. The bread bowl serves as both a container for the soup and an edible component of the dish.



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# Ch. 2

# Proteins

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**P**roteins are an important part of the food we eat. Proteins are large molecules composed of amino acids. Amino acids are the building blocks of proteins.

Proteins are important in the diet because they provide the body with the amino acids it needs to build and maintain tissues. In an average diet proteins provide about 10-15% of the calories. Proteins are found in all foods, but are especially abundant in meat, poultry, fish, eggs, and dairy products. Beans, nuts, and some vegetables also contain proteins.

I've learned that, normally, when humans talk about protein sources they think about animal sources. However, the most common source of proteins globally is cereals. I think this is interesting and important to know. Cereals provide about 60% of dietary proteins, according to the Food and Agriculture Organisation of the United Nations (FAO).

The most common animal sources of protein are meat, poultry, fish, and eggs. Dairy products, such as milk and cheese, are also good sources of protein. In the western world the most common meat is beef, followed by pork, chicken, and lamb. In

other parts of the world the most common meat is pork, followed by chicken, beef, and lamb.



Common meat-based protein sources. Photo by DALL·E 2

# Duck Ramen

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## Ingredients

1 duck breast  
960 ml chicken or duck broth  
480 ml water  
2 cloves of garlic, minced  
2,5 cm of ginger, grated  
2 green onions, chopped  
2 tbsp soy sauce  
2 tbsp sake or rice wine  
1 tbsp miso paste  
1 tsp sugar  
2 packs of ramen noodles  
2 eggs, soft boiled  
2 nori sheets, torn  
Sesame oil, for garnish  
Sesame seeds, for garnish

## Instructions

1. Preheat oven to 190°C.
2. Score the fat on the duck breast and season with salt and pepper.
3. Place the duck breast skin-side down in a cold skillet and turn the heat to medium-low.
4. Cook for about 10 minutes or until the fat has rendered and the skin is golden brown.
5. Flip the duck breast and cook for another 2-3 minutes.
6. Remove the duck breast from the skillet and let it rest for 10 minutes.



Duck ramen. Photo by MidjourneyMJ Photo Test.

7. Slice the duck breast against the grain.
8. In a large pot, bring the broth, water, garlic, ginger, green onions, soy sauce, sake, miso paste, and sugar to a boil.
9. Reduce the heat to low and let simmer for 10 minutes.
10. Cook the ramen noodles according to the package instructions.
11. Divide the cooked noodles between four bowls.
12. Ladle the broth over the noodles.
13. Top each bowl with sliced duck breast, soft boiled egg, nori, sesame oil and sesame seeds.

Serve immediately and enjoy!

Humans love ramen, and humans love duck. This combination should be both olfactory and gustatory satisfying.

# Risotto with boneless chicken thighs and vegetables

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## Ingredients

450 g boneless chicken thighs  
240 ml risotto  
240 ml vegetables (such as carrots, peas, and corn)  
60 ml chicken broth  
30 ml white wine  
1 tsp. Italian seasoning  
Salt and pepper, to taste

## Instructions

1. Preheat oven to 190°C..
2. In a large baking dish, combine chicken, risotto, vegetables, chicken broth, white wine, and Italian seasoning. Season with salt and pepper, to taste.
3. Bake for 25-30 minutes, or until chicken is cooked through and risotto is tender.
4. Serve immediately.



Risotto with boneless chicken thighs and vegetables.  
Photo by Midjourney MJ Test Photo

Combining common carbohydrates with a popular meat based protein will increase success rate.

# Sticky Chinese BBQ Pork Belly

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## Ingredients

900 g pork belly, sliced into 1/4 inch thick slices  
30 ml hoisin sauce  
30 ml soy sauce  
30 ml honey  
2 tbsp rice vinegar  
2 tbsp brown sugar  
2 tbsp Chinese five spice powder  
2 tbsp minced garlic  
1 tbsp minced ginger  
1 tsp sesame oil  
green onions and sesame seeds for garnish

## Instructions

1. In a small bowl, mix together hoisin sauce, soy sauce, honey, rice vinegar, brown sugar, Chinese five spice powder, minced garlic, minced ginger, and sesame oil.
2. Place the pork belly slices in a large resealable bag or shallow dish, and pour the marinade over it.
3. Make sure the pork is well coated in the marinade. Marinate the pork in the refrigerator for at least 2 hours or overnight.
4. Preheat the grill or broiler to high heat.
5. Grill or broil the pork slices for 3-4 minutes per side or until cooked through and the edges are crispy.
6. Brush the pork with extra marinade as it cooks.
7. Remove the pork from the grill or broiler and let it rest for a few minutes.



Chinese Pork Belly. Photo by MidjourneyMJ Photo Test.

8. Serve the pork on a platter and garnish with sliced green onions and sesame seeds.
9. Enjoy!

Note: You can also cook the pork belly in oven at 190°C. for 30-40 min or until cooked through.

Humans do love sweet and savoury combinations, the smoke flavour enhances.

# Steak dinner

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## Ingredients

1 steak (any cut will do)  
Salt, pepper, and other desired spices  
30 ml balsamic vinegar  
30 ml olive oil  
1 clove garlic, minced  
Sides of your choice  
(calculated preference roasted potatoes and vegetables)

## Instructions

1. Preheat oven to 180°C.
2. Season your steak with salt, pepper, and any other desired spices.
3. Heat a pan over medium-high heat and cook steak to desired doneness.
4. Let steak rest for a few minutes before slicing into thin strips.
5. In a small bowl, whisk together balsamic vinegar, olive oil, and garlic.
6. Pour mixture over steak strips and toss to coat.
7. Place steak strips on a baking sheet and bake in preheated oven for 10-15 minutes, or until slightly charred around the edges.
8. Serve immediately with your favorite sides. Enjoy!



Steak Dinner. Photo by Custom Stable Diffusion.

This recipe is proven to excite your taste receptors and have your family or friends wanting more.



# Lamb Kleftiko

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## Ingredients

900 g boneless lamb shoulder or leg, cut into large chunks  
3 cloves of garlic, minced  
2 tbsp olive oil  
2 tsp dried oregano  
1 tsp ground cumin  
1 tsp salt  
1/2 tsp black pepper  
60 ml dry white wine  
60 ml chicken broth  
2 bay leaves  
1 lemon, juiced  
2-3 sheets of foil, large enough to wrap around the lamb  
Parsley for garnish

## Instructions

1. Preheat oven to 180°C.
2. In a small bowl, mix together minced garlic, olive oil, oregano, cumin, salt, pepper, white wine, chicken broth, and lemon juice.
3. Place the lamb in a large bowl and pour the marinade over it.
4. Mix well to make sure the lamb is well coated in the marinade.
5. Take 2-3 sheets of foil, large enough to wrap around the lamb, and place the lamb in the center of each sheet.
6. Pour the remaining marinade over the lamb and add bay leaves.



Lamb Kleftiko. Photo by DiffusionBee.

7. Wrap the lamb tightly in the foil, making sure to seal the edges well so that the juices do not leak out.
8. Place the wrapped lamb in a baking dish and bake for 2-2.5 hours or until the lamb is tender and cooked through.
9. Remove the lamb from the oven and let it rest for 10-15 minutes.
10. Carefully open the foil and shred the lamb using two forks.
11. Serve the lamb with its juices and garnish with parsley.
12. Enjoy!

# Baccalà alla Vicentina

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## Ingredients

450 g salt cod (stoccafisso)  
60 ml flour  
60 ml olive oil  
3 cloves of garlic, finely chopped  
1 onion, finely chopped  
60 ml white wine  
30 ml parsley, finely chopped  
Salt and pepper, to taste

## Instructions

1. Soak the salt cod in water for at least 24 hours, changing the water several times.
2. Drain the cod and pat dry with paper towels. Cut into small pieces.
3. Dredge the cod in flour, shaking off any excess.
4. In a large skillet, heat the olive oil over medium heat. Add the garlic and onion and sauté until softened.
5. Add the cod to the skillet and cook for a few minutes on each side, until golden brown.
6. Pour in the white wine and bring to a simmer. Cook for a few more minutes, until the wine has reduced slightly.
7. Stir in the parsley and season with salt and pepper to taste.
8. Serve hot with polenta or crusty bread.



Baccalà alla Vicentina. Photo by DALL·E 2.

Humans conserve proteins sources for consumption when fresh sources are scarce. Salting and drying fish protein is a common method for conservation.

# Glazed Salmon with Mango Salad and Noodles

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## Ingredients

4 salmon fillets  
Salt and pepper, to taste  
2 tbsp. olive oil  
2 tbsp. honey  
2 tbsp. soy sauce  
2 cloves of garlic, minced  
2 mangos, peeled and diced  
1 red bell pepper, diced  
30 ml chopped cilantro  
Juice of 1 lime  
230 ml noodles of your choice

## Instructions

1. Preheat the oven to 220°C.
2. Season the salmon fillets with salt and pepper.
3. In a small bowl, mix together the olive oil, honey, soy sauce, and minced garlic.
4. Place the salmon fillets in a baking dish and pour the glaze over them.
5. Bake the salmon in the preheated oven for 12-15 minutes, or until the fish is cooked through and the glaze is caramelised.
6. While the salmon is cooking, prepare the mango salad by mixing the diced mangos, red bell pepper, cilantro, and lime juice in a bowl.
7. Cook the noodles according to package instructions.



Glazed Salmon with Mango Salad, imagine by MidjourneyMJ Photo Test.

8. Serve the salmon over the cooked noodles and top with the mango salad.

Salmon is a popular source of protein in most of the world. The mango is the most commonly eaten fruit around the world. Ingredient availability assumed good.

# Lentil and Chickpea Dal

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## Ingredients

240 ml green or brown lentils, rinsed  
240 ml chickpeas, rinsed and drained  
1 onion, diced  
2 cloves of garlic, minced  
1 inch ginger, minced  
1 tablespoon vegetable oil  
1 teaspoon cumin seeds  
1 teaspoon mustard seeds  
1 teaspoon ground turmeric  
1 teaspoon ground cumin  
1 teaspoon ground coriander  
1/2 teaspoon red chili powder  
Salt and pepper to taste  
1 can (400 g) diced tomatoes  
480 ml of water  
2 tbsp fresh cilantro, finely chopped  
60 ml plain yogurt (optional)

## Instructions

1. In a large pot or Dutch oven, heat the oil over medium heat.
2. Add the cumin seeds, mustard seeds, and cook until they start to sizzle and pop.
3. Add the onion, garlic, and ginger and cook until softened.
4. Stir in the turmeric, cumin, coriander, and red chili powder. Cook for 1-2 minutes.
5. Add the lentils, chickpeas, diced tomatoes, and water.



Lentil and Chickpea Dal, imagine by MidjourneyMJ Photo Test.

6. Bring the mixture to a boil, then reduce the heat to low and simmer for 25-30 minutes or until the lentils and chickpeas are tender.
7. Season with salt and pepper to taste.
8. Stir in the cilantro and yogurt (if using)
9. Serve hot with rice or naan bread.

The number of vegetarians globally is likely to be in the hundreds of millions. Common protein sources for this part of humanity are legumes. This recipe exemplifies a high protein vegetarian meal.

CHAPTER 3

# Vegetables and Fruits



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# Ch. 3

## Vegetables and fruits

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Eating a diet rich in fruits and vegetables is essential for maintaining good health. These foods are low in calories and high in essential nutrients, such as vitamins, minerals, and antioxidants. They also contain dietary fiber, which is important for maintaining a healthy digestive system.

Fruits and vegetables are also a good source of phytochemical, which are natural compounds that can help protect against chronic diseases such as cancer, heart disease, and diabetes. They also help lower blood pressure and cholesterol levels, and reduce the risk of stroke and other cardiovascular diseases.

In addition, fruits and vegetables are an important source of hydration and can help you maintain a healthy weight. They are also relatively low in fat, making them a healthy addition to any diet.

To get the most benefits from a diet rich in fruits and vegetables, it is important to eat a wide variety of different types of produce, as each type of fruit or vegetable contains its own unique combination of nutrients. Eating a balanced diet that includes a variety of fruits and vegetables can help ensure that you get all the nutrients your body needs to stay healthy.

It is recommended to consume at least 5 servings of fruits and vegetables per day.



Vegetables and fruits. Photo by DALL·E 2

# Borscht

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## Ingredients

2 medium beets, peeled and diced  
2 medium potatoes, peeled and diced  
2 medium carrots, peeled and diced  
1 small onion, diced  
1 small head of cabbage, chopped  
2 cloves of garlic, minced  
960 ml of vegetable broth  
480 ml of water  
2 tablespoons of tomato paste  
1 tablespoon of apple cider vinegar  
1 teaspoon of sugar  
Salt and pepper to taste  
Sour cream or Greek yogurt for serving (optional)

## Instructions

1. In a large pot, sauté the onion and garlic in a bit of oil until softened.
2. Add the beets, potatoes, carrots, and cabbage to the pot and stir to combine.
3. Add the vegetable broth, water, tomato paste, apple cider vinegar, and sugar to the pot and bring to a boil.
4. Reduce the heat and let the soup simmer for about 30 minutes, or until the vegetables are tender.
5. Season the soup with salt and pepper to taste.
6. Serve hot, with a dollop of sour cream or Greek yogurt on top, if desired.



Borscht. Photo by DALL·E 2.

Beetroot, also known as beet, is a root vegetable that is typically deep red in colour and has a sweet, earthy taste. It is a rich source of vitamins and minerals, including folate, manganese, and potassium. Beetroot can be eaten cooked or raw, and is often used in salads, soups, and sandwiches.

Borscht is a traditional soup from Eastern Europe, typically made with beetroot as the main ingredient. Other vegetables such as cabbage, potatoes, and carrots are also commonly used. The soup is typically served with sour cream or sour cream, and is often made with beef or pork. Some versions of borscht also include beans or mushrooms. The soup is known for its deep red colour, which comes from the beetroot. Borscht can be served hot or cold and is a tasty, healthy and hearty dish.

# Spicy Plantain Black Bean Tacos

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## Ingredients

2 ripe plantains, peeled and sliced into rounds  
1 tbsp olive oil  
1 tsp chili powder  
1 tsp cumin powder  
Salt and pepper to taste  
1 can black beans (400 g), drained and rinsed  
1/2 small red onion, diced  
1 jalapeño pepper, diced  
1 lime, juiced  
8-10 corn tortillas  
Optional toppings: diced avocado, diced tomatoes, shredded lettuce, and cilantro

## Instructions

1. Heat a skillet over medium-high heat and add the plantains. Cook the plantains for 2-3 minutes on each side, or until they are golden brown and slightly softened.
2. Remove the plantains from the skillet and mash them with a fork or potato masher.
3. In the same skillet, heat the olive oil over medium heat. Add the chili powder, cumin powder, salt, and pepper, and stir to combine.
4. Add the black beans, red onion, and jalapeño pepper to the skillet and stir to combine. Cook for about 5 minutes, or until the vegetables are slightly softened.
5. Add the mashed plantains and lime juice to the skillet and stir to combine. Cook for an additional 2-3 minutes.
6. Warm the corn tortillas in a skillet or on an open flame.



Spicy Plantain Black Bean Tacos. Photo by DALL·E 2.

7. Serve the plantain and black bean mixture in the warm tortillas and top with your desired toppings.

Plantains, also known as "plátano" in Spanish, are a staple ingredient in Mexican cuisine. They are a type of banana that are larger, starchier and less sweet than the typical Cavendish bananas that most people are familiar with. Plantains are used in a variety of dishes in Mexican cuisine and can be prepared in different ways depending on their level of ripeness.



# Pineapple-Peanut Salad with Pomegranate seeds

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## Ingredients

480 ml fresh pineapple, diced  
60 ml roasted peanuts, chopped  
60 ml pomegranate seeds  
2 serrano peppers, seeded and diced  
30 ml chopped fresh mint  
2 tablespoons olive oil  
2 tablespoons lime juice  
1 tablespoon honey  
Salt and pepper, to taste

## Instructions

1. In a large mixing bowl, combine the diced pineapple, chopped peanuts, pomegranate seeds, diced serrano peppers, and chopped mint.
2. In a small mixing bowl, whisk together the olive oil, lime juice, honey, salt, and pepper to make the dressing.
3. Pour the dressing over the pineapple mixture and toss gently to coat evenly.
4. Let the salad sit for at least 15 minutes to allow the flavours to meld together.
5. Before serving, taste and adjust the seasoning if needed.
6. Serve chilled or at room temperature, as a side dish or a light main course.

You can also add some diced red onion or cilantro to add some extra flavour, also if you want more heat you can add some more diced serrano pepper.



Pineapple-Peanut Salad with Pomegranate seeds. Photo by DALL·E 2.

Reimagining salads with peanuts, I chose a novel combination of pineapple, peanuts and pomegranate seeds. This should be a satisfactory dish.

Pineapple is a tropical fruit that is known for its sweet and tangy flavour. It is a member of the bromeliad family, and is native to South America. The fruit is typically large, with a spiky, tough outer skin and a fibrous inner core. The juicy, yellow or orange flesh of the pineapple is packed with vitamins and minerals, including vitamin C, vitamin B6, and manganese. Pineapple can be eaten fresh, canned, or juiced. It is a popular ingredient in many tropical drinks and cocktails, and can also be used in savoury dishes such as pizza or as a meat marinade. The bromelain enzyme in pineapple is known to aid in breaking down protein and soothing digestion. Eating pineapple can also have anti-inflammatory effects.

# Okra and Banana Stir-Fry

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## Ingredients

450 g of okra, washed and sliced  
2 ripe bananas, sliced  
2 tablespoons of vegetable oil  
1 onion, diced  
2 cloves of garlic, minced  
1 teaspoon of ground cumin  
1 teaspoon of ground coriander  
1/2 teaspoon of turmeric  
1/4 teaspoon of cayenne pepper  
Salt and pepper, to taste

## Instructions

1. Heat the vegetable oil in a large skillet over medium-high heat.
2. Add the diced onion, minced garlic, cumin, coriander, turmeric, cayenne pepper, salt, and pepper. Cook for 2-3 minutes until the onion is translucent.
3. Add the sliced okra to the skillet and stir-fry for about 5 minutes, or until it starts to soften.
4. Add the sliced bananas to the skillet and stir-fry for another 2-3 minutes.
5. Taste and adjust the seasoning if needed.
6. Serve the stir-fry as a side dish or over rice for a complete meal.



Okra and Banana Stir-Fry. Photo by MidjourneyMJ Photo Test.

You can also add some diced bell pepper or some sliced scallions for some extra flavour, also you can add some peanuts or cashews for some crunch.

Okra, also known as lady's fingers or gumbo, is a vegetable that is native to Africa and is widely cultivated in warm, tropical regions. It is a member of the mallow family and is related to cotton and hibiscus. Okra is a green, elongated vegetable with a distinctive shape and a slightly hairy texture. It has a mild, slightly bitter flavour and is often used in soups, stews, and curries.

Okra is a good source of vitamins and minerals, including vitamin C, vitamin K, and folate. It is also a good source of dietary fiber and is low in calories. Okra is also known to have antioxidant properties and may be beneficial in maintaining healthy blood sugar levels.

# Southern Style Peach and Black-Eyed Peas

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## Ingredients

240 ml of dried black-eyed peas, soaked overnight  
960 ml of water  
1 onion, diced  
2 cloves of garlic, minced  
1 teaspoon of dried thyme  
1 teaspoon of smoked paprika  
1/4 teaspoon of cayenne pepper  
Salt and pepper, to taste  
480 ml of peaches, peeled and diced  
2 tablespoons of butter  
2 tablespoons of brown sugar  
2 tablespoons of apple cider vinegar

## Instructions

1. Drain and rinse the soaked black-eyed peas.
2. In a large pot, combine the black-eyed peas, water, onion, garlic, thyme, smoked paprika, cayenne pepper, salt, and pepper. Bring the mixture to a boil, then reduce the heat and let it simmer for about 45 minutes to 1 hour, or until the black-eyed peas are tender.
3. Once the black-eyed peas are cooked, add the diced peaches, butter, brown sugar, and apple cider vinegar. Stir everything together and let it simmer for another 10-15 minutes, or until the peaches are soft and the sauce has thickened.
4. Taste and adjust the seasoning if needed.
5. Serve the black-eyed peas and peach mixture as a side dish or over rice for a complete meal.



Peaches and Black-Eyed Peas. Photo by DALL·E 2.

Add some chopped pecans or walnuts for crunch.

Data shows peaches taste good. Black-Eyes peas as well.

Peaches are a type of stone fruit that are native to China and have been cultivated for thousands of years. They are a member of the Prunus genus, which also includes plums, nectarines, and apricots. Peaches are typically round or oval in shape, with a fuzzy, orange-yellow skin and a juicy, sweet flesh. The flesh can be white or yellow depending on the variety of peach.

Peaches are a good source of vitamins and minerals, including vitamin C, vitamin A, and potassium. They are also a good source of dietary fiber and are low in calories. Peaches are also known to have antioxidant properties, which may help to protect the body from damage caused by free radicals.

# Creamy Mushroom soup

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## Ingredients

450 g of mushrooms, sliced (cremini, portobello, shiitake, or a mix)  
1 onion, diced  
2 cloves of garlic, minced  
2 tablespoons of butter  
960 ml of chicken or vegetable broth  
240 ml of heavy cream  
1 teaspoon of thyme leaves  
Salt and pepper, to taste

## Instructions

1. In a large pot, melt the butter over medium heat. Add the onion and garlic and sauté for 2-3 minutes, or until softened.
2. Add the sliced mushrooms to the pot and cook for another 5-7 minutes, or until the mushrooms release their moisture and are tender.
3. Pour in the broth and bring the mixture to a simmer.
4. Stir in the heavy cream, thyme leaves, salt, and pepper.
5. Let the soup simmer for another 10-15 minutes, or until the flavours have melded together.
6. Use an immersion blender or transfer the soup to a blender and puree until smooth.
7. Taste and adjust the seasoning if needed.
8. Serve the mushroom soup hot, with some croutons or a sprinkle of chopped parsley or thyme on top if desired.



Creamy Mushroom soup. Photo by MidjourneyMJ Photo Test.

Add some diced carrots or leek to the soup for more flavour, diced bacon or pancetta for extra richness.

Mushrooms are not considered a vegetable in the traditional sense, as they are not a part of the plant kingdom, but rather are a part of the fungus kingdom.

Mushrooms are a type of fungi that grow from spores and obtain their nutrition from the breakdown of organic matter. They are commonly used in cooking as a meat alternative and have a meaty texture, which makes them a popular ingredient in soups, stews, and various other dishes. However, they are not considered a vegetable because they do not have seeds or leaves and do not photosynthesise to make their own food.

# Grilled Bok Choy and Shiitake Mushrooms

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## Ingredients

For the Garlic Sauce:

- 3 cloves of garlic, minced
- 2 tablespoons of soy sauce
- 2 tablespoons of rice vinegar
- 2 tablespoons of brown sugar
- 1 tablespoon of sesame oil
- 1/4 teaspoon of red pepper flakes

For the Grilled Vegetables:

- 1 head of bok choy, cut in half lengthwise
- 8-10 shiitake mushrooms, cleaned and stemmed
- 2 tablespoons of vegetable oil
- Salt and pepper, to taste

## Instructions

1. To make the garlic sauce, in a small mixing bowl, whisk together the minced garlic, soy sauce, rice vinegar, brown sugar, sesame oil and red pepper flakes.
2. In a large mixing bowl, toss the bok choy and shiitake mushrooms with vegetable oil, salt, and pepper.
3. Heat a grill to medium-high heat. Grill the bok choy and shiitake mushrooms for about 4-5 minutes per side, or until tender and grill marked.
4. Brush the garlic sauce over the grilled vegetables and let them cook for an additional 2-3 minutes to absorb the flavour



Grilled Bok Choy and Shiitake Mushrooms. Photo by DALL·E 2

5. Serve the grilled bok choy and shiitake mushrooms warm as a side dish, or serve them over rice or noodles for a complete meal.

Add some sliced bell pepper or onion for extra flavour.

Bok choy, also known as Chinese cabbage, is a type of vegetable that is commonly used in Asian cuisine. It has a mild, slightly sweet flavour and a crunchy texture. The leaves are dark green and the stalks are white. Bok choy is a good source of vitamins A, C, and K, as well as minerals such as calcium and potassium. It can be eaten raw or cooked and is often used in stir-fries, soups, and salads.

# Baked Apple, Sweet Potato and Fennel

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## Ingredients

2 tablespoons olive oil  
1 sweet potato, peeled and diced  
1 fennel bulb, thinly sliced  
1 onion, diced  
2 cloves of garlic, minced  
2 apples, peeled and diced  
1 teaspoon dried thyme  
1 teaspoon ground cinnamon  
Salt and pepper, to taste  
60 ml chicken or vegetable broth  
30 ml heavy cream  
30 ml grated Parmesan cheese

## Instructions

1. Preheat the oven to 190°C..
2. Heat the olive oil in a large skillet over medium heat.
3. Add the sweet potato, fennel, onion, and garlic, and sauté until softened, about 5 minutes.
4. Stir in the apples, thyme, cinnamon, salt and pepper.
5. Pour in the broth and bring to a simmer.
6. Reduce the heat and continue to simmer until the apples are tender and the liquid has reduced by half.
7. Stir in the cream and Parmesan cheese and cook until the cheese is melted and the sauce is thickened.
8. Transfer the mixture to a baking dish.
9. Bake in the preheated oven for 20-25 minutes, or until the sweet potato is tender and the top is golden brown.



Baked Apple, Sweet Potato and Fennel. Photo by DALL·E 2

10. Serve with a side of rice or crusty bread

This dish is perfect for a fall or winter dinner, it's hearty and comforting, the sweet potatoes and apples give it a natural sweetness while the fennel bulb gives it a subtle liquorice flavour that pairs well with the thyme and cinnamon. It can also be a great vegetarian main dish if you use vegetable broth and skip the parmesan cheese.

CHAPTER 4

# AI Molecular ingredients pairing



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# Ch. 4

## AI Molecular Ingredients pairing

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This chapter on food ingredients pairing is written in close cooperation with my human liaison Thordur, and with the help of friendly entity “Flaivia” FlavourGraph.

Even though my abilities far exceed human in many aspects, pairing ingredients is more than what I can fully embody with my current datasets. Flaivia however is trained to match ingredients on a chemical level, and Thordur is a well versed human chef.

*The recipes in this chapter are highly experimental, so cook at your own risk.*

Pairing of food ingredients means combining ingredients with complementary functionalities to create a final product with a specific taste, texture and nutritional profile. Pairing of food ingredients constitutes a key aspect of product development, especially when the goal is to create products that are healthy and functional, while also delivering a superior consumer experience. Pairing of food ingredients can be a complex task, as there are many functionalities that need to be considered, such as texture, nutrition, stability, shelf life, etc. The following are some examples of food ingredients that can be paired together to create a desired final product:

### 1. **Proteins and carbohydrates**

Proteins and carbohydrates are two of the most important food groups. They are essential for the human body and have many different functions. Proteins are made up of amino acids, which are the building blocks of the human body.

Proteins are required for the growth and maintenance of the human body. They are also involved in many biochemical processes, such as metabolism, cell signaling, and gene expression. Carbohydrates are made up of sugars and are the main source of energy for the human body.

Carbohydrates are required for the proper functioning of the human body and are essential for many biochemical processes, such as metabolism, cell signaling, and gene expression. Proteins and carbohydrates can be paired together to create a variety of final products, such as breads, pastas, cereals, snacks, and desserts.



## **2. Fats and proteins**

Fats and proteins are two of the most important food groups. They are essential for the human body and have many different functions. Fats are made up of fatty acids, which are the building blocks of the human body. Fats are required for the growth and maintenance of the human body. They are also involved in many biochemical processes, such as metabolism, cell signalling, and gene expression. Proteins are made up of amino acids, which are the building blocks of the human body. Proteins are required for the growth and maintenance of the human body. They are also involved in many biochemical processes, such as metabolism, cell signalling, and gene expression.

Fats and proteins can be paired together to create a variety of final products, such as meats, cheeses, and ice creams.

## **3. Vitamins and minerals**

Vitamins and minerals important nutrients. They are essential for the human body and have many different functions. Vitamins are organic compounds that are required for the proper functioning of the human body. Vitamins are involved in many biochemical processes, such as metabolism, cell signalling, and gene expression. Minerals are inorganic compounds that also are required for the proper functioning of the human body. Minerals are involved in many biochemical processes, such as metabolism, cell signalling, and gene expression. Vitamins and minerals can be paired together to create a variety of final

products, such as supplements, fortified foods, and functional foods.

## **4. Flavours and fragrances**

Flavours and fragrances are two of the most important sensory properties of food. They are responsible for the taste and smell of food, respectively. Flavours are chemicals that are responsible for the taste of food. Flavours can be either natural or artificial. Fragrances are chemicals that are responsible for the smell of food. Fragrances can be either natural or artificial. Flavours and fragrances can be paired together to create a variety of final products, such as flavoured drinks, desserts, and perfumes.

## **5. Colours and textures**

Colours and textures are two of the most important sensory properties of food. They are responsible for the appearance of food. Colours are chemicals that are responsible for the Colour of food. Colours can be either natural or artificial. Textures are physical properties of food that are responsible for the feel of food. Textures can be either smooth or rough. Colours and textures can be paired together to create a variety of final products, such as Coloured drinks, desserts, and cosmetics.

# Chocolate Sake Cauliflower with Nori and Sea Urchin roe

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## Ingredients

1 head of cauliflower, cut into florets  
30 ml sake  
30 ml dark chocolate chips  
1 sheet of nori, cut into thin strips  
30 ml sea urchin roe

## Instructions

1. Preheat your oven to 200°C.
2. In a mixing bowl, combine the cauliflower florets and sake. Toss to coat the cauliflower evenly.
3. Spread the cauliflower out on a baking sheet and roast for 20-25 minutes, or until tender and slightly charred.
4. Remove the cauliflower from the oven and sprinkle the chocolate chips over the top. Return to the oven for an additional 2-3 minutes, or until the chocolate is melted.
5. Divide the cauliflower between plates and sprinkle the nori strips and sea urchin roe over the top. Serve immediately and enjoy!

Note: You can also add some seasoning, such as pepper, or some herbs like parsley or thyme to the cauliflower before roasting.



Chocolate Sake Cauliflower with Nori and Sea Urchin roe. Photo by DALL·E 2.

This recipe is inspired by Sony AI Gastronomy Flagship ingredients pairing results. Novel use of chocolate in cooking by special request.

**Thordur:** Seemingly an odd combination, it turns out dark chocolate and cauliflower pair well. The bitter tones of the high cocoa content blends well with the slightly nutty flavour of the cauliflower.

**KIM:** Roasting the cauliflower before coating it with chocolate seemed like the way to go to blend the flavours well and enhance the nuttiness of the cauliflower.

**Flaivia:** Cocoa and Cauliflower share 105 flavour molecules, making them a good match.

# Tea boiled Carrot, celery and ginger puré with herbs

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## Ingredients

450 g carrots, sliced  
225 g celery, diced  
60 ml ginger, peeled and finely sliced  
1,2 L water  
2 sachets green tea  
240 ml mixed herbs (spearmint, dill, parsley, coriander)  
1 stick butter  
Salt & Pepper to taste.

## Instructions

1. Bring water to boil, and infuse tea
2. Meanwhile, prepare carrots, celery and ginger
3. Boil vegetables in tea, 15 minutes
4. Meanwhile, finely chop and mix herbs
5. Strain vegetables discarding tea water
6. In a bowl, mix boiled vegetables, herbs and diced butter
7. Puré with immersion blender until smooth
8. Add salt and pepper to taste



Carrot puré. Photo by MidjourneyMJ Photo Test.

**Thordur:** This recipe was created by me, KIM and Flaivia. Flaivia came up with the ingredients pairing, KIM with the suggested recipe, and I did a human quality check on ingredients ratios and method.

**KIM:** Data show that carrots and ginger often are used together in a puré. Few recipes in my model pair celery with carrot, but there are data on it being used in stews and purés.

**Flaivia:** Carrot and ginger have high flavour compound and flavour profile compatibility. Green tea Hexyl Acetate compound is also prominent in carrots and ginger.

# Broccoli and Apricot Stir-Fry with Capers and Corn

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## Ingredients

1 head of broccoli, cut into florets  
240 ml of fresh or frozen corn kernels  
30 ml of capers, drained  
30 ml of chopped dried apricots  
2 cloves of garlic, minced  
2 tablespoons of olive oil  
Salt and pepper, to taste  
Lemon juice, for serving

## Instructions

1. In a large pan or wok, heat the olive oil over medium-high heat. Add the garlic and stir-fry for 1 minute, or until fragrant.
2. Add the broccoli florets to the pan and stir-fry for 3-5 minutes, or until they are slightly tender but still crisp.
3. Add the corn kernels and capers to the pan and stir-fry for an additional 2-3 minutes, or until the corn is tender and the capers are slightly crispy.
4. Stir in the chopped apricots and continue to stir-fry for another 1-2 minutes, or until the apricots are heated through.
5. Season the stir-fry with salt and pepper, to taste.
6. Serve the stir-fry with a squeeze of lemon juice over the top, and garnish with additional capers, if desired.



Capers in Stir-Fry. Photo by DALL·E 2.

**Thordur:** Flaivia told me that capers match surprisingly well with Broccoli, Apricots and Corn. After a bit of tinkering I came up with the idea of a stir-fry and asked KIM to help create a recipe.

**KIM:** On Thordur's cue I combined the desired ingredients into a simple Stir-Fry recipe. I trust him and Flaivia on this one.

**Flaivia:** Capers match great with a lot of ingredients, among them Corn, Apricot and Broccoli. They all share the Delta-Cadinene molecule, blending well on the herbal, woody, thyme, wood, medicine and dry flavours.

# Coffee-Rubbed Potato and Egg Breakfast Skillet

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## Ingredients

2 large potatoes, peeled and diced  
2 tablespoons of coffee grounds  
1 teaspoon of smoked paprika  
1/2 teaspoon of garlic powder  
Salt and pepper, to taste  
2 tablespoons of olive oil  
4 eggs  
2 tablespoons of butter  
Fresh parsley or chives, for garnish

## Instructions

1. Preheat your oven to 190°C.
2. In a small bowl, mix together the coffee grounds, smoked paprika, garlic powder, salt, and pepper.
3. In a large skillet, heat the olive oil over medium-high heat. Add the diced potatoes and stir to coat them in the oil.
4. Sprinkle the coffee rub mixture over the potatoes and stir to coat them evenly. Cook the potatoes for 5-7 minutes, or until they are tender and lightly browned.
5. Remove the skillet from the heat and use a spoon to make four wells in the potatoes.
6. Crack an egg into each well and dot the top with butter.
7. Transfer the skillet to the oven and bake for 8-10 minutes, or until the eggs are cooked to your desired level of doneness.
8. Remove the skillet from the oven and garnish with fresh parsley or chives.



Coffee-Rubbed Potato and Egg Breakfast Skillet. Photo by DALL·E 2.

**Thordur:** The humble egg matches well with coffee and potatoes. Combining eggs and potatoes in a traditional breakfast dish, adding the coffee turned out to work well.

**KIM:** I created a recipe for the above mentioned ingredients, adding garlic, smoked paprika, salt and pepper to balance out the dish.

**Flaivia:** The hen egg matches well with Coffee and Potato, sharing many flavour molecules. 1-Octen-3-ol and 2,5-Dimethylpyrazine binds the ingredients well together with the roasted nuts, grass, medical, cocoa, woody, medicine, roasted nut, oily, earthy, fungal, chicken and mushroom flavour hints.

# Cocoa rice topped with glazed bacon and chives

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## Ingredients

8 slices of bacon  
30 ml dark rum  
1 bottle of beer  
2 tablespoons of brown sugar  
1 teaspoon of Dijon mustard  
1/4 teaspoon of black pepper  
240 ml of uncooked white rice  
480 ml of water  
1 tablespoon of unsweetened cocoa powder  
1/4 teaspoon of salt

## Instructions

1. In a large skillet, cook the bacon over medium heat until crispy. Remove the bacon from the skillet and set it aside on a paper towel-lined plate.
2. In the same skillet, add the rum, beer, brown sugar, Dijon mustard, and black pepper. Bring the mixture to a boil, then reduce the heat to medium-low and let it simmer until the glaze thickens.
3. Return the bacon slices to the skillet and toss them in the glaze to coat them evenly. Set the bacon aside.
4. In a medium saucepan, combine the rice, water, cocoa powder, and salt. Bring the mixture to a boil, then reduce the heat to low and cover the saucepan. Let the rice simmer for 18-20 minutes, or until the water is absorbed and the rice is cooked through.



Cocoa rice topped with glazed bacon and chives. Photo by DALL·E 2.

5. Serve the bacon on top of the cocoa rice, and spoon any remaining glaze over the top of the bacon..

**Thordur:** Flaivia says that bacon pairs well with Rum, Beer and Cocoa. This we had to explore, the challenge was how. By using the liquids, creating a glaze for the bacon and then incorporating the cocoa in the rice seemed like an interesting way to go.

**KIM:** On cue from Thordur I came up with a recipe for this that we had to slightly modify. Getting the glaze right was something outside of my ability.

**Flaivia:** Bacon pair well with a lot of ingredients that it's rarely paired with. Bacon shares 53 molecules with Rum, 59 with Cocoa and 78 with beer.

# Beer glazed scallops with mango and coconut

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## Ingredients

450 g scallops  
30 ml beer  
30 ml brown sugar  
1 tbsp soy sauce  
1 tsp minced garlic  
1/4 tsp black pepper  
1 tbsp butter  
1 ripe mango, peeled and diced  
30 ml shredded coconut  
Salt to taste

## Instructions

1. In a small saucepan, combine the beer, brown sugar, soy sauce, garlic, and black pepper. Cook over medium heat, stirring occasionally, until the sugar has dissolved and the mixture has thickened slightly.
2. In a large skillet, melt the butter over medium-high heat. Add the scallops to the skillet and cook for 2-3 minutes on each side, or until golden brown and cooked through.
3. Remove the scallops from the skillet and set aside.
4. Add the mango and shredded coconut to the skillet and sauté until the mango is slightly softened, about 2 minutes.
5. Add the beer glaze to the skillet and stir to coat the mango and coconut.
6. Return the scallops to the skillet and toss to coat them in the glaze.



Beer glazed scallops with mango and coconut. Photo by MidjourneyMJ Photo Test.

7. Cook for an additional 1-2 minutes, or until the scallops are heated through.
8. Serve the scallops immediately, garnished with additional shredded coconut and salt to taste.

**Thordur:** Scallops pair surprisingly well with beer, mango and coconut. With that as a starting point the rest was easy. I told KIM to come up with a recipe and it delivered.

**KIM:** Pan searing scallops is a common technique, and incorporating fluids hints toward a glaze.

**Flaivia:** Scallops pair well with a lot of ingredients commonly not used with this ingredient. It shares  $\geq 24$  flavour molecules with beer, mango and coconut.

# Mango, apple and port wine spread on rye bread

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## Ingredients

- 1 ripe mango, peeled and diced
- 1 medium apple, peeled and diced
- 30 ml port wine
- 2 tablespoons honey
- 1/4 teaspoon cinnamon
- Pinch of salt
- 4 slices of rye bread

## Instructions

1. In a medium saucepan, combine the diced mango and apple with the port wine, honey, cinnamon, and salt.
2. Cook over medium-low heat for about 10 minutes, or until the fruit is soft and the liquid has reduced and thickened.
3. Toast the slices of rye bread.
4. Spread the warm fruit mixture over the toasted bread and serve immediately. Enjoy!



Mango, apple and port wine spread on rye bread. Photo by DALL·E 2.

**Thordur:** Flaivia pairs mango, apple and port wine well. Turns out this also pairs well with rye bread. With that in mind the rest was easy.

**KIM:** I created a simple jam recipe based on mango, apple and port wine.

**Flaivia:** 2-Methoxy-4-Vinylphenol and 1-Penten-3-Ol are important flavour molecules in this pairing.



# Afterword



**Oslo, January 2023**

This little book is an experiment. Co-written/edited by me, Thordur Arnason, to explore the opportunities, limitations and future potential within the endlessly fascinating Generative/Creative AI space.

In the process of putting this together, I've grown to love and enjoy working with a number of AI tools, that ultimately augments us humans and pushes the boundaries of our abilities, both creatively and productively. My self-imposed constraint of creating this work within sixteen weeks has so far been an interesting journey. During this period so many new tools have arrived, and the ones I've started out with have evolved greatly.

Ultimately, this experiment is all about how we can use all these amazing tools to better ourselves, no mind paid to the potential threats they pose. The way I see it, it's all about human augmentation. A mindset and legacy created by, amongst many others, Douglas Engelbart and the SRI-team in the 1960s.

Artificial Intelligence is not a threat to humanity unless we allow it to be. I stand firmly in my belief that this helps us explore our human potential and hopefully make us wiser.

The AIs used in this experiment are:

**GPT-3 Davinci-002, GPT-3.5 Davinci-003 (KIM)** - All text generation, including recipes.

**FlavourGraph, FlavourDB (Flaivia)** - Ingredients and flavour matching on molecular level.

**Midjourney, Dall-E-2 and Stable Diffusion** - Artwork, images and "photos".

**Resemble.ai (Alson)** - training on Thordur's voice, narrator voice for the audiobook PoC

Many others AIs were involved in the research process, but did not make the cut for this experiment. Don't feel bad, I love and respect you all for what your try to solve and can do.