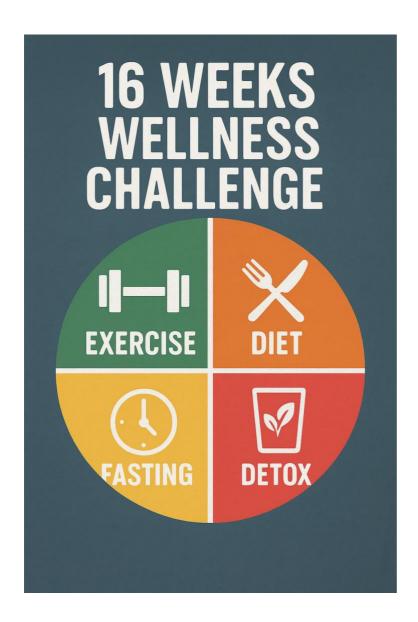
# 16 week health challenge!





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#### Preface

With this material, I want to illustrate in a general and simplified way how we can pave new health habits into our lives in terms of – exercise, diet, and generally good habits. My experience is mainly in my profession as a physiotherapist, with patient-oriented training and rehabilitation, where I have been active for 10 years. But I also have a lot of experience of training for myself, as I have practiced fitness, and many ball sports, and thus I have also engaged in the importance of diet and habits for the results you get. I have realized that every detail of what changes you make can make a big difference. Through the above experience of this, I have asked myself many questions over the years, which I have since sought answers to, A lot of questions and answers are in addition to my university competence, but which I still feel that I on the whole dare to stand for. The material is aimed at healthy individuals, and the dietary advice I would classify as "simple", and if you who read this feel that you are carrying an illness, injury or the like, I recommend you to consult the relevant healthcare provider first. I will also be open about saying that I have used Chatgptn to produce large parts of the material, and to get a further development of many of the answers that I myself had already produced before. I therefore reserve the right for any errors that exist. However, I have read through this a lot of times and think that most of it is recognizable and rations well within me, and seems reasonable. With this, I would like to wish you a good and pleasant reading

Created: Year 2025, website: www.gustafaxelryd.com

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- W.1: Challenge 1 Start daily exercise routine
- V.2 Read up on fasting in this section (click here)

#### W.5-W.8

- Read the pdf file "A guide to Weight Loss", the two parts that are marked in green and are specifically about weight loss.
- W.5: challenge 2 24h fasting.
- W.6: challenge 3 Start a kind diet, go on 250 kcal in calorie deficit

#### W.9-W.12

- V.9 Read up on detox treatment in this section (click here)
- W.9: Challenge 4- try 48h fasting
- W.10: Challenge 5- Start the 30-day detox regimen

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- Week 14 Challenge 6: 72h fasting
- Week 16 All challenges completed. Done with diet.

#### **Fast**

## Benefits of fasting and how to set it up:

#### Introduction. What are the positive effects of fasting?

- There are several positive effects of fasting, both for the body and the brain, including:
- 1. Weight loss: Fasting can contribute to weight loss by limiting calorie intake and increasing fat burning in the body.
- 2. Improved blood sugar control: Fasting can contribute to improved blood sugar control by reducing insulin levels and increasing insulin sensitivity.
- 3. Improved heart health: Fasting can contribute to improved heart health by lowering blood pressure and LDL cholesterol levels.
- 4. Improved brain function: Fasting can contribute to improved brain function by increasing the release of brain growth factors that are important for cognitive function and memory.
- 5. Reduced inflammation: Fasting can help reduce inflammation in the body by reducing the production of cytokines, which are proteins involved in inflammatory processes.
- 6. Improved cell repair: Fasting can contribute to improved cell repair by increasing the production of autophagy, a process in which the body breaks down and recycles damaged cells.
- However, it's important to note that fasting may be inappropriate for some people, especially those with malnutrition, diabetes, or other health conditions. It is important to consult a doctor before starting a fasting routine and to gradually increase the time of fasting to avoid negative side effects.

The renewal of stem cells during fasting is a complex biological phenomenon that is affected by how long and how often you fast. Here is an overview based on current research:

- 1. Short-term fasting (24–72 hours)
- Fasting for 48–72 hours has been shown to activate regenerative processes in the body, including:
  - Improved stem cell activity: A study from USC (University of Southern California) in 2014 found that fasting for 72 hours could trigger regeneration

- of the immune system by stimulating hematopoietic stem cells (those that form blood cells) to start regeneration.
- Autophagy and repair: After just 24-48 hours, autophagy is activated, a process in which cells clear away damaged parts, paving the way for regeneration.

#### 2. Stem Cell Regeneration – Time Frames

- Clear stem cell activation: Begins to be noticeable after 48–72 hours of fasting.
- Long-term impact: Repeated fasting cycles (e.g., intermittent or intermittent fasting for weeks/months) can provide long-term improved stem cell function, especially in the intestines, blood, and muscles.

#### 3. Fasting and Type of Stem Cells

- Hematopoietic stem cells: Activated after prolonged fasting (72 hours).
- Intestinal stem cells: Positively affected after short fasts (24–48 hours).
- **Neural stem cells**: Have shown increased activity after calorie restriction or fasting, but often after repeated cycles.

#### Why exactly 72 hours?

- After that time, the body begins to enter a more **profound ketogenic and catabolic state**, where:
- The electrolyte balance may be disturbed (risk of low sodium, potassium, magnesium).
- **Muscle breakdown** can increase, especially if you are underweight or have a low protein intake before fasting.
- **Blood sugar** can fall to risky levels in some people (especially people with diabetes or insulin problems).
- Cortisol levels can rise and negatively affect both mood and immune system.
- For whom is longer fasting risky?
- People with heart or kidney problems
- People with eating disorders
- Elderly, underweight, or people with low muscle mass
- Pregnant or breastfeeding
- Those who take insulin or other blood sugar-lowering drugs

#### **Summary:**

• **Up to 72 hours**: Generally safe for healthy adults, with adequate fluid and electrolyte intake.

#### 1. Fat loss – how much body fat is burned?

• During fasting, the body mainly uses fat for fuel after 24–36 hours. Your fat burning depends on your body weight, muscle mass, and activity.

#### **Estimated fat deficit in 72 hours fasting:**

- You consume about **2000–2500 kcal/day** at rest (depending on the body)
- In 3 days = approx. 6000-7500 kcal in total
- 1 kg fat = ~7700 kcal

So you burn approximately:

#### 0.8-1 kg body fat

But this is a ceiling, and can be lower (0.4–0.7 kg) if the body goes into energy-saving mode.

#### 2. Fluid loss – glycogen & urine

• When you don't eat, your body quickly consumes glycogen (the carbohydrate store in the muscles and liver), and each gram of glycogen binds about **3-4 grams of water**.

#### · Glycogen loss:

- Total glycogen store: ~500–600 grams
- Water loss associated with this: approx. 1.5-2.5 kg

Total fluid loss from glycogen:

#### 2-3 kg of fluid

- Further fluid loss occurs through:
- Urin (ketoner, salter)
  - Decreased bowel volume
  - Sweating (if you move or sweat a lot)

#### 1. Recommended escalation to reach 72 hours

Here is a safe and effective progression:

- Step 1: 16:8 or 18:6 (short-term fasting)
- Start by fasting 16–18 hours a day for a few days

This helps the body get used to using fat as fuel (so-called "metabolic flexibility")

#### Step 2: 24-hour fasting

- E.g. dinner for dinner
- Do this 1-2 times and feel how your body reacts (mood, energy, thirst, sleep)

#### Step 3: 48-hour fast

- Drive once when you feel safe
- Make sure you are free or have low stress, and that you sleep well

#### Step 4: 72-hour fast

• When 48 hours feels stable (not extremely heavy), you can aim for 72 hours. This can take **1-3 weeks** depending on your habit and daily fitness.

#### 2. Fluids and electrolytes – how to keep your balance

- During fasting, you urinate much more than usual, which flushes out **sodium**, **potassium**, **and magnesium**. Therefore, fluid + electrolytes are absolutely crucial.
- Fluids drink plenty
  - Drink at least 2-3 litres of water per day
  - Add decaf tea if you want to vary
- Salt & electrolyter rekommendation
- You can run **Resorb** 1-2 times a day **or make your own mixture**:

#### **Homemade electrolyte drink:**

- 1 liter of water
- 1/4 teaspoon **Himalayan salt or mineral salt** (sodium + trace elements)
- 1/4 teaspoon **NoSalt** or similar (potassium chloride optional but good)
  - 1/2 teaspoon Magnesium Citrate (or capsule)
  - Possibly a little lemon

**Tip:** Magnesium in the evening  $\rightarrow$  improves sleep and reduces cramps

#### 3. Important things to avoid

- No hard exercise during longer fasts (light walking is OK)
- Avoid fasting if you have an eating disorder, are pregnant, have type 1 diabetes or are taking insulin/sugar-lowering medication
- Be careful with fasting if you have **low blood pressure** or migraines

#### How often?

- Every 1-3 months.
  - For most people, it is enough to do a 2-3 day fast every three months. This
    gives the body time to recover between fasts, and reduces the risk of nutrient
    deficiencies or exhaustion. Fasting several times a month can disrupt your
    metabolism.

People with certain health conditions, pregnant, or breastfeeding should consult with a doctor before fasting

My own thoughts on the benefits of fasting in addition to the above mentioned benefits:

- Discipline
- The Spiritual Perspective
- Know how the body responds
- Relaunch

# Detox cure 30 days – Background & Purpose

#### What can a detox cure do

- Help the body detoxify from
  - Metabolic residues
    - Detoxification system:
      - Kidneys
      - Lungs
      - Liver
      - Antioxidants
  - Potential microbes (fungal infections & parasites)
    - Detoxification system:
      - Immune system
      - Tarmfloran
      - · Gastric acid and digestive enzymes
  - Environmental toxins (microplastics, heavy metals, chemicals)
    - Detoxification system:
      - Liver
      - bile and feces

#### Optimize your gut flora by:

- Reduce strain on the gut flora
  - Less sugar and processed food
  - Less alcohol and additives
  - · Reduced inflammation of the intestinal wall
- · Supply of nutrients for the good bacteria
  - Prebiotic fiber
  - Polyphenol
  - Fermented foods
- Environmental improvement in the gut

- Less "leaky gut"
- Better pH balance in the colon
- Better bile and enzyme flow
- Sharpens your mental acuity indirectly by giving the brain the following
  - More stable blood sugar and energy
    - More even energy level and concentration
  - Reduced inflammation
    - Inflammation in the body affects neurotransmitters in the brain and thus contributes to depression and anxiety
    - Less inflammation > clearer thoughts and better mood
  - Better brain-gut communication
    - Better gut flora > improves the production of serotonin, GABA >
      affects stress levels, sleep, and mood
  - More recovery
    - Through reduced caffeine intake, alcohol, and screen time → better sleep quality -> essential for memory, learning and creativity. You make better decisions, and are more resistant to stress.
  - Less toxic load
    - A lighter loaded body frees up resources for mental clarity instead of constantly dealing with internal "fire brigade call-outs".
  - Bonus Effect:
    - Facilitates weight loss in several ways:
      - Lower inflammation improves insulin sensitivity and increases metabolism
      - More even blood sugar, which reduces hunger and cravings for sweets
      - Improved digestion: reducing cravings for unhealthy foods

# The body's natural detoxification system

- Kidneys
- Lungs
- Liver
- Antioxidants

- Immune system
- Tarmfloran
- · Stomach acid and digestive enzymes
- bile and feces

#### What is included in a detox cure

- Dietary changes
  - Reduction or elimination of processed or refined foods
  - Reduced intake of sugar and fast carbohydrates
  - Reduced or no consumption of alcohol, caffeine, and tobacco
  - Increased intake of fiber-rich vegetables, root vegetables and fruits
  - Focus on pure protein sources
  - Increased consumption of water and fluids
  - Addition of fermented foods
  - Exclusion of allergens and indigestible foods
  - Supplements that may support detoxification: milk thistle, chlorella and spirulina, NAC (N-acetylcysteine)
- Sauna
  - Increased sweat production & blood circulation
- Exercise
  - Stimulates the lymphatic system
  - Increased sweat production
- Deep breathing
  - More efficient transport of carbon dioxide (a major metabolic residue) via the lungs > optimizes oxygen uptake, nervous system function, prevents carbon dioxide poisoning (fatigue, dizziness, etc.)
  - Lowers stress levels -> less cortisol -> benefits the immune system and digestion

Detox cure – how often

- Shorter detox (3-7 days)
  - Can be done every month to every other month if you want
- Longer detox (15-30 days)
  - Can be done every 3 to 6 months
- Annual detox
  - For some, a detox / "deep cleaning" is enough about 1 time a year, in combination with ongoing health habits during the year.
- Why not all year round?
  - The body needs balance, not constant restriction > can lead to nutritional deficiencies and stress in the body
- What distinguishes detox cure from fasting in brief?
  - Detox: Effect: Nourishes and cleanses the body without starving it.
  - Fasting: **Effect:** The body uses reserves (fat) and cleanses cells, but without nutrients.
- Who should avoid or consult a doctor before detox treatment?
  - Chronically ill, pregnant women, people with eating disorders or nutritional deficiencies, those who are breastfeeding, children & the elderly (who need a nutritious diet), people with low blood pressure or low blood sugar or other metabolic imbalances

# Suggested 30-day diet plan for detox cure

• In the accompanying pdf file you will find suggestions for diet plans, shopping lists, weekly planning, etc.

# 🛒 Exempel på Inköpslista för 30 dagars detox

#### 1. Grönsaker (färska och gärna ekologiska)

- Spenat
- Grönkål
- Broccoli
- Blomkål
- Brysselkål
- Zucchini
- Morötter
- Rödbetor
- Gurka
- Paprika (gärna röd, gul, grön)
- Selleri
- Tomater
- Sparris
- Lök (röd & gul)
- Vitlök
- Färsk ingefära

#### 2. Frukt & bär (gärna ekologiska)

- Äpplen
- Citroner
- Apelsiner
- Kiwi
- Blåbär (färska eller frysta)
- Hallon (färska eller frysta)
- Jordgubbar

### Appendix 9 – Detox The Purpose Of The Diet

#### Grönsaker

#### Grönkål, spenat, broccoli, blomkål, brysselkål

Effekt på avgiftning: Innehåller svavelhaltiga ämnen som sulforafan som stimulerar leverns avgiftningsenzymer (fas I och II), vilket stärker leverns kapacitet att bryta ner och eliminera

Effekt på tarmflora: Fibrerna fungerar som prebiotika och främjar tillväxt av goda bakterier.

#### Rödbetor

Avgiftning: Betain hjälper levern att avgifta och minskar inflammation i kroppen. Tarmflora: Fibrer och polyfenoler i rödbetor främjar en divers och hälsosam tarmflora.

#### Frukt och bär

#### Citrusfrukter (apelsin, citron, lime)

Avgiftning: Rik på C-vitamin och flavonoider som stödjer antioxidativt skydd och leverns avgiftningsprocesser.

Tarmflora: Prebiotiska fibrer hjälper till att stödja goda bakterier.

#### Bär (blåbär, hallon, jordgubbar)

Avgiftning: Innehåller antioxidanter som skyddar kroppens celler från oxidativ stress orsakad av toxiner.

Tarmflora: Polyfenoler i bär fungerar som prebiotika och kan öka andelen nyttiga bakterier.

#### Fullkorn & baljväxter

#### Havre, quinoa, linser, kikärter, bönor

Avgiftning: Fiber binder toxiner och metaboliska restprodukter i tarmen, vilket hjälper till att transportera ut dem ur kroppen via avföringen.

Tarmflora: Viktig källa till prebiotiska fibrer som stimulerar nyttiga bakterier.

#### Fermenterade livsmedel

#### Surkål, kimchi, kefir, yoghurt

Avgiftning: Hjälper till att balansera tarmfloran och kan minska kolonisering av skadliga mikrober som svamp och parasiter.

Tarmflora: Tillför probiotika som stärker tarmens mikrobiom.

#### Hälsosamma fetter

#### Extra virgin olivolja, avokado, linfröolja, fet fisk (lax, makrill)

Avgiftning: Omega-3 och enkelomättade fetter minskar inflammation, vilket gör det lättare för kroppen att hantera och eliminera toxiner. Vissa fetter stödjer leverfunktion.

Tarmflora: Hjälper till att bibehålla en frisk tarmbarriär och minskar inflammation i tarmen.

#### Örter och kryddor

# Appendix 10 – Detox Weekly Planning

Här kommer ett **exempel på en veckoplan i tabellform** för en detoxvecka, som innehåller måltider som hjälper till att avgifta kroppen, stöder tarmflora, och är fullpackade med näringsrika, rena råvaror. Alla rätter är enkla, goda och bygger på principerna vi pratade om.

Dag	Frukost	Mellanmå	Lunch	Mellanm	Middag	Kvällst
Mån	Grön smoothie	En näve	Quinoasallad med		Ugnsbakad lax	Maskro
dag	(spenat, gurka, äpple,	nötter &	rödbetor, avokado,		med ångad	sté
Tisd	Havregrynsgröt med	Äpple med	Linssoppa med	Fermente	Grönsakswok med	Peppar
ag	bär och linfrön	mandelsm	spenat och	rad	tofu och	mintté
Ons	Kefir med nötter och	Morotssta	Sallad med	Ett litet	Stekt torsk med	Nässelt
dag	blåbär	var och	kyckling,	päron	blomkålsmos och	e
Tors	Grön smoothie	En näve	Bovetesallad med	Hummus	Ugnsrostad	Ingefär
dag	(spenat, selleri,	valnötter	rödbetor och	med	sötpotatis med	ste
Fre	Bovetegröt med	En liten	Grönsakssoppa	Fermente	Kycklingfilé med	Kamo
dag	kanel och äpple	handfull	med vitlök och	rad	ångad broccoli och	millté
Lör	Chiapudding med	Nötter &	Quinoasallad med	Morotsst	Linsgryta med	Maskro
dag	kokosmjölk och bär	torkad	avocado och	avar &	spenat och	sté
Sön	Grön smoothie med	I I	Sallad med	Gurkstav	Ugnsrostad	Peppar
dag	ingefära och citron		ugnsbakad lax,	ar &	grönsakspytt med	mintté

#### Viktiga tillägg:

- Drick vatten kontinuerligt under dagen (minst 2 liter).
- Använd extra virgin olivolja eller kallpressad rapsolja till sallader och matlagning.
- Byt gärna ut fisk mot vegetariska proteinkällor som linser, bönor och tofu 1-2 gånger per vecka.
- Fermenterade produkter som surkål, kimchi eller kefir ger tarmfloran extra stöd, ta gärna 1-2 gånger/dag.
- Välj ekologiska råvaror så långt möjligt för att minska intag av kemikalier och toxiner.

# Söndagsförberedelse för detoxveckan — steg för steg

Totalt uppskattad tid: 2-3 timmar (beroende på rutin)

#### 1. Planera & skriv inköpslista (15-20 min)

Gå igenom måltidsschemat