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# **KETO Diet**

## **Didactic Material nr. 5**



# Introduction

**The ketogenic (keto)** diet is a way of eating that focuses on high fat, moderate protein, and very low carbohydrates. By cutting down carbs, the body enters a state called ketosis, where it burns fat instead of glucose for energy. This shift can help with weight loss, steady energy levels, and better blood sugar control. The key is choosing the right foods to stay in balance while benefiting from ketosis.

How it works:

- Normally, your body uses glucose (from carbs) as its main energy source.
- On a keto diet, you drastically reduce carb intake (usually 20–50 grams per day) and increase fat consumption.
- With low glucose available, your liver produces ketones from fat, which become your new energy source.

## What is the Keto Diet?

The typical ratio is about 70–75% fats, 20–25% proteins, and 5–10% carbohydrates. This change in macronutrients makes the body switch from using glucose (sugar) as its main source of energy to burning fat. As a result, the body produces ketones, which serve as an alternative fuel.

**People adopt the keto diet for different reasons, such as weight loss, better focus, and increased energy levels.** Common foods in this diet include avocados, nuts, seeds, eggs, cheese, and meats, while starchy foods, grains, and most fruits are limited. To benefit from this diet, it is important to keep the right nutrient balance so the body stays in ketosis.

### Common Foods:

- Allowed: Meat, fatty fish, eggs, butter, cheese, oils, nuts, low-carb vegetables (like leafy greens).
- Avoided: Bread, pasta, rice, sugar, most fruits, starchy vegetables.

You can use [Lifesum App](#) to plan your personalized meal plans and recipes.

### Potential Risks/Considerations:

- “Keto flu” (fatigue, headache, nausea during transition)
- Nutrient deficiencies if not planned well
- Not suitable for people with certain liver or pancreatic conditions

# Why is it important?

The keto diet provides an alternative to traditional diets by focusing on adjusting macronutrients to achieve specific health goals. Learning how to follow the keto diet correctly helps individuals make informed choices that match their lifestyle, nutritional needs, and overall wellness objectives.

## What are the benefits?

The keto diet provides several key advantages, including:

1. **Weight Loss:** The keto diet promotes fat loss by encouraging the body to burn stored fats for energy, which can lead to more effective and sustained weight loss compared to traditional low-fat diets.
2. **Improved Energy Levels:** By using fats as the main energy source, the keto diet provides a steady supply of fuel, which can help avoid energy crashes associated with high-carb meals.
3. **Mental Clarity and Focus:** Some followers report enhanced cognitive performance and better concentration due to the consistent energy supply from ketones.
4. **Appetite Control:** The high-fat content of the keto diet helps increase satiety, reducing hunger and the likelihood of overeating.
5. **Blood Sugar Regulation:** By limiting carbohydrates, the keto diet can help stabilize blood sugar levels, making it a potential option for managing conditions like type 2 diabetes.
6. **Potential Health Benefits:** Some studies suggest that the keto diet may improve certain health markers, including cholesterol and blood pressure, although long-term effects need further research.
7. **Support for Lifestyle Goals:** The keto diet can complement personal wellness objectives by providing an alternative to traditional diets, supporting individualized nutrition strategies.

# What can I do?

Adopting keto diet habits can feel challenging at first because it's a major shift in how your body gets energy, but with a structured approach, it becomes much easier. Here's a practical step-by-step guide:

## 1. Learn the Basics

- Understand macros: high fat, moderate protein, very low carbs.
- Know which foods are allowed and which to avoid.

## 2. Stock Your Kitchen

- Allowed foods: meat, fish, eggs, cheese, butter, oils, nuts, seeds, low-carb veggies (spinach, zucchini, broccoli).
- Avoid: bread, pasta, rice, sugar, starchy veggies, most fruits.
- Remove or minimize temptations—out of sight, out of mind.

## 3. Plan Your Meals

- Use apps and prepare easy snacks: cheese sticks, nuts, boiled eggs, avocado.
- Meal prep a few days ahead to avoid impulsive high-carb choices.

## 4. Transition Gradually (Optional but Helpful)

- Some people start by reducing carbs slowly over a week. That helps minimize “keto flu” (fatigue, headache, irritability during transition).
- Stay hydrated and replenish electrolytes (sodium, potassium, magnesium).

## 5. Track Your Progress

- Track carbs, fats, and protein with an app or journal.
- Monitor energy, mood, and weight changes - optional: test ketone levels with strips or a blood meter to confirm ketosis.

## 6. Focus on Lifestyle Habits

- Hydration: Drink plenty of water.
- Sleep: Adequate rest supports metabolism and cravings.
- Exercise: Strength training and cardio help fat adaptation.

## 7. Make It Enjoyable

- Experiment with keto-friendly recipes and spices.
- Find a community online for motivation and recipe sharing.

# What have I learnt?

- The keto diet is low in carbohydrates and high in fats, helping the body burn fat for energy.
- It can support weight loss, steady energy levels, and mental focus.
- Maintaining proper nutrient balance is essential for staying in ketosis and staying healthy.
- Knowing the basics of the diet helps make informed food choices.
- The keto diet is becoming more popular due to potential health benefits, but long-term effects are still being studied.

All is summarized in the European approach of Microcredentials.

## Micro-credential 1

### Restoring and regenerating healthy and resilient ecosystems

- 1.1 Value sustainability by reflecting on personal values while critically evaluating how they align with sustainability values.
- 1.2 Supporting fairness to support equity and justice for current and future generations and learn from previous generations for sustainability.
- 1.3 Promoting nature to acknowledge that humans are part of nature; and to respect the needs and rights of other species and of nature itself in order to restore and regenerate healthy and resilient ecosystems.

## Micro-credential 2

### System thinking, Critical thinking and Problem framing

- 2.1 (Systems thinking), to approach a sustainability problem from all sides; to consider times, space and context in order to understand how elements interact within and between systems.
- 2.2 (Critical thinking) To assess information and arguments, identify assumptions, challenge the status quo, and reflect on how personal, social and cultural backgrounds influence thinking and conclusions.
- 2.3 (Problem framing) To formulate current or potential challenges as a sustainability problem in terms of difficulty, people involved, time and geographical scope, in order to identify suitable approaches to anticipating and preventing problems, and to mitigating and adapting to already existing problems.

## Micro-credential 4

### Acting for sustainability

- 4.2 (Collective action) to act for change in collaboration with others.
- 4.3 (Individual initiative) to identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet.