

ENGLISH  
FRENCH  
GERMAN  
ICELANDIC  
NORWEGIAN

# HEALTHY LIVING AND SUSTAINABLE FOOD



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# GUIDEBOOK CONTENT

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## INTRODUCTION

Food and nutrition go hand in hand. Evolution of mankind has been accompanied by the search for nutritious food and scourge of nature when adverse effects play. From the early hunter-gatherers to the modern-day artisanal and industrial production methods, we have always looked to get all our nutrients, be micro- or macro- through diverse sources.

This publication entitled 'Guidebook to Healthy Living and Sustainable Food' is a youth-oriented work that targets young individuals to understand the value of food and nutrition and provides valuable insight, information and tips to understand the food they currently consume.

It is a collaborative work by DalPro Utvikling AS based in Hitra, Norway, the Alliance for Global Development Asbl. based in Luxembourg and Framhaldsskólinn í Austur-Skaftafellssýslu based in Sveitarfélagið Hornafjörður, Iceland under the auspices of the project HAPPEY (Heuristic APPROach to Educating Youth on hidden hunger), funded by the Norwegian Erasmus + National Agency.

We need to eat to meet our nutritional needs, but people often make their food choices for reasons other than nutrition. While eating habits and traditions are different for every culture, no single food contains all of the nutrients we need to be healthy or there exists no one 'ideal' diet that is right

for everyone. A healthy, balanced diet could be based on local eating patterns, using locally available foods and respecting local eating customs. Special attention should be paid to individual nutritional and dietary needs vary with age, sex, health status and activity levels.

The first two chapters delve on the issue of food and its nutritive value and on hidden hunger to help readers understand the context. The next two sections are on sustainable food production and consumption. The ensuing chapters encourage individuals to buy local produce and deliberate on the thematic of healthy living, organic food and growing food at home.

A special section is devoted to encouraging today's youth find employment opportunities in the sustainable food production and consumption sector and addresses why they should open up their career opportunities.

Beware all master chefs, we have prepared a list of recipes from Norway, Iceland and Luxembourg that you can try to cook at home yourself. Some recipes are really seasonal, so you would have to keep your taste buds waiting for the right time of the year!

We hope you are able to enjoy this culinary work and are able to benefit from it. Cheers to a healthy life!

The Editors



Chapter 1:

# FOOD AND ITS NUTRITIONAL VALUE

In 1947, half of the world's population was chronically malnourished (considered at that time primarily in terms of inadequate energy consumption). Currently, this number stands at about 12,5%. This is a remarkable achievement, yet 868 million people remain undernourished in terms of energy consumption and an estimated 2 billion people suffer from one or more micronutrient deficiencies (FAO, IFAD and WFP, 2012).

Food systems around the world are diverse and changing rapidly, with profound implications for diets and nutritional outcomes.

While the nature and causes of malnutrition are complex, the common denominator among all types of malnutrition is a nutritionally inappropriate diet.

THE WORLD HAS OVER 50 000 EDIBLE PLANTS. JUST THREE OF THEM, RICE, MAIZE AND WHEAT, PROVIDE 60 PERCENT OF THE WORLD'S FOOD ENERGY INTAKE.

IN WESTERN EUROPE THE MAIN STAPLE FOODS IN THE AVERAGE DIET ARE (IN TERMS OF ENERGY) ANIMAL PRODUCTS (33 PERCENT), CEREALS (26 PERCENT) AND ROOTS AND TUBERS (4 PERCENT).

### STAPLE FOOD

A staple food is one that is eaten regularly and in such quantities as to constitute the dominant part of the diet and supply a major proportion of energy and nutrient needs.

A staple food does not meet a population's total nutritional needs: a variety of foods is required. This is particularly the case for children and other nutritionally vulnerable groups.

Typically, staple foods are well adapted to the growth conditions in their source areas. For example, they may be tolerant of drought, pests or soils low in nutrients. Farmers often rely on staple crops to reduce risk and increase the resilience of their agricultural systems.

**Most people live on a diet based on one or more of the following staples: rice, wheat, maize (corn), millet, sorghum, roots and tubers (potatoes, cassava, yams and taro), and animal products such as meat, milk, eggs, cheese and fish.**

Of more than 50 000 edible plant species in the world, only a few hundred contribute significantly to food supplies. Just 15 crop plants provide 90 percent of the world's food energy intake, with three rice, maize and wheat - making up two-thirds of this. These three are the staples of over 4 billion people.

Although there are over 10 000 species in the Gramineae (cereal) family, few have been widely introduced into cultivation over the past 2 000 years. Rice feeds almost half of humanity. Per capita rice consumption has generally remained stable, or risen slightly since the 1960s. It has declined in recent years in many of the wealthier rice-consuming countries, such as Japan, the Republic of Korea and Thailand, because rising incomes have enabled people to eat a more varied diet.

Roots and tubers are important staples for over a billion people in the developing world. They account for roughly 40 percent of the food eaten by half the population of sub-Saharan Africa. They are high in carbohydrates, calcium and vitamin C, but low in protein. Per capita consumption of roots and tubers has been falling in many countries since the beginning of the 1970s, mainly because urban populations have found it cheaper and easier to buy imported cereals.

Many countries are experiencing a similar shift away from traditional foods, but there is growing recognition of the importance of traditional food crops in nutrition. After years of being considered "poor people's foods" some of these crops are now enjoying a comeback. Cassava, considered a minor crop at the turn of the century, has now become one of the developing world's most important staples providing a basic diet for around 500 million people. Plantings are increasing faster than for any other crop. Quinoa, a grain grown in the high Andes, is also gaining wider acceptance even outside of Latin America with the introduction of new varieties and improved processing.

### **OTHER IMPORTANT NUTRITIONAL SOURCES - COMPLEMENTARY FOODS**

Throughout the world, complementary foods play an essential role in meeting nutrient requirements. They include protein sources - meat, poultry, fish, legumes and milk products; energy sources - fats, oils and sugars; and vitamin and mineral sources - fruits, vegetables and animal products.

In addition to conventional crops and agricultural products, the following are valuable sources of nutrition. Their importance is particularly obvious during seasonal and emergency shortages.

Wild plants are essential for many rural subsistence households; at least 1 000 million people are thought to use them. In Ghana, for instance, the leaves of over 100 species of wild plants and the fruits of another 200 - are consumed. In rural Swaziland, more than 220 species of wild plants provide a greater share of the diet than domesticated cultivars. In India, Malaysia and Thailand, about 150 wild plant species have been identified as sources of emergency food.

Wild animals including insects, birds, fish, rodents and larger mammals are often the only source of animal protein for rural people. In parts of the Peruvian Amazon, for example, over 85 percent of dietary animal protein is from the wild. Some 62 developing countries rely on wildlife for at least one-fifth of their animal protein.

Fish supplements the rice diet of many north-eastern Thai and Lao farming families. Both fish and frogs are caught in streams, irrigation canals, ditches, water reservoirs and flooded paddy fields.

Tree foods and home gardens contribute significantly to rural diets. In West Java, Indonesia, coconut trees and home gardens produce 32 percent of total dietary protein and 44 percent of total calorie needs. In Puerto Rico, the produce from home gardens has increased vitamin A and C intake, especially in children.

Forest foods can provide varied food year round, supplying essential minerals and vitamins. They include: wild leaves, seeds and nuts, fruits, roots and tubers, mushrooms, honey and animal products.

THE 'HIDDEN HUNGER' DUE TO MICRONUTRIENT DEFICIENCY DOES NOT PRODUCE HUNGER AS WE KNOW IT. YOU MIGHT NOT FEEL IT IN THE BELLY, BUT IT STRIKES AT THE CORE OF YOUR HEALTH AND VITALITY.

- KUL C. GAUTAM, FORMER DEPUTY EXECUTIVE DIRECTOR OF UNICEF

Chapter 2:

# HIDDEN HUNGER

Also known as micronutrient deficiency, hidden hunger affects more than an estimated 2 billion people globally. The repercussions of these vitamin and mineral deficiencies can be both serious and long-lasting.

The idea of hidden hunger emanates from the fact that most individuals fail to realise the deficiency. The last few decades have brought about an enormous development of human society, the way we eat, feel and think.

Since it is harder to identify visually, hidden hunger gets far less attention than it warrants. Micronutrient malnutrition causes many of the same health problems as calorie deficiency hunger. Hidden hunger is particularly detrimental to young children, women of childbearing age, and the poorest parts of populations in developing countries. Like regular hunger, it costs millions of lives each year and prevents an even greater number from escaping poverty.



### MODERN DAY

The Charlie Chaplin film from 1936, 'Modern Times' showed the issue of eating food in the working industrial context. Ensuring that there was as little downtime as possible so the industrial machinery could keep running. This was the early half of the 20th century.

We face a paucity of time to do our daily chores and hence end up neglecting food. Today, we are faced with an enormous amount of options for food, though is everything that glitters gold? All food is not nutritious food.

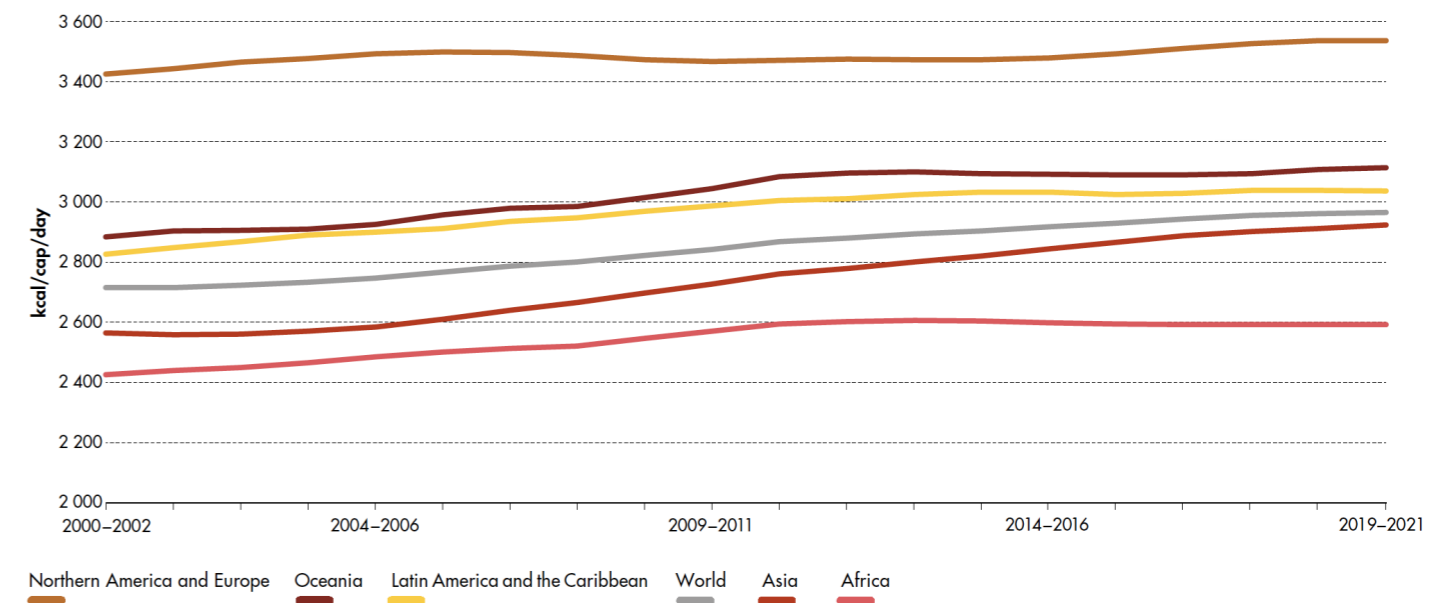
The prevalence of undernourishment shows that the share of people who lack regular access to sufficient calories is increasing, with as many as 828 million people undernourished in 2021 (almost 11% of the world's population).

### FOOD SECURITY AND NUTRITION

After a decades-long decline and five years of relative stability since 2014, the global level of the prevalence of undernourishment (PoU) has increased sharply between 2019 and 2020 and rose at a slower pace between 2020 and 2021, under the shadow of the COVID-19 pandemic.

Food supply in is the highest in Northern America and Europe at about 3,540 kcal per person per day.

AVERAGE DIETARY ENERGY SUPPLY BY REGION



Note: This series is used for estimating the prevalence of undernourishment. Values for 2020 and 2021 are projections.  
 Source: FAO. 2022. FAOSTAT: Suite of Food Security Indicators. In: FAO. Rome. Cited October 2022. <https://www.fao.org/faostat/en/#data/FS>  
<https://doi.org/10.4060/cc2211en-fig51>

Average Dietary Energy Supply Per Person

(Source: Statistical Yearbook 2022: World Food and Agriculture, FAO. <https://www.fao.org/3/cc2211en/cc2211en.pdf>)

## **PROCESSED AND NON-PROCESSED FOODS: A CONTRIBUTING FACTOR TO HIDDEN HUNGER IN EUROPE**

Unprocessed or minimally processed foods are whole foods in which the vitamins and nutrients are still intact. The food is in its natural (or nearly natural) state. These foods may be minimally altered by removal of inedible parts, drying, crushing, roasting, boiling, freezing, or pasteurisation, to make them suitable to store and safe to consume. Unprocessed or minimally processed foods would include carrots, apples, raw chicken, melon, and raw, unsalted nuts.

Processing changes a food from its natural state. Processed foods are essentially made by adding salt, oil, sugar, or other substances. Examples include canned fish or canned vegetables, fruits in syrup, and freshly made breads. Most processed foods have two or three ingredients.

Some foods are highly processed or ultra-processed. They most likely have many added ingredients such as sugar, salt, fat, and artificial colours or preservatives. Ultra-processed foods are made mostly from substances extracted from foods, such as fats, starches, added sugars, and hydrogenated fats. They may also contain additives like artificial colours and flavours or stabilisers. Examples of these foods are frozen meals, soft drinks, hot dogs and cold cuts, fast food, packaged cookies, cakes, and salty snacks.

### **UNPROCESSED FOODS**

These include what's naturally edible in plant and animal food sources, like fruits and veggies, nuts, or meat that hasn't been cured or treated with preservatives or additives. While everyone has a different definition of unprocessed, cooked food

(whether in the oven or on the stovetop) still counts as unprocessed for most, depending on how you go about it. If you're slathering it in highly processed vegetable oil, it won't count to the unprocessed purists out there.

### **MINIMALLY PROCESSED FOODS**

Includes those that have been slightly changed for the process of preserving it, including fermentation (like pickles), grinding (like hummus), or pasteurisation (like many dairy products).

### **PROCESSED CULINARY INGREDIENTS**

Minimally processed foods are made by pressing, refining, grinding, or milling. Think plant oils, flour, and pasta made from whole grains.

### **PROCESSED FOODS**

These include food from the previous groups that also might have some added salt, sugar, or fat. Canned fruits and veggies, some cheeses, fresh-made bread, and canned fish are some examples. These foods are typically made from at least 2 to 3 ingredients.

### **ULTRA-PROCESSED FOODS**

These include food from the previous group that go above and beyond in their addition of salt, sweeteners, fat, flavours, or preservatives. These might be added to boost shelf stability, preserve texture, and make them tastier. They're usually ready-to-eat require no further preparation. They're often low in fiber and nutrients. Examples include packaged cookies, some chips and breakfast cereals, some frozen dinners, and lunch meat.



# UNPROCESSED OR MINIMALLY PROCESSED FOODS

## **VEGGIES AND FRUITS**

Organic, seasonal produce. Canned fruits and vegetables can be a healthy, minimally processed addition to your diet as well.

**BEANS** Dried beans (chickpeas, black beans, etc.) are an easy way to dodge preservatives and sodium, but canned varieties are also a good, quick-prep choice. Bean spreads like hummus are also minimally processed and have health benefits. Nuts. Raw nuts are the least processed, but roasted ones without a ton of additives are also pretty legit. Minimally processed nut butters that just contain nuts are also pretty “whole.”

## **MEAT AND SEAFOOD**

Poultry, beef, pork, or seafood counts as unprocessed (or maybe minimally processed once you cook it). For some unprocessed food eaters, hormone-free and organic is a priority. Whether you roast, bake, grill, or boil, be sure to use natural plant oils (if any) and avoid deep-frying.

## **HERBS AND SPICES**

Rosemary, oregano, cumin, chili, garlic, oh my — herbs and spices, whether ground or raw, are a healthy and delish addition to any unprocessed diet.

**EGGS** are an unprocessed food and can be cooked in a variety of delicious ways. We're partial to hard-boiled, which are great fresh or when saved for later.

## **SOME DAIRY**

Dairy without lots of additives is considered minimally processed. Unpasteurized dairy is technically unprocessed but can come with a heightened risk of harmful bacteria, which is why docs and the FDA advise those who are immunocompromised to avoid it. Ultimately, as long as you can tolerate lactose well, minimally processed dairy can be healthy in moderation.

**SOME OILS** and by some, we mean oil in moderation. Olive oil has a great rep when it comes to health benefits and cooking versatility.

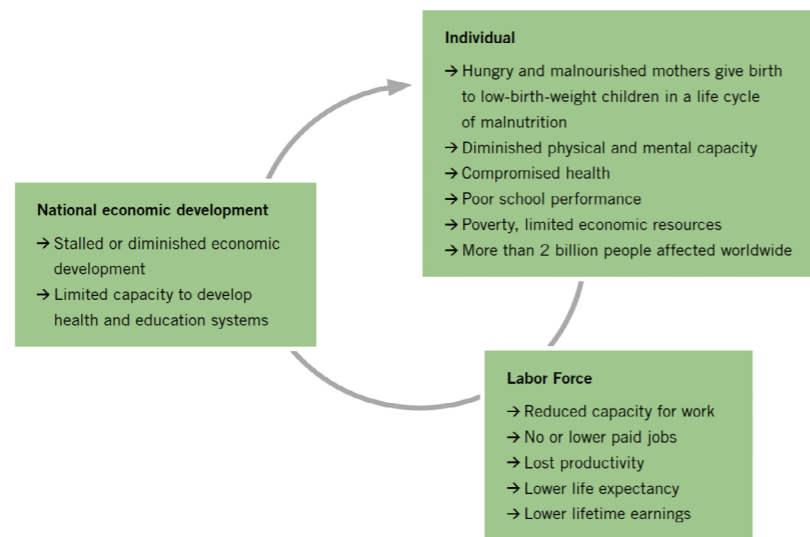
## **WHOLE GRAINS**

You can find these in pasta, whole-wheat bread, snacks, and more.

## **HIGHLY PROCESSED FOODS TO LIMIT**

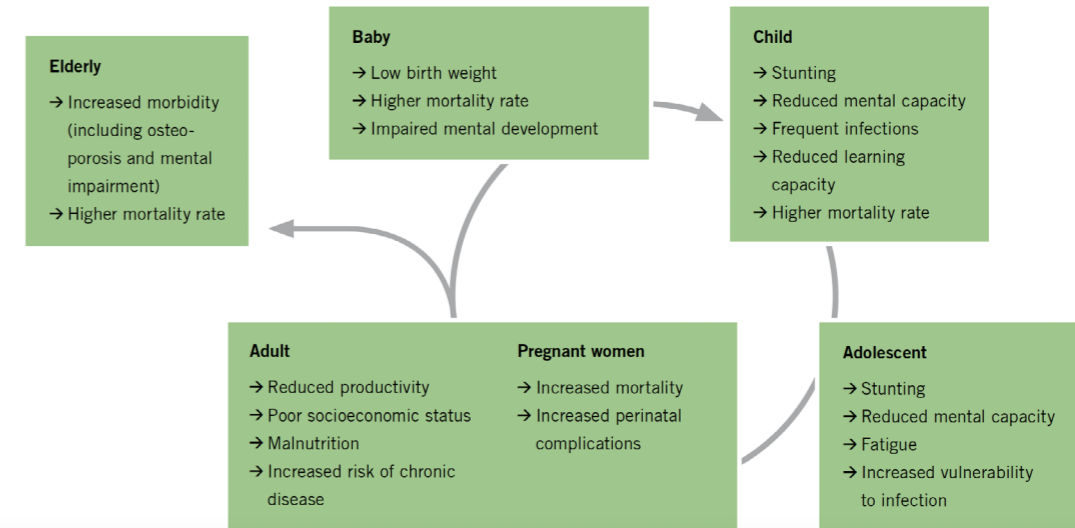
Sugary drinks like soda  
chocolate and candy  
ice cream and dessert  
fast food like French fries and burgers  
frozen food like pizza and pasta  
sweet treats like muffins, buns, and cakes  
processed meats like sausages and deli meats  
foods with certain chemical additives, like nitrites or nitrates

FIGURE 3.4 CYCLE OF HIDDEN HUNGER, POVERTY, AND STALLED DEVELOPMENT



Sources: Black et al. (2013); IFPRI (2014); FAO (2013); von Grebmer et al. (2010).  
 Note: The life cycle of malnutrition refers to how women who were poorly nourished as girls tend to give birth to underweight babies, perpetuating the cycle of undernutrition.

FIGURE 3.3 CONSEQUENCES OF MICRONUTRIENT DEFICIENCIES THROUGHOUT THE LIFE CYCLE



## CONSEQUENCES OF MICRONUTRIENT DEFICIENCIES THROUGHOUT THE LIFE CYCLE

Poor diet is a common source of hidden hunger. Diets based mostly on staple crops, such as maize, wheat, rice, and cassava, which provide a large share of energy but relatively low amounts of essential vitamins and minerals, frequently result in hidden hunger.

Diets vary across regions and even countries in Europe. The food consumed and the dietary styles depend on numerous factors and preferences shaped by culture; peer pressure; and geographical, environmental, and seasonal factors. Victims of hidden hunger may not understand the importance of a balanced, nutritious diet. Nor may they be able to afford or access a wide range of nutritious foods such as animal-source foods (meat, eggs, fish, and dairy), fruits, or vegetables.

When food prices rise, consumers tend to continue to eat staple foods while cutting their intake of nonstaple foods that tend to be richer in micronutrients.

Diet also affects absorption. Alcohol consumption can interfere with the absorption of micronutrients.

Vitamin and mineral deficiencies impose a significant burden on the affected persons and societies, both in terms of health costs and negative impacts in lost human capital and reduced economic productivity. Hidden hunger impairs physical growth and learning, limits productivity, and ultimately perpetuates poverty in a continuous cycle.

Often, hitherto traditional methods of consumption which were part of the regular diet in Europe and were very nutritious is disappearing due to the advent of fast-food outlets in cities and due to the younger generation unwilling to work harder to cook food at home.

Hence, establishing good nutrition practices among the population is a good way to start. To improve knowledge and practices related to good nutrition, participatory learning by addressing large sections of individuals is a good way to reverse the trend in the increased consumption of ultra-processed foods.

Chapter 3:

# **SUSTAINABLE FOOD PRODUCTION AND CONSUMPTION**

**In a thriving ecosystem, we find the best example of a closed-loop system where there is no such thing as waste.**

**How can nature's own approach to zero waste inspire you in your daily life?**

The definition of sustainable development is fulfilling the needs of the present without diminishing the opportunities of future generations to do the same. It encompasses environmental protection, the use of clean energy, increased employment opportunities, emphasis on cultural values and tradition, peace, security, and economic growth.

Sustainability in the food sector is defined as the production and consumption of food that promotes the health of those who inhabit the earth and the environment we live in, now and for the future.

That involves using farming-friendly, socially responsible, and economically viable methods. This includes reducing the use of harmful chemicals conserving water and soil, protecting biodiversity, and promoting fair labor practices. Sustainable food production also involves reducing food waste and promoting healthy and nutritious diets. The goal of sustainable food production is food produced in a way that is sustainable for the planet, people, and the economy.

**Every action you take, no matter how small, has the power to make a difference.**

### **BUY LOCALLY GROWN FOOD**

There is no legal or universally accepted definition of what is “local food”. But it is generally said that food is “local” if it’s grown and harvested within 0 km-160 km of your home or 650 km of the restaurant where it’s served. It doesn’t come from large commercial farms, and it isn’t transported over long distances. Often these products are fresher, taste better, and have more nutrients due to the shorter time from harvest to table. The producer might be able to reduce packaging and less travel, therefore also having a smaller carbon footprint.

### **CHOOSE ORGANIC FOOD**

By choosing organic food you support farming practices that do not include the use of synthetic fertilizers or pesticides. You support your health and the health of the planet. By choosing products from farms also working with regenerative farming practices, you support farming that stores much more carbon and enhances soil life than other farming practices.

Read more in chapter 7; Organic food.

## ZERO WASTE

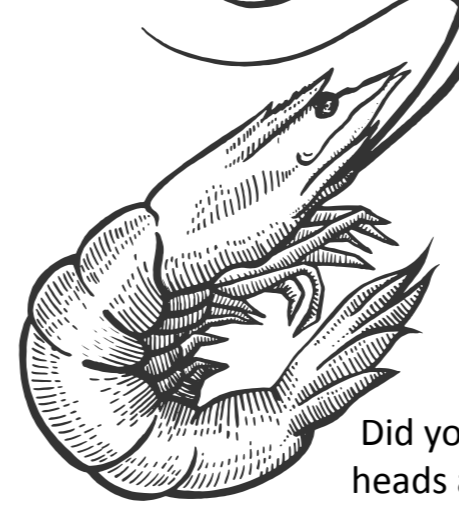
Zero waste is a philosophy and approach to living that focuses on minimizing waste and reducing the amount of materials sent to landfills and incinerators. The goal of zero waste is to redesign the way we use and produce goods so that there is no waste generated at any point in the product's life cycle.

### The zero waste approach involves several key principles, including:

1. Refusing what we do not need
2. Reducing our consumption
3. Reusing items as much as possible
4. Recycling materials that cannot be reused
5. Composting organic waste

By adopting a zero-waste lifestyle, individuals and communities can significantly reduce their impact on the environment, conserve natural resources, and protect human health. The zero-waste mindset also supports a circular economy, where waste is minimized, and resources are reused and regenerated. This will power a transition away from our current linear and extractive economy and towards a circular system that supports people and nature's right to a safe and healthy environment.

Cooking with no waste, also known as zero-waste cooking, is an approach to cooking that aims to reduce the amount of food waste generated during the cooking process. This means using all parts of ingredients, minimizing the use of single-use packaging and plastic, and repurposing leftovers. By adopting this approach, we can reduce the environmental impact of our cooking and make the most out of the food we have, while also saving money and supporting sustainable food systems.



Did you know that Fish soup cooked from shrimp heads and shell, leftover “waste” from yesterday’s meal makes a delicious broth for fish soup?

Working against food waste is one facet of sustainable development. Globally, 1/3 of the food produced goes directly to the trash according to the FAO (Food and Agriculture Organization), or about 1.3 billion tons of food per year. There are several things you can do to reduce food waste: take an inventory and take stock of your pantry, refrigerator, and freezer before going to the store to prevent overbuying. You can create a meal plan, save and eat leftovers or use them creatively, store food appropriately, buy “ugly” foods, and compost.



Photo: Icelandic snack- **Ugly potato snack**. The ugly potatoes are handmade potato chips made from Icelandic potatoes. The potatoes that are used are potatoes that do not meet the standards because of their shape or how they look, or surplus production.

<https://www.ljotukartoflurnar.is/>



#icelandicfood #mataraudur

### **SUPPORT SUSTAINABLE FISHING**

Fishing must never be more than the fish, or other seafood, are able to reproduce at sustainable levels. The fishing methods and amount harvested from the sea, are they environmentally friendly? How are other species and habitats reacting to the fishing, do they remain intact and unharmed? Are laws and regulations being followed?

Science advice for a healthy and environment-friendly diet within the Nordics and the Baltics Countries, released June 2023: **“Increased intake of fish from sustainably managed stocks is supported both by effects on health outcomes and environmental footprint.”**

Mackerel is one of the most sustainable fishes recommended now by WWF. The population is quite high, and the fish is also very healthy to eat. Maybe you live in a place where you can go fishing? They are easy to catch from land with a fishing rod and are quite fun to catch.



### **GROW YOUR OWN FOOD**

Growing food at home has numerous benefits, both for individuals and for society as a whole. It provides a source of fresh and healthy produce, can save you money, you can reduce your reliance on store-bought produce, and you know where, how, and with what the food you grow is made of. It can also help to reduce our carbon footprint by reducing the need for long-distance transportation and the associated emissions. By supporting local agriculture and reducing our reliance on imported foods, we can help

build more resilient and sustainable food systems. Growing your own food is a great way to promote health, save money, build community, and support a more sustainable life.

Check out a whole chapter on this subject in Chapter 8: Growing Food at Home.

### **USE YOUR LANDSCAPE**

By using what you can find in your surrounding area you are reducing packaging waste and reducing your carbon footprint. You are spending time outside and exercising by walking around nature which is good for your body and mind. You can go pick berries, collect herbs or pick mushrooms. You can source local ingredients or try out traditional recipes. What treasures can be found in your area?

### **REDUCE PACKAGING WASTE**

You can reduce packaging waste by choosing a project that is not wrapped in packaging such as fruits and vegetables, and used instead of reusable bags. You can grow your own food, and get food from your surrounding areas such as mushrooms, berries, and more. By cooking at home but not ordering in you can save a lot of unnecessary packaging, or by bringing your own container.



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### **DEMANDS ARE CHANGING:**

Here is a few ideas of what you can do, the list can go on and on because there are so many things you can do. By making small changes in your daily life, you can help maintain sustainable food production. It all comes down to supply and demand, if you as a consumer demand something companies must answer the call and provide the product in a way that is demanded. Increased environmental consciousness calls for higher demand for wholesome and environmentally certified food, domestically and abroad. Changed demand calls for a different focus on certifications of origin and recognized quality certifications.

Without nutrition, there is no growth and development, and without food, there is no life!

## Chapter 4:

# THINK TWICE WHAT YOU BUY

We are faced with multiple options when buying food. Some of us buy food in supermarkets, while others head to open-air markets. We should make careful food choices to have a healthy, balanced diet. Everyone has different reasons to eat what they eat including eating habits, traditions, cost, taste and many others.

As discussed in the previous chapters, overnutrition or undernutrition can lead to the issue of hidden hunger. Sustainable food production and consumption can help alleviate these two issues. Though at times, we tend to buy packaged items from the supermarket due to a dearth of alternative options.

### **BUYING PACKAGED FOOD**

In supermarkets, foods are packaged in bags, boxes, bottles, cans and wrappers, the consumer cannot detect the quality and quantity of the food through their senses of sight, smell, taste and touch. This means that the producer has information about the product that is not known to the consumer.

When there are a wide variety of labels in a market consumers may be overwhelmed with information and become confused, which can prevent them from easily recognising important necessary information and feeling confident about their food purchase.

Quite often, when we plan to eat healthy, we look at the 'nutrition label' on the packaging in supermarkets. But what is the nutrition label? For the end-user to compare, all information is provided with the base reference of amount per 100g or 100ml. Vitamins and mineral presence is also provided to ensure individuals are able to make informed decisions towards reaching their daily recommended dietary intake.

### **MAKING GOOD MEALS BEGINS WITH GOOD PLANNING**

When deciding what foods to include in the shopping basket, it is helpful to: Plan meals in advance. Remember what foods and meals have been eaten in the last few days and try to avoid buying the same foods. Check what foods there already are at home to avoid waste and repetition. Buy only what is needed to avoid waste and spoilage.

### **Keep in mind recommendations for variety, quantity and portions:**

- Buy some foods from all of the food groups.
- Vary the foods selected within each food group.
- Buy small amounts of foods that should make up only a small amount of the diet (sugar, sweets, fats and oils).
- For important foods that may be expensive,

Sustainable diets are those diets with low environmental impacts which contribute to food and nutrition security and to healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimising natural and human resources.

FAO, 2010, Sustainable Diets and Biodiversity.



such as meats, fish, milk and milk products and certain fruits and vegetables, include them in the shopping but buy smaller amounts and when possible, substitute with less expensive similar foods from the same group (for example, dried beans or other legumes instead of meat for protein and choose vegetables and fruits in season).

- Buy according to the nutritional needs of the family / individual

#### **When buying grain products:**

- Select a variety of grains, breads and cereals, especially whole unrefined grains.
- Choose pastries, cookies and other sweets less often, as special treats.

#### **When buying vegetables and fruits:**

- Choose a variety of red, orange or dark green vegetables and fruit; they usually contain more nutrients than those with lighter colours.
- For best flavour and price, purchase fresh fruits and vegetables in season.
- Buy only what can be eaten or preserved in the next few days; fruits and vegetables lose nutrients and flavour when they wilt or spoil.
- Choose frozen vegetables as a convenient alternative to fresh; they can be just as nutritious, they keep well and reduce the amount of preparation time. Canned vegetables are also good, but may have higher amounts of salt.
- Substitute frozen or canned fruit when fresh fruit is not available or is too expensive (but check for added sugars).

- Choose whole fruit over fruit juices (whole fruit has more fibre) and fruit juices instead of fruit drinks. Fruit drinks may have added sugars and only a small amount of fruit juice.

#### **When buying milk and milk products:**

- Include a variety of milk products, such as cheeses and yoghurts, in addition to milk.
- Look for lower-fat varieties.

#### **When buying meat and alternatives:**

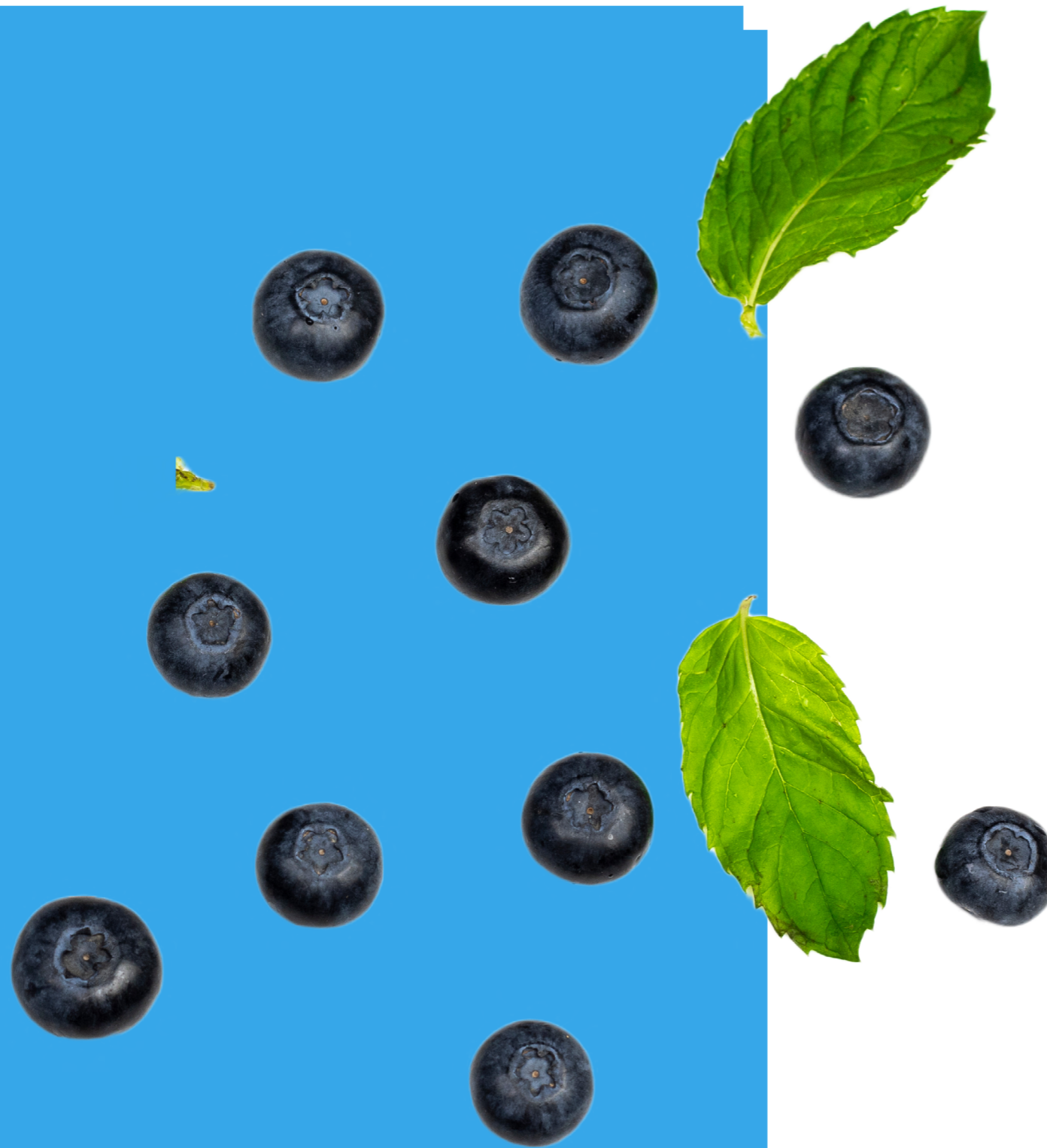
- Include a variety of red and white meats and poultry.
- Select leaner meats or meats with reduced fat.
- Include a variety of fish and seafood (fresh, tinned or frozen).
- Buy beans, peas and lentils, canned or dried; they are an inexpensive source of protein, are low in fat and high in fibre.
- Include some nuts and seeds as a good source of protein.

The food label on packaged foods can be a useful source of information for food selection and buying.



The ideal diet should include a bit of everything: staple foods, vegetables, fruits, animal foods, legumes, oilseeds and nuts, fats and oils and sugars, albeit in appropriate quantities.

Source: Eating Well for Good Health, FAO 2013. E-ISBN 978-92-5-107611-8



Chapter 5:

# VIABLE ALTERNATIVES TO FOREIGN PRODUCTS

Locally grown food is a broad term that describes food that was grown within a geographical region that could be considered local to your particular area. Whether it's within your county, city, neighborhood or even your own backyard, locally grown food can take many forms. There is no legal or universally accepted definition of what local food is. But it is generally said that food is "local" if it's grown and harvested within 0 km-160/650 km of your home or the restaurant where it's served. It doesn't come from large commercial farms, and it isn't transported over long distances.

When buying locally, you may choose to buy food that was grown as locally as possible. Locally grown food can often be found in your regular grocery store, at farmers' markets, within community-supported agriculture programs, or even on certain websites and groups on social media platforms. Some farms even offer direct farm-to-table purchasing from their own websites or at the farm.

### **THERE IS NO ONE RIGHT WAY**

In the food store you are faced with many considerations when choosing the products you want to buy. For example price, packaging, content, marketing and more. It's up to you to be an aware consumer, which is not always easy. Packaging and labeling can be very confusing in their messaging. You may wonder if it is better to buy locally grown peppers that are wrapped in plastic or peppers that are grown in another country and then transported to your grocery store, but without packaging. This is a question which is worth to stop and consider, and there may not be one right answer.

Photo: Taken in a grocery store in Iceland.



### **ALTERNATIVES**

If you are following a recipe it can sometimes be very important to follow each step and follow the recipe carefully, for example when baking macarons. But in day to day life when cooking dinner then it can be okay to be a little creative and courageous to try something else with the recipe on the side.

If you are cooking something with eggs but have run out, then there are many possibilities; you could run to the store and get some.. or you can find a replacer that you have at home.

#### **Egg replacers:**

- Vinegar & baking soda. Replace 1 egg with = 1 teaspoon baking soda, 1 tablespoon vinegar.
- Unsweetened applesauce. Replace 1 egg with = 1/4 cup applesauce.
- Plain or vanilla soy yogurt. Replace 1 egg with = 1/4 cup yogurt.
- Silken tofu.
- Ripe banana.
- Ground flaxseed
- Chia seeds

**Let's look at a "pesto" recipe for example:**

2 cups fresh basil leaves (no stems).

Options: Use any fresh herbs you have, like parsley or ramsons.

2 tablespoons pine nuts or walnuts

Options: Use any nuts or seeds you have. Almonds and cashew is good to soak in water a few hours before. Seeds like sunflower and pumpkin can also be used.

2 large cloves garlic.

½ cup extra-virgin olive oil

½ cup freshly grated parmesan cheese

You can omit the cheese or use a different variety.

Step 1

-Combine basil leaves, pine nuts or walnuts and garlic in a food processor and process until very finely minced.

Step 2

-With the machine running slowly dribble in the oil and process until the mixture is smooth.

Step 3

-Add the cheese and process very briefly, just long enough to combine. Store in refrigerator or freezer.

With an open mind and the courage to change one thing for another, you can make your own pesto. For example if you don't have pine nuts The possibilities are endless.



Chapter 6:

# HEALTHY LIVING: NUTRITION

## KNOW WHAT YOU EAT

In a world floating with options and advice, one can easily get confused about the best strategy supporting our body's best. Good nutrition is crucial for human growth and development.

Did you know your poop is 60-80 % bacteria, ready to be recycled out in the world? So where did the food go on its way down the gut? From the food you eat there is quite a lot that goes into your blood and is being used for energy and to build, maintain and repair your body as needed. As well as all those lovely compounds and fibers that support our well-being and fight off free radicals and viruses.

By knowing what you fill up your body with and how, you will be more empowered to decide for your optimal health.

## FOOD IS ENERGY AND ITS BUILDING BLOCKS

The amount of energy equals the calories you get from your food and drink. Eating more energy(calories) than you use will increase your weight. Our bodies are built for storing energy for later use. For thousands of years humans had to build up this ability for times when food is scarce, like in winter or in areas with drought. That is how we adopted nature's variations. The more we use energy through physical output the more "refill" of food we need.



# MACRONUTRIENTS AND MICRONUTRIENTS:

**WHEN WE TALK ABOUT MACROS, WE MEAN THE NUTRIENTS WE NEED IN LARGER QUANTITIES AND WHAT FILL UP OUR ENERGY STORES. THIS IS CARBOHYDRATES, FATS, AND PROTEIN.**

**CARBOHYDRATES** are the body's main source of energy. They are found in foods such as fruits, vegetables, grains, and dairy products. Carbohydrates are a very complex and large group. Here you have all the different sugars but also the undigestible fibers.

**FATS** are another important source of energy for the body. They are found in foods such as meat and dairy products, oils, nuts, and seed. Fats also provide insulation for the body, protect internal organs, and help to transport vitamins and minerals throughout the body as well as being important components in our bodies like cell membrane and our brain tissue. We get saturated fats from animal products and unsaturated fats from food oils and fish.

The balance of the different fats in our diets are more important than the amount when it comes to cardiovascular diseases.

**PROTEINS** are important for building and repairing tissues, such as muscles, skin, and hair. They are found in foods such as meat, fish, poultry, eggs, beans, and nuts. Proteins are made up of amino acids, which the body uses to create new cells and repair damaged tissues. Many amino acids are essential to us and we need them through our diet to build the proteins we need.

## **MICRONUTRIENTS: VITAMINS, MINERALS, TRACE ELEMENTS AND ANTIOXIDANTS**

Micronutrients are essential nutrients that our bodies need in small amounts to function properly. There are four main types of micronutrients: vitamins, minerals, trace elements, and antioxidants.

Vitamins are organic compounds that are essential for a variety of bodily functions, including immune function, energy production, and the maintenance of healthy skin, hair, and nails. There are 13 vitamins in total we need from our diet, including vitamin A, B-complex vitamins, vitamins C, D, E, and K.

Minerals are inorganic compounds important for a wide range of bodily functions, including the formation of bones and teeth, nerve function, and the regulation of blood pressure. Some common minerals include calcium, iron, magnesium, potassium, and zinc. Trace elements are minerals that the body needs in very small amounts. These include selenium, copper, chromium, and iodine, among others. Trace elements play important roles in many bodily functions, including the immune system, thyroid function, and antioxidant defense.

Antioxidants are compounds that protect the body against

free radical damage, which can contribute to chronic diseases such as cancer, heart disease, and Alzheimer's disease. Some common antioxidants include vitamins C and E, beta-carotene, and selenium.

In general, a balanced and varied diet rich in fruits, vegetables, whole grains, lean protein, and healthy fats can provide all of the micronutrients that the body needs. However, in some cases, dietary supplements may be recommended to help fill in any gaps in the diet.

## **EAT THE RAINBOW**

When we eat a variety of different vegetables, fruits and plants, we also eat a large variety of different natural colors. These colors have a key role in the plant as protection against threats. When we eat them, they also offer us protection against various threats. One good example is anthocyanin, this “color” you will find in blueberries, grapes, and red cabbage to mention a few. This blue color is great at protecting our brains and blood vessels and enforces the vitamin C effect. Other similar bioactive compounds you find in other colors in the plants.

A diet rich in colorful vegetables, berries, spices, and fruits is strongly linked to fewer cases of a range of cancer and cardiovascular diseases.

## **REDUCE THE SALT, NOT THE TASTE**

Studies have shown that less salt in our diets reduces the chances of high blood pressure. Too much salt will also desensitize our taste buds. Try adding herbs and other spices instead.

## **FIBERS**

Fiber is a type of carbohydrate found in plant-based foods that our body cannot fully digest or absorb. It passes through the digestive system relatively intact and has several essential functions. Fiber adds bulk to the stool, promoting regular bowel movements and preventing constipation. By doing so they also contribute to long-term gut health and prevention of cancer and diseases in the gut. Fiber also lowers

the uptake of blood sugars and will work in the prevention of diabetes and heart disease.

Certain types of fiber, known as prebiotics, serve as food for beneficial gut bacteria. By promoting a healthy balance of gut bacteria, fiber contributes to a strong immune system and improves overall gut health.

It is recommended to consume a variety of fiber-rich foods, including fruits, vegetables, whole grains, legumes, nuts, and seeds. The recommended daily intake of fiber varies based on age, sex, and individual needs, but generally, adults should aim for 25 to 38 grams of fiber per day.

## **MICROBIOME-YOUR GUT UNIVERSE**

Your body inhabits trillions and trillions of microbes. Most of these are bacteria found in our gut in numbers and volume as large as 2-3 kg for one adult. This gut-cosmos is called the microbiome and is found within research in medicine to have a great impact on many issues regarding our health. They help us digest food, send signals on our bodily state, and even produce vitamins like K. When we get in unbalance here, or dysbiosis as it’s also called, we often will notice the effect on our health. This can show up as leaky gut symptoms, interfere with your digestion, or impact other health issues.

When the microbiome in your gut is balanced and thriving, this will be mirrored in your overall health. They release as a byproduct short-chain fatty acids that nourish the gut cells and communicate with our nervous system, metabolism, and brain. The right foods and fibers will enhance conditions for a thriving gut microbiome.

Prebiotic foods are those that will nourish and feed your gut bacteria. There are many types of fibers, and the best is to eat a variety as often as possible.

Probiotic foods are those that are rich in active bacteria and will help your digestion like fermented foods and kefir.

### **IMPORTANCE OF BREASTFEEDING**

Breastfeeding is important for both the mother and the baby. Here are some reasons why:

**Nutrition:** Breast milk is the perfect food for babies, providing all the nutrients they need for healthy growth and development. Breast milk also contains antibodies that help protect the baby from illnesses and infections.

**Bonding:** Breastfeeding provides an opportunity for the mother and baby to bond through skin-to-skin contact and eye contact.

**Health benefits for the mother:** Breastfeeding has been linked to a reduced risk of breast and ovarian cancer, as well as a lower risk of type 2 diabetes and postpartum depression.

**Cost-effective:** Breastfeeding is free and does not require any special equipment or supplies, making it a cost-effective way to feed a baby.

**Environmental impact:** Breastfeeding is environmentally friendly as it doesn't require the production, transportation, or disposal of formula cans and bottles.

Overall, breastfeeding is a natural and healthy way to nourish a baby and promote a strong bond between mother and child.

### **PHYSICAL ACTIVITY**

Physical activity is important for all, no matter the age. For adults it is recommended to be in moderate activity for at least 2,5 to 5 hours a week. To reap more health benefits, increase the activity. If you are sitting a lot during the day, try compensating with some form of extra activity.

### **HAPPY BRAIN CHEMICAL FLOW HACKS**

It's well known now that exercise increases hormone flow which affects our mood and wellbeing. But did you know there is a bacterium in the soil that stimulates our serotonin production? When we work in the soil with our hands we get in contact with the bacteria "mycobacterium vaccae". In an English study they found the effect similar to antidepressants! It is a good reason to let gardening be a place for activity and recovery as well as a source of good sustainable, healthy food and being in touch with nature.

### **ULTRA-PROCESSED FOODS**

are made mostly from substances extracted from foods, such as fats, starches, added sugars, and hydrogenated fats. They may also contain additives like artificial colors and flavors or stabilizers. Examples of these foods are frozen meals, soft drinks, hot dogs and cold cuts, fast food, packaged cookies, cakes, and salty snacks.



# VITAMINS AND MINERALS:

## VITAMINS:

**VITAMIN A:** Supports vision, immune function, and cell growth. It can be found in liver, fish, dairy products, and orange and yellow fruits and vegetables.

## VITAMIN B COMPLEX:

Includes various B vitamins such as B1 (thiamine), B2 (riboflavin), B3 (niacin), B5 (pantothenic acid), B6 (pyridoxine), B7 (biotin), B9 (folate or folic acid), and B12 (cobalamin). They play important roles in energy production, metabolism, and nerve function. Sources include whole grains, legumes, meats, eggs, and leafy green vegetables.

**VITAMIN C:** An antioxidant that helps with collagen formation, immune function, and iron absorption. Citrus fruits, strawberries, kiwi, potatoes with skin, bell peppers, and leafy greens are good sources.

**VITAMIN D:** Important for bone health, immune system function, and calcium absorption. It can be synthesized by the body when

exposed to sunlight and is also found in fatty fish, fortified dairy products, and egg yolks.

**VITAMIN E:** An antioxidant that protects cells from damage. It can be found in nuts, seeds, vegetable oils, and leafy greens.

**VITAMIN K:** Plays a role in blood clotting and bone health. Green leafy vegetables, broccoli, and mature cheeses are good sources. Our gut bacteria also make K vitamin for us.

## MINERALS:

**CALCIUM:** Essential for strong bones and teeth, muscle function, and nerve transmission. Dairy products, leafy greens, fortified foods, shellfish and fish with edible bones are good sources.

**IRON:** Important for oxygen transport and energy production. Red meat, poultry, fish, legumes, fortified cereals, and leafy greens are sources of iron.

**MAGNESIUM:** Supports muscle and nerve function, energy production, and bone health. It can be found in nuts, seeds, whole grains, legumes, and leafy greens.

**POTASSIUM:** Helps maintain fluid balance, nerve function, and muscle contractions. It is abundant in fruits, vegetables, dairy products, and legumes.

**ZINC:** Important for immune function, wound healing, and DNA synthesis. Meat, shellfish, legumes, seeds, and nuts are good sources.

Remember, this is just a brief overview, and each vitamin and mineral have various functions and sources. It's always best to maintain a balanced diet to ensure adequate intake of these essential nutrients.



Chapter 7:

# ORGANIC FOOD

For the health of the farmer, for your health, and the health of nature.

In a study, they looked at 27 English students from Newcastle University who went to Crete for five weeks for a course. They were eating conventional food in England and changed to Mediterranean cuisine in Crete. The students were followed up with urine samples. Part of the 27 students changed to organic Mediterranean food while the other group to just a Mediterranean diet. The ones who changed to organic food had decreased levels of pesticides in their urine while the ones continuing to eat the same but not organic had increased levels in their urine.

This story tells us about the importance of eating organic but also about how hard it is to avoid the cocktail of different synthetic pesticides on fruits and vegetables. It's not easy to choose well for your health and at the same time try to avoid the cocktail we are being exposed to through what we eat and drink.

## **ORGANIC FARMING FOLLOWS A SET OF PRINCIPLES**

Principle of Health: Organic agriculture should sustain and enhance the health of the soil, plant, animal, human, and the planet as one and indivisible.

Principle of Ecology: Organic agriculture should be based on living ecological systems and cycles, work with them, emulate them and help sustain them.

Principle of Fairness: Organic agriculture should build on relationships that ensure fairness with regard to the common environment and life opportunities.

Principle of Care: Organic agriculture should be managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment.

## **CERTIFICATIONS ON ORGANIC FOOD IN THE EU**

If the EU organic logo is used on a product it indicates that the product is in full conformity with the conditions and regulations for the organic farming sector established by the European Union. For processed products, it means that at least 95% of the agricultural ingredients are organic.

## **WHY SHOULD WE BUY ORGANIC FOOD?**

Organic farming practices avoid the use of synthetic pesticides, herbicides, and genetically modified organisms (GMOs) and by choosing organic food you can help minimize your exposure to these chemicals. Organic livestock farming prohibits the routine use of antibiotics and growth hormones.

Organic farming methods prioritize soil health, biodiversity, and ecological balance. Organic farmers work towards reducing their impact on the environment by using practices such as crop rotation, composting, and natural pest control. Some studies suggest that organic food may have higher nutrient levels compared to conventionally grown food, more good fat acids, and also more antioxidants and some vitamins.

Organic farming practices aim to enhance the nutrient content of the soil, which can potentially result in more nutritious produce. Many organic farms are small-scale, family-owned operations. By choosing organic products, you can support these local farmers and contribute to the growth of sustainable agriculture. Organic farming standards typically include requirements for animal welfare, such as providing access to outdoor areas and ensuring animals are raised in a natural and humane manner.

It's worth noting that while organic food has its benefits, it can be more expensive compared to conventionally grown food due to the higher costs associated with organic farming practices.

### **HIGH-DEMANDING PLANTS ARE OFTEN GROWN IN MONOCULTURE**

Some agriculture plants have a greater negative impact than others. Growing certain plants in huge areas in monoculture (which means only one plant variety is grown) is problematic because of the heavy machinery required, and the methods used will deplete the soil and cause erosion. Soil treated like this will quickly lose its nutrients, ability to hold water, and soil life.

Examples of plants grown in large numbers with not-so-good side effects: Number one is **sugar**, sugar plantations destroy the most biodiversity in the world. **Chocolate**, the plant only grows in certain areas and needs around 2000 liters of water to make 100g of chocolate.

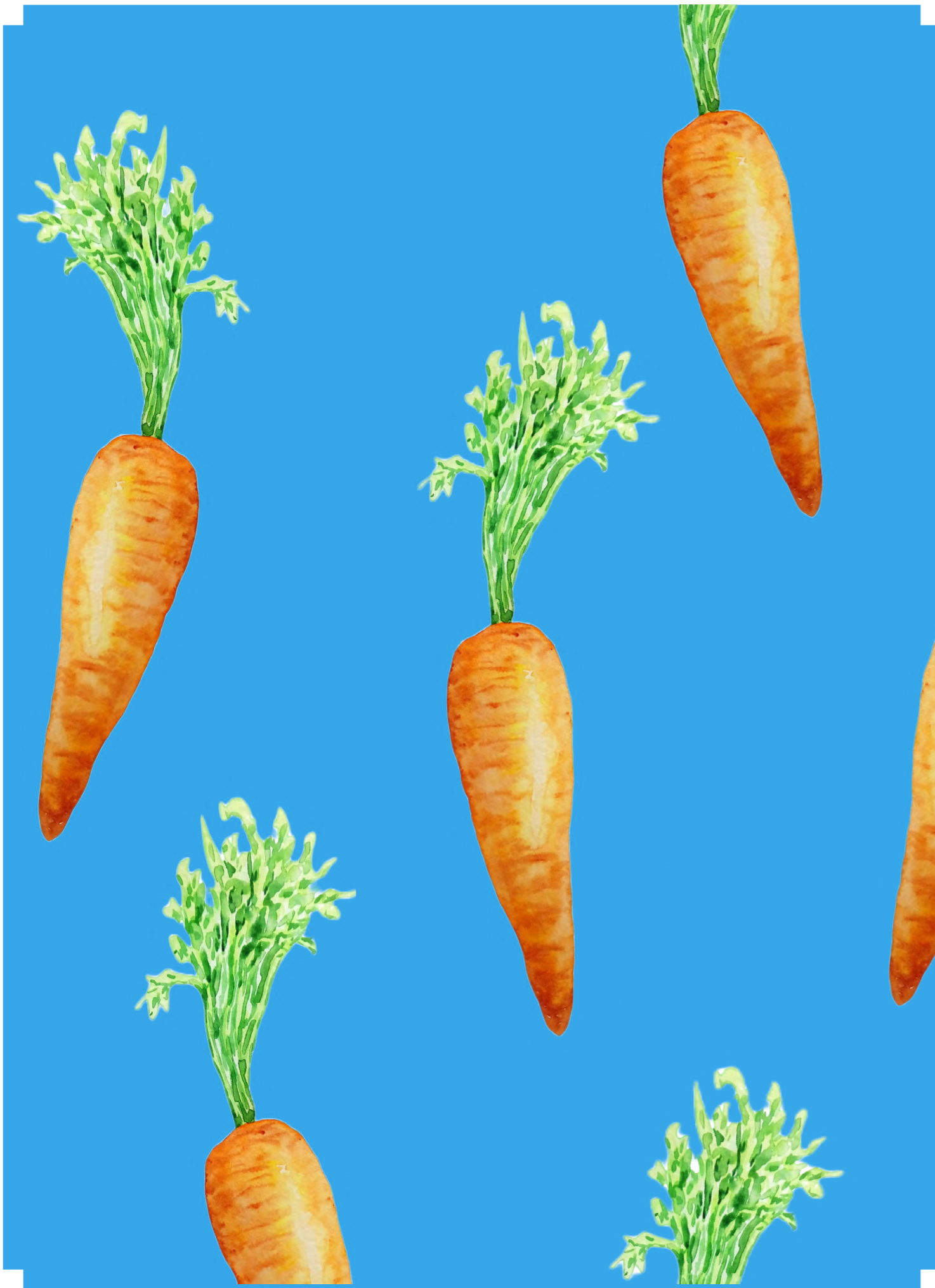
**Coffee**, similar to chocolate the plant is posed to grow under the shades of trees but to make it more simple coffee is grown in full light, often with a lot of harm to trees, uses too much water, and soil erosion.

### **CERTIFICATIONS ON RESPONSIBILITY IN DIFFERENT ARENAS TO HELP THE CUSTOMER CHOOSE PRODUCTS**

The production of food and the impact it has on our environment and lives is significant. Sometimes more than others. Making choices in our daily lives when we choose which products to buy, is one of the small things that can make a big difference. Different certifications focus on different values like workers' welfare, animal welfare, or sustainability. Some are international and others are more for each country. Organizations like Fairtrade and Rainforest Alliance are often on imported products like coffee or cacao. MSC is a certification for sustainable fish.

Organizations for organic production is often found in each country as well. In Norway, they have one certification called Debio, which is a standard organic certification like the one in the EU, while Demeter is also an organic certification but that also has a rule set for biodynamic farming. The biodynamic standard is that farms should function as living organisms. In other words, a biodynamic farm is one that grows a variety of crops, doesn't use synthetic fertilizers and pesticides, and overall has systems in place that mimic what nature would do on its own.

Look for the little seals in the grocery store at your next stop.



Chapter 8:

# GROWING FOOD AT HOME

Growing food at home has numerous benefits, both for individuals and for society as a whole. First and foremost, it provides a source of fresh, healthy produce that can be harvested at its peak ripeness, ensuring maximum flavor and nutritional value.

Growing food at home can also be a great way to save money on groceries. By growing your own fruits and vegetables, you can reduce your reliance on store-bought produce, which can be expensive and may not always be available or fresh. Plus, you can avoid the use of harmful chemicals and pesticides often found on store-bought produce, ensuring that your food is healthy and safe. In addition, growing food at home can be a fun and rewarding activity that can bring families and communities together. It can also help to reduce our carbon footprint by reducing the need for long-distance transportation and the associated emissions. And, by supporting local agriculture and reducing our reliance on imported foods, we can help to build more resilient and sustainable food systems.

Growing your own food is a great way to promote health, save money, build community, and support a more sustainable life.

Watch a very good animated film on nutrient cycling here:



Dr.Elaine Ingham is world-known as the foremost soil biologist and has advanced our knowledge about the soil food web for over 4 decades. She founded the Soil Food Web School. Learn more about them at [soilfoodweb.com](http://soilfoodweb.com).

## WHAT IS GOOD SOIL?

Have you ever been digging in fluffy dirt in a garden or tried digging a hole with your hands in heavy clay soil? Identifying what is good soil is not always easy, especially if you are new to gardening. Dirt is minerals and organic material, air, and water. When these components are in balance soil life can thrive. One teaspoon of soil contains trillions and trillions of microbes that are a strong contributor to healthy soil life. We do not want the soil to be sandy, it will dry out quickly and nutrients will wash off easily. If the soil is only organic material like in a swamp, or is heavy clay, it will close out the air and nothing will grow. Good soil is a mix of sand and organic carbon-rich material, easily crumbles, and has a grain structure.

Earthworms present in the soil is a good indicator, small helpers but with significant impact. They make airways in the soil, and did you know that after they have eaten soil and shiting it out again it has enriched that dirt with nutrient nitrogen 12 times!

A particularly good indicator is observing how you can squeeze the soil into a loose lump in your hand (a good mix of sand, organic, clay, etc.) The dirt has a grain structure, which is a sign of rich soil life, and look out for the earthworms. The more, the better.

Any soil can be improved. It is exceedingly rare that when we start gardening in a new place, everything is perfect. But by gardening and doing things like mulching, we easily improve this, and the place will be better over time. The more carbon you can store, the better the soil will be. The exception is in areas that have been contaminated by industry or chemical/toxic materials.

## THE PERFECT SMALL VEGETABLE

**GARDEN** is the one that provides learning, growth, fresh nutritious produce, joy, and some sweat and tears. It matters less how it looks or if it is not as you expected it to be. Be kind to yourself. A garden is never perfect, and every season is different, trial and error are a part of that. Know that by supporting yourself with a garden, you also support insects and nature.

You can grow a lot in a few square meters. Maybe you have room for a meter-by-meter garden in your backyard or garden? Container gardening is also a good idea for smaller places and balconies.

First, does the location provide enough hours of sunlight for vegetables to grow?

How is the drainage? If the area often has water ponds and is wet it could be a promising idea to grow in raised beds, or at least pile it up from ground level. This will help drain water, let air in, and warm up the soil.

Possible “predators” in the area? Animals like deer, roedeers, and rabbits can do much damage in a brief time. Same with insects like cabbage caterpillars, cabbage moths, and aphids. Think about what might threaten your future garden, you need a fence or need to cover your cabbage plants with insect netting.

Do some research on the plants you want to grow. On the back of the seed packet, there is info on when to sow,



spacing, how tall the plant will be, and when to expect a harvest. Plan things like spacing, nutrient requirements, growth height, and planting depth. It is a puzzle but by starting small know that you learn as you go. Keeping a logbook is a clever idea for saving your experiences and remembering when and where to plant and so on.

### **STARTING UP VEGETABLE PLANTS INDOORS**

For planting out after risk of below zero degrees, drought, or getting lost in weeds.

Spring and summer arrive at various times in Europe. In the warmer parts, you can do so many things directly out but then again it can be hard to get things to grow if it is too dry. Starting plants indoors can be a safe way of starting plants even if you live in a very dry area. If you do not have planting pots or trays you can also use whatever you find that fits your plants. Just make sure there is drainage or make some small holes so access water can drain off. Soil for planting indoors is best bought at a garden center or similar. Tell them why you need it in order to make the best choice. Lighting is important for the plant. Make sure they get enough light, if not they will grow long and weak and die before you get them out. Choose a place by a southern window, use light from growing lights or an ordinary fluorescent tube light, and place the plants 30-40 cm under the light. Adjust light and nutrients as they grow.



# EASY PLANTS FOR THE NEW GARDENER

## SUGAR SNAP PEAS AND BROAD BEANS/FAVA BEANS

These are the plants you can start off very early in the season directly outside. Around the Mediterranean countries, they grow in winter. Peas often require something to climb on to and some varieties grow to over 2 meters. Broad beans are in Norway the most protein-rich plant we can grow this far north. They do not climb, but the plants might need some support when they grow taller.

## LETTUCE

Many varieties here also to choose from. Sow them one and one for planting out, sow directly and thin them out later, or sow them in rows for cutting several times during the season (but then it will not grow a head). When sowing lettuce mixes in rows you can cut them 4-5 times before they are too old, and it is easy to just have a mix with different varieties.

## RADICHES AND TURNIPS

They grow well in almost any soil but the challenge with these types of vegetables is that they are so sensitive to daylight. Too much and they start

bolting, (that is when they want to produce a flower stem for seeds). These vegetables start off early in spring or from August onwards. The particularly good thing about them is that they only need 5-6 weeks before they are finished.

## CABBAGE

Here mentioned under one name. This is many different plants from winter cabbage to broccoli and kale. Amongst the most nutritional plants we can eat, but also the most demanding on feed. These plants are heavy feeders and do like an extra amount of good compost or manure in the planting hole.

## CARROTS

Sow early outside and thin out in time. Also, it is important to keep the weeds out and have spacing between them. The seeds need 2-3 weeks before they sprout and, in that time, they might drown in weeds and are impossible to locate. Few vegetables are as sweet as freshly harvested carrots. Did you know that the more beating the carrot gets, the more bitter it will taste? That is why the one in the store often has a different taste. Carrots will start producing a bitter taste as a defense mechanism when handled roughly.

## POTATOES

This crop we plant with smaller potatoes. You can buy from a garden store or similar for planting. It's not a good idea to plant the ones in the food store because you might get diseases. Try to only use certificated planting potatoes the first time. When you later harvest you can save the smallest ones for planting next year. Potatoes are a great crop to have in new growing areas where you intend to grow other vegetables the following year.

## TOMATOES

Give tomatoes a warm and sunny condition, either outdoors or indoors, and good soil and they can produce loads of nice tomatoes until frost. The plants need to be started early. For the northern part indoors in March and planting out in a greenhouse or protected outside after any danger of frost. When planting out you can preferably plant them deep. The interesting thing about tomatoes is if planted out deep, they will develop more roots from the stem. This makes them able to grow stronger. Tomatoes need pruning but it varies for if it is a bush variety or a high climbing variety. Check the seed packet or online for instructions.

## FLOWERS

Grow a variety of different flowers, there are many ordinary summer flowers that are edible. Good for the insects and good for us. Add petals and whole flowers to salads, decorate focaccia bread, or garnish your dishes. The most common edible flowers that are easily grown are nasturtiums, cornflowers, calendula, and pansy.

## MICROGREENS

These are fresh shoots from various greens that are about 1-3 weeks old. Normally grown in soil or on special mats and easily cut off with a scissor or knife when using. They can provide a vitamin-packed addition to most meals so add when you can to your food. Microgreens do not need a garden or much space. For growing microgreens, you can get seeds that are suited for the purpose. Good microgreens are broccoli or cabbage, sunflowers, and peas.



## **BALCONY AND/OR CONTAINER GARDENING**

Container gardening is a method of growing plants in pots, buckets, or other containers instead of planting them directly in the ground. It's an excellent option for people who have limited space or want to grow plants indoors. Container gardening allows you to cultivate a variety of plants, including flowers, vegetables, and herbs, in a small area. It's also an excellent way to control soil quality and water levels, making it easier to care for your plants. With container gardening, you can add beauty to your home or apartment while enjoying the satisfaction of growing your own plants.

## **UPSIDE DOWN TOMATOES? -YES, YOU CAN ACTUALLY**

Seems like a weird thing to do, but it works. This is a cool thing to do with a growing bag or a bucket and saves a lot of space. Since it is upside down it's good to have the hole under it as small as possible while still being able to plant a tomato plant. If the plant is large just make the hole a bit bigger and close it up after with something around the plant so the dirt does not fall through. Choosing a smaller tomato plant, preferably a variety for containers, is good. Once in, you can just fill up with soil. Hang the tomato plant where you want it, but do not forget to water it.

## **JOIN WITH OTHERS ON CREATING COMMUNITY GARDENS**

Community gardening is a practice where a group of people come together to cultivate a piece of land collectively. These gardens are usually located in urban areas where access to green spaces and fresh produce is limited. (Urban gardening refers to the practice of cultivating plants and crops in urban areas, such as on rooftops, balconies, and in community gardens. As more people move into cities, urban gardening has become an increasingly popular way to produce fresh food, beautify the cityscape, and promote sustainability. Urban gardening can take many forms, including container gardening, raised bed gardening, and vertical gardening.)

Members of the community work together to plant, maintain, and harvest the garden, sharing the responsibilities and the rewards.

Community gardening provides numerous benefits, including the production of healthy and organic food, social interaction among neighbors, and the creation of a sense of community ownership and pride. It also promotes physical activity, reduces stress, and contributes to the beautification of urban areas. Moreover, community gardens are a great way to promote sustainability and environmental awareness. By using compost and natural fertilizers, reducing water usage, and avoiding the use of harmful pesticides, community gardening can help reduce the carbon footprint of urban areas and contribute to the fight against climate change.

Overall, community gardening is a fun, rewarding, and environmentally responsible way to bring people together and enhance the quality of life in urban areas.

## **WEEDING, PLANTING AND MULCHING**

Our vegetables need their space and do not like competition so much. We also want to see the full potential of our vegetables. By weeding and mulching we give our garden the best base for thriving.

Before we start planting and sowing in our garden, we must prepare the plot. We dig up all the weed roots and remove them to a garden compost or similar. When we dig, remove weeds, and shape our garden plot we also at the same time do aeriated the soil. The soil life also needs air to speed up their processes and the soil gets warmer. If we need to add some good amendments to the soil like compost, then this is a suitable time to mix it in.

Weeds come in many varieties, annual and perennial. We want to remove all the roots, especially on the perennial weeds, so they do not come back. The annual weeds can also be a big hassle and we want to remove them from the garden plot before they strangle and overgrow our plants, steal the nutrients from the soil or spread their seeds.

Plant out after any danger of frost and the plants are strong enough. Take them out in sun and weather a couple of days before in their pots to harden them off a bit. This way they will get used to the outside before they are transplanted into the soil. The depth and spacing depends on the plant. Cabbage plants often need as much as 50 cm between each plant while a beet has enough with 10 cm. Planting depth can also vary.

Mulching is when we add a layer of organic or inorganic material that is spread over the soil around plants. It can be made of leaves, grass clippings, wood chips, straw, or other materials. The benefits of mulching are numerous. Mulch helps to retain moisture in the soil, reducing the need for frequent watering. This is especially important in areas with hot and dry weather conditions. It will also



inhibit erosion if you live in an area with heavy and rare rainfalls and retain much more of the water. Mulch helps to suppress the growth of weeds by blocking the sunlight that they need to germinate and grow. Soil temperature regulation where mulch acts as an insulator, regulating soil temperature and protecting the roots of plants from extreme temperatures, high and low. As mulch decomposes, it releases nutrients into the soil, enriching it and providing essential nutrients for plant growth. Fresh grass cuttings are an example of a very nutrient rich mulch that will add a lot of growing power to nutrient demanding plants. Wood chips are low in nutrients and will take nutrition from the soil if you mix it in, but they are great as a mulching layer on top around the plants and on walking paths.

Overall, mulching is a simple and effective way to improve the health and productivity of plants in a garden. It conserves water, suppresses weeds, regulates soil temperature, enriches the soil, and prevents erosion. By mulching around plants, gardeners can save time and effort, while promoting a healthy and beautiful garden.

## **GARDENING HELPS YOU PRODUCE HAPPY HORMONES**

Did you know there is a bacterium in the soil, called *Mycobacterium vaccae*, that when we contact it will promote serotonin production. In contact we mean on our hands and skin. Also soil particles we breathe in. So not using gloves is a good thing and soil is a natural antidepressant. This was found and confirmed through an English study.

Hormones that improve our overall mood will also be produced when we work physically in the garden. It is also shown in studies that being in nature, seeing beautiful nature or only having a picture of nature in an office in the city will improve your wellbeing.



# VEGETABLES AND HERBS YOU CAN RE-GROW IN YOUR HOME

Many vegetables we buy can be regrown. It will not produce the same vegetable and not the same yield but will offer you (and Mother Nature) more nutrients and value for your money. Taking care of some living plants is also a cozy addition to kitchen work and a tasty nutritious addition to food.

The most important to notice is which vegetable has the potential to be regrown. Any parts where you also get a bit of the root or a part you can take cuttings off. And then after some time in a glass jar, you can see new roots emerging.

Occasionally change out the water for your vegetable "rootlings".

## LEMONGRASS

Save the root ends and put them in a glass of water. It might take some time but most often they will start to grow out. After a while, you can then put

it in a pot with soil. Remember that this is a tropical plant and keep that in mind where to put it. They usually live, but will not grow that much in cooler weather outside.

## CHINESE CABBAGE AND PAK CHOY

These plants which are closely related have many different names. They often have a root end where they can regrow leaves. Put in a small bowl with some water under, no need to cover. After a few days, roots should be coming and new leaves coming.

## HAS THE ONION IN THE FRIDGE GONE SOGGY AND GOT GREEN LEAVES?

You can just put it down in the soil, let them root, and grow the green stem. Use the green leaves young. When they are old and bigger, they get fibrous and are not so good for eating. If you leave it in the soil, it will produce a wonderful allium flower instead.

On spring onions you can save the bottom parts and just put in water or soil, and they will regrow.

## CELERY

Cut off the lower part and put in a cup

or something and a little water. They will start regrowing greens that are perfect for soups and curries, or finely chopped in salads or garnish on food.

## HERBS IN POTS WITH SOIL

In Norway, we often find herbs for sale in pots with soil. This way they can have a longer shelf life. Being patient enough often will give you more back with fresh herbs like parsley, dill, and coriander. Splitting up the soil and roots and planting them in pots with new soil can make them last the whole season. From bushy herbs like rosemary, tarragon, and sage you can also take new cuttings. These are herbs that can last for many years as long as they do not freeze in the winter.

## SAVE YOUR OWN TOMATO SEEDS

Taking care of seeds from tomatoes. Want to take it down zero waste street a little further? Or you found a variety of tomatoes that you also wish to grow for yourself, this is how you proceed.

Cut the tomato in half. Scrape out the gel-like substrate that also contains all the seeds. Collect all in a jar with a lid or other airtight cover and keep it at your kitchen counter or other easy assessable place. They will now start to ferment. Shake the jar a few times

for three days and on day three rinse off the seeds in a colander. With water and they will release the gel coat. Easy now after fermenting. But the main reason is that it is the best way you can clean your seeds from viruses and diseases that otherwise have a lot of contamination risk.





Chapter 9:

# FOOD PRODUCTION AND CULINARY CAREERS

Food has a significant role in our lives, from we are born to our last breaths. Food is essential to life. Working with food production, if you work on a large or small farm or garden, often has a value beyond the often today short-sighted economic gain and resource-extracting policies. By working in food and food production, young people can contribute to addressing global challenges such as hunger, malnutrition, and environmental sustainability within the local context. Working closely with nature promotes a sense of responsibility and understanding towards nature and will give valuable insights and skills that can be applied in various fields.

Food production has a strong connection to local communities. By engaging in this field, young people can contribute to the economic development of their communities and strengthen the local food system. They can play a role in promoting nutritious and wholesome food options and support the health and well-being of the people there.

### **WHAT IS REGENERATIVE AGRICULTURE?**

When using regenerative practices in farming you focus on building more topsoil and storing more carbon than what you use from the land. It is a holistic and system-based approach that often includes how you use livestock in grazing, how you save water, and use practices like crop rotation and cover cropping while also restoring soil health and promoting biodiversity. A win-win for the future and an approach more and more farmers turn to in many countries around the globe.

### **MARKET GARDENS**

Market Gardens are a type of small-scale vegetable production where the produce is sold directly to the customer on markets or direct delivery to restaurants for example. The market garden model is not new but builds upon the type of production they have had a lot of in southern parts of Europe and Asia where farmland is limited, and production is mostly hand run with the use of all the space available and different varieties of vegetables growing at different times in the year. Recent years this way of growing annual vegetables for sale has had a renaissance with good examples of modern innovation in the

way vegetables are being produced and sold. Typical for a market garden is efficient land use, and organic practices with the use of compost and organic fertilizers. The growing beds are often permanent with little or no turning of the soil.

One example of a market garden can be a farmer who works full-time on 10000 m<sup>2</sup>. Most of the work is done by hand and with the help of easy power tools and maybe a small tractor. Approximately 20 different vegetables are planted throughout the season with the hardy plants in spring, like peas, spinach, and radishes. Followed by high-season plants like tomatoes, cucumbers, potatoes, onions and autumn harvests like beets, pumpkin, and cabbage. This way the land use is maximized throughout the season.

Want to learn more about different farming practices through high school level education or higher? In most countries there are schools you can apply for and where you can live while learning.

In Norway we have Sogn Jord og Hagebruksskole (SJH <https://sjh.no>), this is a high school level school in a large fjord in Norway where students of all ages attend. They offer many studies and also do shorter training in crafts like making cheese.

### **FOOD FOR THOUGHT: ON RUNNING SMALL-SCALE REGENERATIVE FARMS WITH VEGETABLE PRODUCTION**

“I don’t think the future lies in the hands of traditional farming families. We don’t need one 100-hectare farm outside of the city, we need a hundred 10-hectare farms outside of the city. We can outproduce industrial farming 50 times over on quality, quantity per square meter, freshness, and

locality. Industrial farming can not compete. But we need loads more people farming, that's for sure." These are the words of Ricard Perkins who describes himself as a farmer, educator, and regenerative agriculture expert dedicated to helping you make a good living and live the good life whilst being of benefit to the whole.

The regenerative farm he has built up in Sweden has inspired numerous young people around Europe to start their small-scale farms or market gardens. Ridgedale Farm: <https://www.ridgedalepermaculture.com> Learn more and check out the courses on his platform: <https://www.richardperkins.co/about/>

Using a goal like zero waste as an opportunity and direction for creating new sustainable businesses. Not owning a farm but want to start up a form of local food production? Maybe you have a farmer in your area, or someone who produces food and has waste products they are not able to sell. Could "waste" products from other producers become your base for creating new products? Maybe you have a forest nearby with abundant mushrooms, nuts, or berries growing that you can harvest? Starting a small local food, or drink, business will give you many new skills and experiences while creating and adding value to your community.

Check out this company in Norway creating botanical drinks using wild and sustainable plants, combined with old crafting techniques;  
<https://villbrygg.com/>  
The Norwegian wild farmer:  
<https://trondelagsankeri.no>

### **DO A CHEF TRAINING AND OPEN UP A LOT OF JOB POSSIBILITIES**

Working as a chef you do not only work with food, but you must also learn how to plan, how to treat raw material, food security and cleaning, how to have good customer relations, and how to plan menus and concepts. By working in a large kitchen there will be a head chef in charge who does most of the responsibility work. In some places, chefs work in different areas within the kitchen, like with desserts and pastries or making sauces.

They need trained chefs everywhere, from restaurants, cafes, and large canteens and institutions. The military and the food industry. In shipping and fisheries, inshore, and offshore.

With a background as a chef or in the food industry you can of course start your own business. However, having worked in different areas and tried out different positions is always good for gaining experience and skills.



#icelandicfood #mataraudur

### **WORKING WITH RESOURCES FROM THE SEA**

Today in Norway and Iceland, the fishery is still a significant workplace. In both countries, you will find salmon and other fish farms. Norway is the biggest producer and accounts for more than 50% of world salmon production. When working in salmon farming there are many job opportunities from logistics and office work to farming and processing.

A large part of the fisheries in Northern Europe happens on boats of different sizes. From bigger companies with different heavy equipment to smaller boats, down to the local coastal fishermen who are working alone in their own boats.

In the region of Trøndelag in Norway, you will also find the biggest crab processing facility in Europe which also handles various kinds of seafood like langoustines, and scallops with an ever search for new sustainable products.

Seaweed and kelp are seen today as being the next big thing with many possibilities for developing products like biogas for energy, fertilizer, feed for farm fish, and food and nutrients for humans to mention a few. Seaweed grows faster than plants on land while helping their ecosystem where grown, and does not need any freshwater or chemicals. In the future we probably have plastic made from this, bioplastic! Isn't that just great?



**Salmon aquaculture is the fastest-growing food production system in the world, accounting for 70 % (2,5 million metric tons) of the market.**



Chapter 10:

# RECIPES FROM NORWAY, ICELAND AND LUXEMBOURG



## SOUR CREAM PORRIDGE

This recipe is 4 portions.

5 dl Sour Cream  
2 dl Wheat flour  
5 dl Whole fat milk  
½ tsp salt

### TRADITIONAL ADD-ONS:

Sugar  
Cinnamon  
Butter  
Raisins

Optional on the side: Charcuterie meat like cured ham or mutton and flatbread.

Let the sour cream boil slowly under a lid for about 2 minutes. Sprinkle half the flour in while stirring the pot. The butter will begin to drip out.

Take out the butter with a spoon in a small bowl and keep it warm until serving. Sprinkle in the rest of the flour and stir well. Pour in the milk very slowly while stirring until it has a good thickness for porridge and is free of lumps. Add the salt at the end. If it is left standing for a while it will thicken, then you can stir in some Ekstra milk for wanted consistency.

Serve in bowls with the «melted» butter (or a butter eye made with cold butter in the middle), sugar, and cinnamon.

### NOTE ON SOUR CREAM

In Norway, the sour cream is usually full fat, which means around 35% fat. This is the best recommended to use for sour cream porridge but it is not necessary. There are varieties available also with lower fat content. Just use what you have available but then you might have to add butter later when serving.

## FRIED SALMON FILET WITH SOUR CREAM, POTATOES, AND CUCUMBER SALAD

For portion size calculate 300 grams of fish per portion, two potatoes, and a 1/3 or 1/4 cucumber. Traditionally in Norway, we have boiled potatoes at every dinner, for both fish and meat. Salmon have been a festive meal for the few but since Norway became the first and biggest salmon producer in the world it is now common amongst most people to have salmon as an everyday dinner. This is a simple dish easily made in time for the potatoes to boil.

Wash and start cooking your potatoes, with or without the skin. By eating the potatoes with the skin on you get both good fiber and vitamin C and you save food, so this is recommended.

The potatoes are cooked, It takes usually 20-30 min and is finished when a butter knife easily goes through the potato. While they are cooking you can fry the salmon. Salmon filet is with or without skin and it doesn't matter which. You can fry it in the pan with some butter or oil, or you can put them in the oven at around 200 degrees Celsius. The salmon is finished usually after about 10 min, season with salt and pepper before or during the. If it's in the frying pan you can flip it once, if it's in the oven you can just leave it.

How to tell if the salmon is cooked through, or any fish for that matter, is that you see it changes color all the way through and the fish meat splits up in flakes easily.

### CUCUMBER SALAD:

1 cucumber in thin slices.

Mix separately and pour over in a bowl:

4 tbsp water

4 tbsp vinegar 7%, ordinary (Optional: white wine vinegar or apple cider vinegar)

2 tbsp sugar

0,5 tsp salt and a pinch of pepper.

Add dill if you like it on the top.

For serving it is so good with sour cream on the side or over the fish and potatoes. Enjoy!





## FRESH SPRING ROLLS WITH SALMON AND VEGETABLES

(Modern recipe inspired by Asian cooking)

You need spring roll sheets for these fresh spring rolls. Choose the vegetables you prefer here. Recommend using vegetables like spring onions, cucumber, and carrots cut in sticks, Chinese cabbage, or red cabbage. Since this is a cold dish and the thin rice paper is transparent it looks nice with leaf parsley and edible flowers inside.

Cut the salmon into small oblong pieces. Let it marinate in a little dash of soy sauce and lemon juice, half on half, for a few minutes (hours is ok) before adding.

First, you take a clean smooth surface or a big plate. Place the spring roll paper in some tempered water and leave it for about 30 seconds. Take it out gently and place it on the plate. Now imagine how you want it to look. Place the chosen vegetables and salmon together in a line in the middle. Fold the spring roll sheet tightly around and roll it together.

To be served immediately after. Dip in sweet chili sauce and enjoy!

### **NOTE ON USING RAW FISH IN DISHES**

Salmon is considered safe for all parasites. There is often a sushi grade or Salma quality you can use. These are pieces specially chosen for being in raw dishes. Other types of fish are only considered safe to use if it has been frozen 24-48 hours before use.

## FISHCAKES WITH BARLEY SALAD

Fishcakes: Original recipe from a local resident in Hitra, an island near to Trondheim in the middle of Norway.

This recipe is for fish mince that you can use and shape for both fish cakes or patties, fish burgers, or balls. You must use a food processor for this recipe, alternatively, grind the fish in a meat grinder and mix by hand. Fish patties and burgers you fried on each side in a frying pan in butter, the fish ball let simmer in lightly salted water for 15-20 minutes.

Cod and other types of white fish are preferred. The fish filet pieces must be fresh and not from frozen fish. They can also have been lying in the fridge for 2-3 days prior, the slight maturing of the fish helps the proteins bind better. The liquid that comes from the fish filet in the bowl is rich in starch and is good to add in the mixture.

750-gram fish filet  
 3-4 tsp salt  
 Little under a half onion: Mix well  
 1 tbsp wheat flour  
 2 tbsp potato starch(flour): Mix well  
 4-5 dl milk to be added slowly.  
 Still, mix, see the mixture get even and almost a bit foamy or creamy.

Now it's ready to be shaped. Use your hands, put some water on your clean hands, or dip them in a bowl. Take some of the mixtures and shape it before putting it in a hot frying pan with butter/oil. Medium heat, fry until nicely brown on each side.

Good to freeze in portions for later what you don't eat the same day. But make sure you eat at least one directly from the pan, so it is good!

## BARLEY SALAD

Barley is a grain you can cook and use just like rice and is very healthy. In the northern part of Europe, it grows very well, is very low in gluten, and has high protein content along with many vitamins and minerals.

Cook the barley with a bouillon cube or add some fresh herbs and salt when cooking. Follow the cooking instructions on the packaging. When it is cooked, mix with the salad ingredients of your choice like tomato and cucumber in cubes and lettuce.

This meal tastes good with tzatziki or other sour cream or yogurt dressings. Mix natural yogurt with sweet chili sauce or chopped fresh herbs and some salt.



## GO WILD!- MEADOWSWEET LEMONADE (Filipendula ulmaria)

This lemonade is made with flower heads from a very commonly found wild plant in Scandinavia; Meadowsweet. You can also use other herbs like sweet cicely (green leaves and flowers), black currant leaves (the younger the better), and elderflowers. Meadowsweet is, as the name suggests, very sweet so alone this will be a very sweet drink, but the lemon will balance it. When ready mix out with water as strong as you prefer. When harvesting from the wild choose flower heads that look healthy and are not infected with pests. Carefully rinse off before adding.

150 grams of meadowsweet flowers.  
 1,5 Liters water  
 1 kg sugar  
 1 lemon (preferably organic since we also add the peel)

Put the flowerheads in the container that you will use for the lemonade. Boil up the water and sugar, and add the lemon in slices. Now add the flowers or pour the sugarwater over the flowerheads. Cover with a lid or cloth. Store in a cold room or fridge for about 24 hours, drain off and then it's ready. Store in the fridge for a week. Keep for later by freezing down in portions. This way you can have the taste of summer all winter.

### TIP FOR FREEZING LIQUIDS IN RE-USE JAM JARS

Save glasses with a lid and use these as containers for freezing. The only important thing to remember is to not fill up completely to the top but leave space for the content to expand when it freezes. Old jam glass containers and similar are most often perfect for use again for many things, just make sure the plastic coat on the lids is not damaged, thou the bare metal. By using glass, you also avoid the chemical substances that might leak from the plastic in some cases.





## THE ICELANDIC MEAT SOUP

What is so wonderful about this recipe is that there is no single dish right and there are countless versions that vary from family to family. This recipe is therefore an ideal opportunity to use what you have in the fridge and make your own version.

It's no secret that soup tastes better the next day. It certainly is, and it is good for 3-5 days after preparation. Just keep it in the fridge in a closed container and heat up only the portions you intend to take from it. That being said, try not to heat it all the time and then cool it again (you can always put the soup in smaller portions in a box and freeze it).

3 liters water  
 1,5-2 kg soup meat (lamb meat).  
 1/2 dl rice/ spaghetti /barley /noodles  
 2 tsp salt (and a little bit of white pepper)  
 5-8 carrots  
 8-10 potatoes  
 1-2 beetroots  
 1/4 cabbage  
 1 onion  
 1 dl soup herbs

-Rinse the meat and put it in the pot along with 3 liters of water. While boiling, it is normal for a brown foam to form on top. Take it away with a spoon or scoop as it forms. Boil for 45 minutes

-While the meat is cooking, prepare the vegetables. Slice the carrots, dice the beets, peel and dice the potatoes, cut the onion into small pieces (much smaller than other vegetables) and dice the head of the cabbage.

-After 45 minutes of boiling the meat, add 1 dl of soup herbs, onions, potatoes, beets, carrots, salt, a little white pepper, and, if you want, 1/2 dl of rice (they were often added for that to drink the soup but many people are used to having rice in their soup). For example, leftover rice/spaghetti/barley/other could be used or it could be left out.

-The soup continues to cook for about 15-20 minutes.

## FISH STEW

### INGREDIENTS:

700 grams of fish (haddock or cod)  
4-500 grams potatoes  
100 grams butter  
2 chopped onion  
1 1/2 dl flour  
2 dl milk/ cream  
2 dl fish broth  
salt and white pepper

### METHOD:

-Boil the fish in water and put it aside (remember not to throw away the broth).  
-Boil potatoes.  
-Melt butter in a pan and let the onion soften for a few minutes. Add flour and stir together and finally add fish stock and milk or cream. Stir and thin if necessary.  
-Mash the fish and cut the potatoes into pieces and add them into the pot.  
-Add salt and pepper.  
Best served with good rye bread.



## GNOCCHI WITH ROSEMARY AND BUTTER

(Originates from Italy)

Do you have a lot of left over potatoes, or just like potatoes? This is an easy recipe and it is ideal to use leftovers or just use what you have in the fridge.

### INGREDIENTS:

1kg potatoes  
2 eggs  
150 grams flour  
Butter  
Fresh rosemary  
Salt and pepper

### METHOD:

Boil the potatoes or use leftover potatoes, peel them, and mash them well together. Add the eggs one at a time and mix together and season as you like. Then the flour is added to the mix until the dough has gotten well together (sometimes you may need to add a little more flour). Divide the dough into four equal-sized pieces and roll into a pulse. Then cut the rolls into approximately 1 cm pieces and roll them over with a fork to achieve the gnocchi look.

Melt the butter (a matter of taste how much butter to put) or add 2-3 branches of rosemary into the pot. Let it simmer on low heat until the butter turns brown.

Now mix the butter with the pasta and sprinkle Parmesan cheese over it.





## HAPPY- MARRIAGE CAKE

170 grams flour  
170 grams oats  
150 grams sugar / brown sugar  
1 tbsp baking powder  
150 grams of soft butter  
salt on the tip of a knife  
A little bit of water if needed to get the dough together  
Rhubarb jam  
Marzipan (optional)

-Turn the oven on to 180° degrees. Mix all the ingredients together (except the jam) in a bowl and knead the dough. Put  $\frac{2}{3}$  of the dough in the greased round baking mold. The dough goes to the bottom of the form and up the sides. Then you put  $\frac{1}{2}$  -1 jar of rhubarb jam over it. Use  $\frac{1}{3}$  of the leftover dough and put in small pieces over the jam. Optionally, put a little marzipan over the cake before putting it in the preheated oven for about 30-40 minutes.





## BEAN SOUP (BOUNESCHLUPP)

### INGREDIENTS:

1 kg beans (preferably fresh beans for Bouneschlupp, available on the market from mid-July)  
 0.5 kg potatoes  
 1 large tin (800 g) of peeled tomatoes  
 400 g bacon  
 Salt  
 Pepper  
 Cream

### METHOD:

1. Chop the beans, peel, and dice the potatoes.
2. Put the beans and potatoes into a large pot, fill with water until just covered, and boil until they are soft but still firm to the bite. In the meantime, fry the bacon in a pan.
3. Add the peeled tomatoes and the bacon to the beans and potatoes and bring briefly to the boil again. Season with salt and pepper.
4. Refine with a dash of cream and serve.

### TIPS

If you like it hot, you can add a pinch of fresh chili finely cut to the bacon and tomatoes.

## BUCKWHEAT DUMPLINGS (STÄERZELEN)

### INGREDIENTS:

2½ cups (600ml) water  
 1 teaspoon fine sea salt  
 2 cups (300 gms) buckwheat flour (light or regular)  
 ¼ cup (60ml) melted butter  
 (optional, to serve):  
 hot milk or cream crumbled cooked bacon (about 4 slices)

### METHOD:

1. Bring the water and salt to a boil in a medium-sized saucepan. Set a skillet onto a neighboring stove burner turned to low heat (or have a heated bowl nearby).
2. Measure the buckwheat flour into a spouted pouring vessel or a bowl, so it's ready to add quickly to the water.
3. When the water comes to a boil, pour the buckwheat flour into the water quickly in a thick stream, while stirring vigorously with a wooden spoon with your other hand. The mixture will seize up and become thick almost instantly. Keep stirring the stiff ball of dough until all the flour is moistened. This will only take a few seconds. Reduce the burner heat to very low.
4. Use a metal teaspoon, dip it into the melted butter, then scoop out a slightly heaped spoonful (a Stäerzel) of the dumpling dough. Shape the top of the dumpling with your fingers if it is quite ragged, but don't worry about being too precise. These dumplings are meant to be rustic. Plop the dumpling into the preheating skillet on the stovetop.
5. Keep scooping out the dough and making more Stäerzelen, dipping the spoon into the butter each time, until you've used up all the dough.
6. Pour the remaining melted butter over the Stäerzelen. At this point, they are ready to serve as a side dish, or you can turn the heat up a bit and sauté the buckwheat dumplings a bit more, flipping them gently, until some of them get lightly golden on some of their surfaces.
7. If preparing the Stäerzelen as a main dish, mound them in flat bowls and pour hot cream or milk over top, then sprinkle them with a handful of cooked, crumbled bacon or speck. Or top them with grated cheese or any of your favorite sauces.
8. Serves 4 as a side dish or 2 as a main dish.





## WHITE ASPARAGUS WITH SAUCE HOLLANDAISE AND POTATOES

### INGREDIENTS:

For the vegetables

1. 500 gm waxy potatoes
2. 1 tsp salt
3. 750 gm white or green asparagus
4. Sugar
5. Lemon juice

For the hollandaise

1. ½ lemon
2. 250 gm butter
3. 3 egg yolks
4. 50ml dry white wine

For garnish

1. 2 tbsps butter
2. 2 tbsps freshly chopped parsley

### METHOD:

1. For the vegetables, rinse and peel the potatoes and cook for 25-30 minutes in boiling salted water.
2. Meanwhile, peel the asparagus and cut off the woody ends. In a saucepan, bring plenty of water to a boil, with salt, sugar, and a dash of lemon.
3. Add the asparagus and simmer for 15-20 minutes.
4. For the hollandaise sauce, squeeze the juice of 1 lemon. Melt the butter in a small saucepan over medium heat and remove from the heat. Whisk the eggs with the white wine, salt, and lemon juice in a bowl over hot water until foamy. Remove from heat and continue to whisk, adding the butter in a thin stream until the sauce is glossy. Season with salt and lemon juice.
5. Drain the potatoes, place in a pan with melted butter and freshly chopped parsley and mix to coat.
6. Serve the asparagus with potatoes on plates and drizzle with the hollandaise sauce.

## LUXEMBOURGISH TRIPE: KUDDELFLECK

### INGREDIENTS:

1. 750 g boiled tripe
  2. 2 eggs
  3. Flour
  4. salt
  5. Pepper
  6. Oil
- For the sauce:
1. 1 shallot
  2. 2 Gherkins
  3. 2 teaspoons of capers
  4. Parsley
  5. Chives
  6. 50 g butter
  7. 1 heaped tablespoon of flour
  8. ½ litre broth or meat stock
  9. Elbling, or any other dry white wine

### METHOD:

1. Tripe is available ready-boiled at the butcher's shop. Cut it into rectangles of 5 x 8 cm.
  2. Take two soup bowls. In one mix the eggs, salt, and pepper. Put the flour into the other.
  3. Dip the pieces first in the egg, and then in the flour.
  4. In the meantime the oil has been heated in a pan.
  5. The pieces are then fried on both sides until crispy.
  6. Put the pieces when cooked on a preheated plate covered with a paper napkin.
- For the sauce:
1. It is best to prepare the sauce prior to frying the tripe. It takes about twenty minutes to cook.
  2. Fry the finely chopped shallots in some butter, and place on one side.
  3. Melt the rest of the butter on a strong heat.
  4. Sieve and stir in the flour, allowing it to brown.
  5. Take the pot from the heat and slowly add the stock, still stirring.
  6. Cook for a while longer, stirring occasionally.

7. Add a good slug of Elbling or other dry white wine.
8. Add the cooked shallots, the gherkins, finely chopped, and the capers.
9. Season to taste with salt, pepper, and perhaps Tabasco.
10. Add the parsley and chopped chives.
11. Serve with boiled potatoes and a good dry white wine.
12. This dish can equally be prepared with tomato sauce.



## **SOURCES**

### **CHAPTER 1: FOOD AND ITS NUTRITIONAL VALUE**

#### **CHAPTER 2: HIDDEN HUNGER**

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Small scale farmer/ Regenerative agriculture  
<https://sjh.no>  
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#### **CHAPTER 10: RECIPIES FROM NORWAY, ICELAND AND LUXEMBOURG**



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