

heavy metals

Detox *and tattoos*



sumi · ink

A detox guide for people with tattoos
with love, no lecture

What your body does with ink, what the studies say, what happens with laser removal, how to test at home if you want to, and five daily habits to look after the terrain.

a letter to begin

The taboo topic *with care*

*“There’s no taboo:
let’s talk about it.
Why should we hide it?”*



It’s a topic that creates a huge amount of resistance. At the slightest mention that tattoo inks aren’t quite something we could consider healthy from a conscious life, a defensive alarm goes off, because it creates cognitive dissonance.

We’re not here to give a lecture or to tell you what’s right or wrong. We’re here to talk about a reality and to propose habits and tools to help our lymphatic system and our body eliminate more efficiently, and to become more aware, not just with tattoos, but across the board.

The tattoo is an entry point: if you become aware through tattoos, all the better. We have friends, family and people on the team who are tattooed. There’s no taboo: let’s talk about it. Why should we hide it?

Around one in eight Europeans has at least one tattoo, and among adults under 40 it can be as many as three or four in ten. The number keeps growing.

There aren’t many studies, although there are some, such as those on lymphoma and tattoos (p. 9). Where studies do exist is on how these compounds affect the body. You don’t have to be very clever to connect the two: if they already act when you put them on the skin, in creams —also for good, as with hormone therapy, which is absorbed—, imagine what happens when you break through the body’s protective barrier: that is inside (p. 5).

This isn’t to create fear, *but it is the truth*: many compounds we put on our skin are studied as possible endocrine disruptors —think of the perfume on your neck and the phthalates that fix its scent—, and, according to the WHO and the United Nations, many hormone-related disorders are on the rise, with those disruptors as one of the factors that may contribute, alongside others. It isn’t just tattoos: it’s everything that adds up.

That’s why I draw two conclusions:

- 1 Maybe getting a tattoo isn’t the best idea.
- 2 If you already have one, let’s learn to manage your body’s load to give it a hand, because we aren’t eliminating these kinds of things efficiently: they stay for years.

Ignore it if you want; that’s your path, I’m not going to tell you otherwise: stop reading. Now, if you feel like knowing a bit more, this guide is for you. No fear: *pick it up with love*.

Being curious sometimes means reading things that aren’t aligned with what you think. Curiosity only about what already fits with you isn’t curiosity: it just validates what you already know.

— **Dani** CO-FOUNDER OF bionobo®

Sources. One in eight Europeans: European Commission, JRC, “Safety of tattoos and permanent make-up. Final report”, EUR 27947 EN, 2016. Up to 30-40% of adults under 40, in Europe and the US: IARC (WHO), “Tattooing: background”. A rising figure, especially among young people: Regulation (EU) 2020/2081, recital 2. Lymphoma and tattoos: Nielsen C et al., *eClinicalMedicine*, 2024, and Clemmensen SB et al., *BMC Public Health*, 2025 (p. 9). Phthalates and endocrine disruptors: Gore AC et al., *Endocr Rev*, 2015. Hormone-related disorders on the rise: WHO and UNEP (United Nations Environment Programme), “State of the science of endocrine disrupting chemicals”, 2012.

the first thing people tell us

Then and now *it isn't the same ink*

*“But ancestral cultures
have been tattooing for thousands of years.”*

It's true: people have been tattooing for thousands of years. But the ink that ancestral culture you're talking about used *has nothing to do with the ink used today*. The same goes for food, the same goes for everything.

thousands of years

THEN · ABOUT 5,300 YEARS AGO

One single thing
natural and simple

soot charcoal burnt wood burnt resin

Ötzi, the Iceman, lived about 5,300 years ago and bears 61 tattoos made with soot and charcoal. In Polynesia people used the soot of burnt candlenut, and the Māori made their pigment from the charcoal of burnt resinous woods and gum, mixed with oil.

It also stayed in the skin – Ötzi's tattoos are still there – but it was one simple thing, **with no added metals or synthetic compounds**.

TODAY

A mixture
of metals and synthetic chemistry

titanium iron copper azo pigments

carbon black aromatic hydrocarbons

Synthetic organic pigments (many from the azo family), metal-based pigments such as titanium dioxide or iron oxides, preservatives and solvents. Even black is now industrial carbon black, which can carry polycyclic aromatic hydrocarbons (PAHs).

Many of these pigments were made for paints, plastics or printer inks, **not to go inside the skin**.

If you want to hold on to that to feel good, fine: you can stop reading this guide. But if you're interested in learning what the difference is and giving your body a hand, keep reading.

We don't come with guilt or to demonise anyone. We're not even here to tell you that you did something wrong. We're here to tell you that we've all been fooled: with food, with everything. If you want to get to know yourself on a deeper level, let go

of dogmas and lower your guard —that defence of “I already have tattoos and I don't want to feel I did something wrong”—, this guide is for you.

Things aren't what they used to be. Today we put in metals, aromatic hydrocarbons and synthetic chemical compounds, and the body treats them as something foreign and protects itself: its defence cells trap the pigment and wall it off (p. 5). The more ink, the more pigment the body has to manage.

Little by little, this is coming to light.

*It's not about good or bad. It's about understanding in depth.
Good or bad is an illusion.*

Sources. Ötzi, 61 tattoos: Samadelli M et al., *J Cult Herit*, 2015; soot and charcoal pigment: Pabst MA et al., *J Archaeol Sci*, 2009. Polynesia: National Museum of Australia, 18th-century account from Tahiti; Māori: Te Ara, the Encyclopedia of New Zealand, “Tā moko”. Today's inks: FDA, “Tattoos & Permanent Makeup: Fact Sheet”; BfR; Regensburger J et al., *Exp Dermatol*, 2010 (PAHs in black inks). Defence cells: Baranska A et al., *J Exp Med*, 2018.

contents and shortcuts

How to read this guide

at your own pace

START

The taboo topic 02
A LETTER, WITH CARE

Then and now 03
IT ISN'T THE SAME INK

PART I · UNDERSTAND

How tattoos can affect the body 05–09
WHAT HAPPENS, WHAT TRAVELS,
WHAT IT CARRIES AND WHAT WE KNOW

What isn't known 07
AND AN IDEA TO RETHINK

Beyond cancer 10
HORMONES, INFLAMMATION · AN ELECTRICAL BODY

PART II · CARE

What detox means · and when it's too late 11–13
WHAT IT ISN'T, WHAT YOU CAN DO · IT'S NEVER TOO LATE

The drainage funnel 12
WHY START FROM THE BOTTOM

5 daily detox habits 14–15
TO LOOK AFTER THE TERRAIN

Home heavy-metal tests 16
PLUS GLYPHOSATE AND MICROPLASTICS

PART III · YOUR SKIN

Let's talk about laser 17
NO RUSH, AND WITH PROFESSIONALS

Before and after getting tattooed 18
CARE WHILE IT HEALS

Your week 19
WITH OR WITHOUT NEW INK

PART IV · SUPPORT

alcalina, at your pace 20
111 DAYS · WHAT TO EXPECT

The deeper protocol 21
WHEN YOU'RE READY

BONUS · SHOPPING

Your allies 22
WHAT TO LOOK FOR

CLOSING

Your skin, your story 23–24
YOU CHOOSE · CONTACT AND NOTICE

There's no need to read it in one sitting. Open it wherever you are.
On your phone, tap any line in the contents and it takes you to its page.

WHERE DO I START?



Just had a tattoo?

Before and after getting tattooed · **p. 18**



Thinking of removing one?

Let's talk about laser · **p. 17**



Want to start today?

If in doubt, water · **pp. 14–15**



Already have the habits going?

The deeper protocol · **p. 21**

HOW IT'S MADE

- ✓ Every fact carries its **source in small print**, next to the fact or on the page it points to.
- ✓ Almost all of it, **without buying anything from us**.
- ✓ **Your tattoo artist and your dermatologist** always have the final say.

GUIDES LIBRARY



Starting from scratch?

If you'd like to begin with the very basics of detox, little by little and from scratch, you'll find the **Beginner's Guide to Gentle Detox** in the guides library.

[eu.bionobo.com · guides library](https://eu.bionobo.com/guides-library)

HOW TO READ EACH HABIT

minimum version

if you want more

observe

what to look for

WITH FRESH INK

pause

PART I · CHAPTERS 01-04

Understand

without fear

I

First, what the body does with ink. Then, what it carries and what we know. Without exaggerating and without hiding anything.

What happens 05

01 · INK AND YOUR DEFENCES

What travels 06–07

02 · THE PATH · WHAT ISN'T KNOWN

What it carries 08

03 · WHAT'S IN AN INK

What we know 09–10

04 · STUDIES · BEYOND CANCER

TO BEGIN · THREE BARRIERS



1 · What you eat

It has to cross the gut barrier.



2 · What you put on your skin

It has to cross the outermost layer of the skin, its main barrier. But skin is not a wall: it lets certain substances through. That is why there are hormone treatments, estradiol or testosterone, that are applied to the skin as a gel or a small spray and reach the bloodstream.



3 · A tattoo

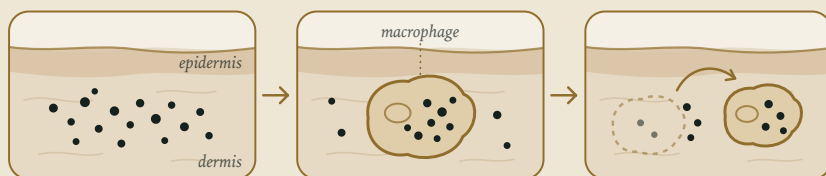
The needle goes through that layer and leaves the pigment in the dermis, below the barrier, where it stays for years. And some components that can appear in inks are described or studied as endocrine disruptors: certain metals, such as cadmium or lead, and some polycyclic aromatic hydrocarbons (PAHs) in black inks.

chapter 01 · what happens

What happens

ink and your defences

And once inside, a tattoo is never still: your body is managing it all the time.



1 · In the dermis

2 · A macrophage picks it up

3 · Another, again
in mice

Some of the skin's defence cells, the **macrophages**, pick up the ink and store it. Studies in mice have shown that, when those cells die, others pick up the same ink: that is why the design lasts for years.

Knowing this isn't a reason to worry: it's to understand why this guide talks so much about the skin and the lymph.

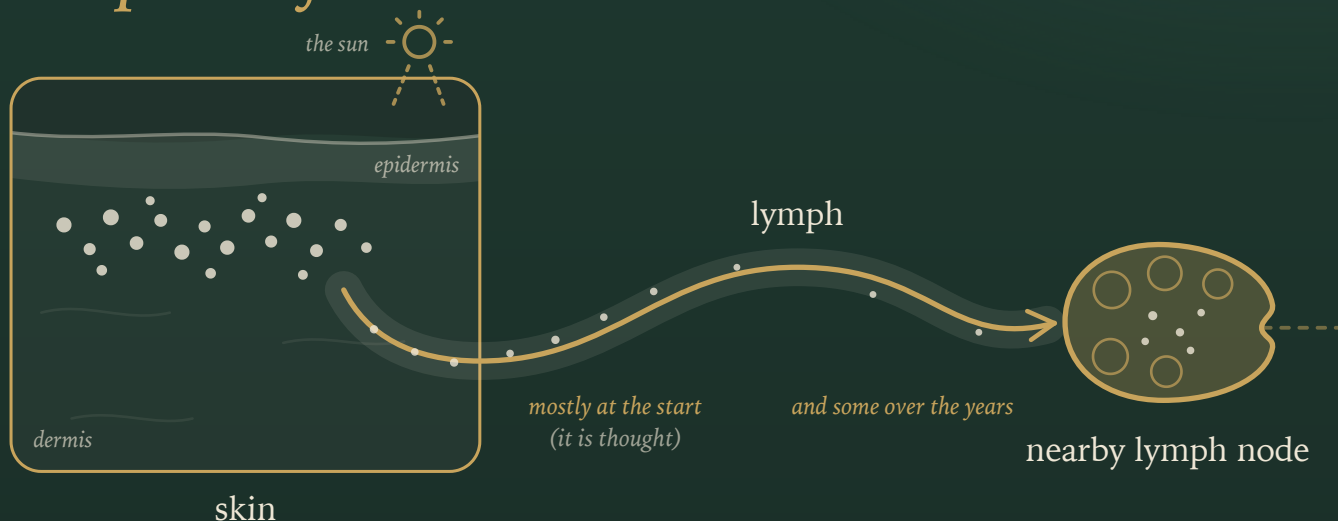
SOURCES Proksch E et al., *Exp Dermatol*, 2008 · Hadgraft J and Lane ME, *Eur J Pharm Biopharm*, 2015 · Busse KL and Maibach HI, *Skin Pharmacol Physiol*, 2011 · Johnson MD et al., *Nat Med*, 2003 · Liu D et al., *Toxics*, 2023 · Regensburger J et al., *Exp Dermatol*, 2010 · Baranska A et al., *J Exp Med*, 2018 (in mice) · IARC, "Tattooing: Background".

◆ **PAUSE** Look at one of your tattoos for a moment. What story does it tell?

chapter 02 · what travels

What travels the path of ink

Some of the ink doesn't just stay in the skin. The lymph, the body's cleaning service, carries the smallest particles to the nearby lymph nodes.



It has been seen in human tissue. A study by the German Federal Institute for Risk Assessment (BfR), using synchrotron X-rays, saw it in tissue from four tattooed people (*Scientific Reports*, 2017).

It found pigment particles in the lymph nodes, some of them nano-sized. And from the skin, part of the ink keeps moving over the years, for example as the sun fades the pigment (IARC).

WHAT WE KNOW

- ✓ In the lymph nodes, ink can stay for **years**.
- ✓ Sometimes the lymph nodes look **stained** the colour of the tattoo.
- ✓ It is thought to travel **mostly at the start**, and a little more over the years.

WHAT WE DON'T KNOW YET

- ? **What it means for health:** according to the BfR, this can't be answered today.
- ? **Whether it reaches other organs in humans:** this has barely been studied. In animal studies, pigment has been found in the kidney, the liver and the spleen.
- ? **Whether it crosses other barriers, such as the placenta:** with tattoo ink, as far as we know, nobody has looked (p. 7).



The same German researchers point out that *most tattooed people do not have chronic inflammation*.

Knowing this path is exactly what lets us look after it. And the lymph has one peculiarity: *it has no heart to pump it* (we look at this on p. 13).

SOURCES Schreiver I et al. (BfR and ESRF), *Scientific Reports*, 2017 · BfR, questions and answers on the lymph node study · IARC, "Tattooing: Background" · StatPearls, "Physiology, Lymphatic System" (NBK557833).

◆ **PAUSE** Roll your shoulders and take three deep breaths. That's how the lymph moves, too.

What isn't known and an idea to rethink

Does ink travel further, even crossing other barriers in the body? No study links it directly to tattoos.

But we do know that some of what we put on our skin (creams, pesticides) and of what we eat—which has to get through barriers—can end up crossing the placenta. *Just imagine.*

WHAT IS DOCUMENTED · IT REACHES THE OTHER SIDE OF THE PLACENTA



Lead

There is no placental barrier to lead: almost identical levels are measured in the mother's blood and in the foetus's.

GOYER, 1990

Creams and cosmetics

Methylparaben, a common preservative, appeared in 47 of 50 cord blood samples; and some sunscreen filters, in the amniotic fluid.

TOWERS, 2015 · KRAUSE, 2018

Mercury

Methylmercury, the kind found in fish: in cord blood, on average, 1.7 times the level in the mother's blood is measured.

STERN AND SMITH, 2003

Phthalates

One widely used in plastics, or its metabolite, appeared in 88% of 84 cord blood samples.

LATINI, 2003 · MOSE, 2007

Pesticides

In 230 mothers and newborns in New York, seven pesticides showed up in the mother's blood and in the cord blood, at similar levels.

WHYATT, 2003

Airborne particles

Black carbon, the soot of combustion: on the foetal side of every placenta analysed and, later, in cord blood.

BOVÉ, 2019 · BONGAERTS, 2022

① **To be honest:** not everything crosses in the same way; the placenta holds back part of some, such as cadmium or certain sunscreen filters. And with tattoo ink, as far as we know, nobody has looked: **we are not saying that it crosses.** This isn't to scare anyone: it's to understand that the body has no watertight compartments.



AN IDEA TO RETHINK

We question what we eat, the heavy metals in food or in supplements—which have to get through that barrier—, but when it comes to tattoos: “*it's fine, they stay in the skin.*”

That way of thinking needs a rethink.

There is not a single study showing that tattoos are good for the body. And with tattoos there are hardly any studies, but we do know, from other studies, that these compounds can affect the body. That's why it's worth knowing what an ink contains (p. 8) and what is known (pp. 9–10).

SOURCES In *Environ Health Perspect*: Goyer RA, 1990; Stern AH and Smith AE, 2003; Whyatt RM et al., 2003; Latini G et al., 2003 · Towers CV et al., *J Expo Sci Environ Epidemiol*, 2015 · Krause M et al., *Environ Int*, 2018 · Mose T et al., *Int J Toxicol*, 2007 · Bové H et al., *Nat Commun*, 2019 · Bongaerts E et al., *Lancet Planet Health*, 2022 · Cadmium: Gundacker C and Hengstschläger M, *Wien Med Wochenschr*, 2012.

◆ **PAUSE** What do you question about what you eat, but not yet about what you put on your skin?

chapter 03 · what it carries

What it carries

what's in an ink

A tattoo ink is pigment diluted in a liquid, and it can contain up to a hundred substances.

WHAT IT CAN CONTAIN · IARC (WHO) AND INK ANALYSES



Black inks

often contain polycyclic aromatic hydrocarbons (PAHs).



Bright colours

often contain aromatic amines.



The vast majority contain metals

In the pigment itself (the titanium dioxide that lightens colours, iron oxides, the copper in blues and greens) or as impurities. In 226 inks from 18 brands, titanium appeared in almost 91% and iron in almost 90%; in 41 inks sold in the EU, chromium in every one. *We don't know the exact percentage, but it is very high.*

THE EUROPEAN RULE · REACH

2022

Since 4 January 2022, the European Union has restricted **thousands of hazardous substances*** in tattoo and permanent make-up inks, with very low limits for metals, PAHs and aromatic amines.



BEFORE 2022

Only seven countries had their own rule. Anything tattooed before then, or outside the EU, stays in the skin with the composition it had at the time.



SINCE 4 JANUARY 2023

Two more pigments were added: Blue 15:3 and Green 7.

THE INK THAT'S REALLY USED · what many tattoo artists tell us

"Many studios order their inks from abroad: by post, from the United States or elsewhere. Even though there are rules, there isn't a very thorough check on what comes in from outside. Compliant ink is available, but almost nobody buys it: they say it isn't the one that lasts best."

This is their testimony, not a statistic. But official checks confirm it: in a Nordic one in 2023-2024 (211 inks), only 7% fully met the European rules, and inks from outside the EU failed most often; in a European one in 2024, 27 of 52 samples contained a banned substance or one above the limit.



BEFORE GETTING TATTOOED, ASK

"Hey, what are you going to tattoo me with?" A good studio will be happy to show you the label, and the ink must meet the European rule (REACH).

Since 2022, the label must say:



1 "Mixture for use in tattoos or permanent make-up"

3 The list of ingredients.

2 The batch number.

4 If it contains them: "Contains nickel. Can cause allergic reactions." and "Contains chromium (VI). Can cause allergic reactions."



Take a photo of the label or note down the batch number: if there's ever a reaction, it helps to know which ink it was (p. 18).



On the product page you don't normally find the ingredients: dig deeper. Perhaps artificial intelligence can give you clues about where to look; it isn't the result, it has to be corroborated: it's information to corroborate.

SOURCES IARC (WHO), "Tattooing: Background" · Tighe M et al., *J Environ Prot*, 2017 (226 inks) · Ćwieląg-Drabek M et al., *Toxics*, 2025 (41 inks) · Regulation (EU) 2020/2081, Annex XVII to REACH, entry 75 · * Around 4,000, according to the restriction proposal by ECHA, the European Chemicals Agency (2017) · Nordic Enforcement Group, TemaNord 2024:549 · NVWA (Netherlands), European tattoo-ink enforcement action, 2024.

◆ **PAUSE** Next time, ask to see the label. Not to frighten yourself: to know what you carry and make an informed choice.

chapter 04 · what we know

What we know

what the studies say

Some studies see a little more risk and others don't. We have grouped them by what they look at, lymphoma and the skin, and we tell you about each one.

☒ SAW AN ASSOCIATION

☐ SAW NO LINK

LYMPHOMA

LYMPHOMA AND SKIN

SKIN

2024 Sweden
Lund University
eClinicalMedicine

Around 1,400 people with lymphoma compared with around 4,200 without it: there were slightly more tattooed people among the first group (21% vs 18%). It was more marked in the first two years after the first tattoo.

The authors conclude that their study suggests an association and call for more studies to find out if there is cause and effect.

2025 Review
eClinicalMedicine

It brings together four studies with almost 18,000 people, including the Swedish and Danish ones on this page.

It saw no significant link with lymphoma, and the certainty is low.

2025 Denmark
Univ. of S. Denmark
BMC Public Health

More than 2,300 Danish twins, studied in two ways. It saw more skin cancer and more lymphoma in people with tattoos larger than the palm of the hand.

The authors conclude that their study suggests a higher risk and call for more studies.

FOR COMPARISON

The 2024 Swedish study, on the other hand, did not see the risk rise with a larger tattooed area.

THE LIMITS THEY POINT OUT THEMSELVES

Few cases, no data on sun exposure, and the comparison between twins was not conclusive.

2025 Sweden
Melanoma
Eur J Epidemiol

Around 1,600 people with melanoma compared with around 4,100 without it: slightly more tattooed people among the first group (22% vs 20%).

The authors say tattoos could be a risk factor and call for more studies to find out if there is cause and effect.

2025 France
IARC · JNCI

Around 111,000 people, around 13,000 of them tattooed. It did not look at lymphoma.

It found no link between having tattoos and skin cancer, melanoma included.

THE IARC ITSELF SUMS IT UP LIKE THIS

Today it is not known whether tattoos can cause cancer in humans, and it cannot be ruled out either. That is why research continues.

Associations, not verdicts.

But they deserve attention.

We tell you this so you can make an informed choice, not to scare you.

SOURCES Nielsen C, Jerkeman M, Jöud AS, eClinicalMedicine, 2024 · McConnell T et al., eClinicalMedicine, 2025 (review) · Clemmensen SB et al., BMC Public Health, 2025 · Rietz Liljedahl E et al., Eur J Epidemiol, 2025 · Mo T et al., JNCI, 2025 · IARC, note of 3 December 2025 and "Tattooing: Background".

◆ **PAUSE** *With information, you choose better. And without fear, too.*

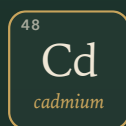
chapter 04 · beyond cancer

Beyond cancer

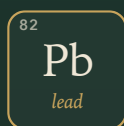
hormones and inflammation

Although there are no studies on tattoos, there are studies on the metals that can appear in inks and their effects on hormones. We don't just want to talk about cancer, which is the worst, but about *low-grade inflammation*.

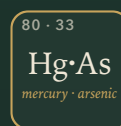
HORMONES · WHAT THE STUDIES SAY ABOUT THE METALS



Mimics estrogens
in laboratory and animal studies: that's why it is called a "metalloestrogen".



Has been associated in people
with changes in sex hormones, while thyroid results are less clear.



Also studied
for their hormonal effects.



LOW-GRADE INFLAMMATION

A silent wear and tear
that doesn't always give clear symptoms

Beyond cancer, studies describe another effect of heavy metals: **long-term exposure is linked to oxidative stress and chronic low-grade inflammation.**

① **To be honest:** these are studies on metal exposure in general, not on tattoos, and more studies in people are needed.

A QUESTION WE ASK OURSELVES

An electrical body

and hardly anyone talks about it

We are also an electrical body. First, what is known; then, the question we ask ourselves.

**Electrical signals**

Nerves and the heart run on electrical signals, and research shows that many other cells use small voltage differences to communicate, for example during wound healing.

**Fascia**

Collagen, its main protein, is piezoelectric: in the lab its fibres generate small electrical charges when they are deformed. Some people think fascia might take part in the body's electrical life: it is an idea under research, not something proven.

**Acupuncture**

It works with fine needles, usually metal, at specific points on the body, and studies indicate it may help with some kinds of pain.

**MRI scans**

One documented fact connects ink and electromagnetism: on rare occasions a tattoo swells or feels like burning during an MRI scan (iron-based pigments are suspected). The FDA describes it as rare and without lasting effects, and advises not to skip the scan but to tell the technician.

If a few needles at specific points already trigger a response in the body, we wonder what happens when we cover large areas of skin with non-organic compounds: do they influence that electricity, in some way?

Nobody has studied it yet. **We don't claim it: it is a question we think is important to ask.**

SOURCES · Liu D et al., *Toxics*, 2023 · Johnson MD et al., *Nat Med*, 2003 (in rats) · Darbre PD, *J Appl Toxicol*, 2006 · Flora SJS et al., *Indian J Med Res*, 2008 · Mathews J and Levin M, *Curr Opin Biotechnol*, 2018 · Minary-Jolandan M and Yu MF, *Nanotechnology*, 2009 · Harnagea C et al., *Biophys J*, 2010 · NCCIH (NIH), "Acupuncture: what you need to know" · FDA, "Tattoos & Permanent Makeup: Fact Sheet".

PART II · CHAPTERS 05-08

Care

II ~ in your hands

Once you understand, what you can do yourself:
almost all of it free, a little every day.

What detox is, and isn't 11-12

05 · WHAT IT IS · THE FUNNEL

When is it too late? 13

06 · NEVER

5 daily detox habits 14

07 · TO LOOK AFTER THE TERRAIN

If you want to measure it 16

08 · HOME TESTS

chapter 05 · what it isn't · what you can do

What detox is and what it isn't, here

Your body doesn't need
more things.
It needs less load.

WHAT IT IS

Supporting, not forcing

- ✓ **Supporting the drainage routes** the body already uses every day: lymph, liver, gut, kidneys, skin and breathing.
- ✓ **Lowering the load and giving the body what it needs:** quality water, movement, rest, breathing and real food.

WHAT IT ISN'T

Not punishment, not fear, no promises

- ✗ **Punishing the body.** "Detoxing doesn't mean punishing the body, but supporting it in its natural cleansing processes."
- ✗ **Living in fear** of what you carry on your skin.
- ✗ **Erasing anything or promising results.** Your tattoos stay with you.

LET'S BE CLEAR

It's about giving a hand *to your lymphatic system and lymph nodes.*

There is a set of habits that help us have lymphatic health, drainage health: opening the pathways and helping the body. It is knowledge almost nobody has: **how do I help my body keep its detox pathways open so it doesn't get overloaded?** We start with the funnel (p. 12).

WHAT "THE TERRAIN" MEANS

When we say **terrain** we mean the base on which everything else rests: the water you drink, what you eat, how much you move, how you rest and how you breathe.

The ink you carry is part of your story; the terrain is yours to look after, a little every day.



water



food



movement



rest



breathing

📖 The basics of detox, calmly and from scratch: in the **Beginner's Guide to Gentle Detox**, in the guides library.

◆ **PAUSE** Which part of your terrain would you like to look after first?

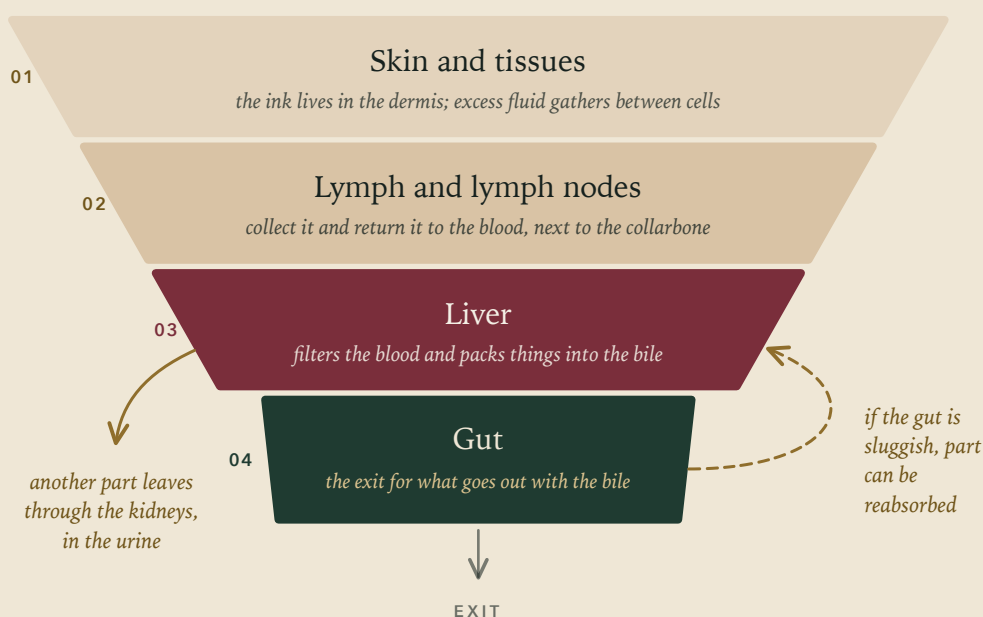
The drainage funnel

why start from the bottom

The big exit for what the liver packs up is the gut. And if the liver, which is what processes everything, is saturated —because in the end everything ends up there a little—, it needs a hand. That's why cleansing the gut matters: there is a funnel, and the idea is for the funnel and the liver to work optimally, together with the habits. *If we want to drain the lymph, we have to start from the bottom.*

OPEN THE EXIT FIRST · THEN MOVE WHAT SITS ABOVE IT

re:set be:liver



WHY START FROM THE BOTTOM

First, make sure whatever moves has somewhere to go.

Lymph returns to the blood at the neck and, from there, the blood passes through the liver. Just as lymphatic drainage starts by opening the central areas before working on the arms and legs, in our way of detoxing **we start at the bottom of the funnel: first the gut, then the liver**. It is the naturopathic tradition *ikigen* follows.

And if the gut is sluggish, part of what arrives with the bile can be reabsorbed: this is called enterohepatic circulation.

IN PRACTICE · FROM THE BOTTOM UP

- 1 **Your habits**
going to the toilet well: water, fibre from real food and movement (pp. 14-15)
- 2 **re:set**
the gut
- 3 **be:liver**
the liver and gallbladder

ikigen = the three steps in a single protocol (p. 21)

If you're going to remove a tattoo or get one, our protocols can be a great help to prepare you, in good time, so that the body doesn't get saturated (pp. 17-18).

StatPearls (NCBI): "Physiology, Bile Secretion" and "Physiology, Lymphatic System". Dietary fibre helps the gut move and carry out what arrives with the bile. The gut → liver order is our way of doing it, not a tested clinical sequence.

chapter 06 · it's never too late

When is it too late?

never

It's human not to worry about something until it becomes a problem. We don't want to alarm you or tell you to stop doing things you enjoy.

LYMPH HAS NO HEART

StatPearls · Physiology, Lymphatic System (NCBI)

It has
no central pump.



That's why it depends so much on what you do every day.



Just as you brush your teeth or shower every day, you can add small routines that support your body.

LEVEL 1 · EVERY DAY

5

Five small, **everyday habits** to look after the terrain (pp. 14-15).

LEVEL 2 · FROM TIME TO TIME

+1

A deeper protocol, seasonal or yearly, when you're ready (p. 21).

✓ **And the best part:** most of these tools and habits are free.

REMEMBER: IT'S NEVER TOO LATE TO START

The best time to start was ten years ago.
The second best is today.

Consistency and mindful care are the key. No one can promise you anything, but there's no need to wait to give your body a hand.

◆ **PAUSE** *What's the smallest step you could start with today?*

5 daily detox habits

water and rebounding

To look after the terrain. They cost little or nothing. Not all five at once: start with one, and add another when the first comes naturally.

 minimum version

 if you want more

 observe

 what to look for

 WITH FRESH INK

IF YOU HAVE INK,
IN THIS ORDER

1

Rebounding
habit 2 · mini
trampoline

2

Daily sauna
if you can · habit 3

3

Lymphatic drainage
manual massage and dry brushing · habit 3

HABIT 1



Water

the universal solvent

It comes first because it's the simplest, and because the body uses it for almost everything. Choose one of these three, whichever is easiest for you:

1

Structured or spring water

2

Filtered

by reverse osmosis or any other filter

3

Bottled mineral water

✕ **What we leave out:** unfiltered tap water. And if you can choose, glass rather than plastic.



 **MINIMUM VERSION** Choose one and always keep a glass to hand.

 **IF YOU WANT MORE** A shower filter.

 **OBSERVE** After 7 days, how are your thirst and your digestion?



WITH FRESH INK The water stays the same; what changes is bathing. Showers, yes; bath, pool and sea, once it has healed (p. 18).

HABIT 2 · KEY 1



Rebounding

mini trampoline, bed or gym mat

Lymph has no heart to pump it: it moves with your muscles, breathing and movement (p. 13). That is why we like rebounding: **gentle bouncing moves the whole body and the breath.** Choose where:

1

On the bed

if you have nothing else, that's fine

2

On a gym mat

if you can get hold of one

3

On a mini trampoline

✕ **What we leave out:** forcing it. Gentle jumps and, if anything feels uncomfortable, stop.



 **MINIMUM VERSION** A few minutes of gentle jumps, on the bed or on a gym mat.

 **IF YOU WANT MORE** A mini trampoline. It doesn't need to be expensive.

 **OBSERVE** How do your legs and energy feel afterwards?

 **WHAT TO LOOK FOR** p. 22 · trampoline



WITH FRESH INK Gently, without sweating or rubbing the area until it heals (p. 18).

 **The three waters are only explained here.** When you read "water" on other pages, we mean any of these three, whichever you have.

5 daily detox habits

heat, movement and calm

The price no one wants to pay:
slowing down.

Letting yourself feel.

HABIT 3 · KEYS 2 AND 3



Sauna and drainage

sauna, daily if you can

Sauna, daily if you can, is one of our favourite habits: it makes you sweat and it relaxes you.

And lymphatic drainage: a slow, gentle manual massage that follows the path of the lymph, by a trained professional, or dry brushing, gentle and towards the heart.

MINIMUM VERSION A gentle dry brush, towards the heart.

+ **IF YOU WANT MORE** A daily sauna and, now and then, a lymphatic drainage massage.

OBSERVE *How do you sleep on heat days?*

WHAT TO LOOK FOR **p. 22 · natural-bristle brush**

WITH FRESH INK No sauna, brush or massage there: see the notice.



THE MOST IMPORTANT NOTICE

While a tattoo heals

No sauna, bath or pool until it has fully healed. Showers, yes, and nothing that rubs the area. That's what the EADV advises.

OUR ADVICE *Keep the brush and massage away from it until it heals; with laser-treated skin, heat and brush only once it has closed and healed (p. 19). And in the sauna, always: water, sessions of about 15 minutes and no alcohol; if you have heart problems or low blood pressure, are pregnant or take medication, check with your healthcare professional first.*



HABIT 4



Move outdoors

and barefoot, if you can

Walking, running, cycling, in the open air: moving works the muscles that help move lymph (p. 13). If you can, spend a while barefoot on grass, sand or soil.

MINIMUM VERSION A 10-minute walk.

+ **IF YOU WANT MORE** Exercise in nature several times a week.

OBSERVE *How's your head when you're back?*

WHAT TO LOOK FOR **p. 22 · sunscreen**

WITH FRESH INK On feet or legs, no sea until it heals; in the sun, keep it under clothing (EADV). Our advice: no walking barefoot on soil or sand until then. Once healed, high-SPF sunscreen (IARC).

HABIT 5



Breathe and calm

reconnect with yourself

Just as many people walk badly without knowing it, most of us breathe badly without realising.

Breathing deeply also helps move lymph (p. 13).

MINIMUM VERSION Box breathing, once a day: breathe in 4 s · hold 4 s · breathe out 4 s · hold 4 s.

+ **IF YOU WANT MORE** Relearn how to breathe, with some help.

OBSERVE *How long do your shoulders take to drop?*

WHAT TO LOOK FOR **nothing · just a minute of your time**

WITH FRESH INK The same as always, from day one.

PAUSE *Which of the five do you really feel like doing? Start with that one.*

chapter 08 · optional

If you want to measure it

home heavy-metal tests

To look at your starting point, there are three tests you do at home and send by post. They're an option, never an obligation.



TRULY OPTIONAL

You don't need one to start

Doing a test before you start isn't essential. You can start the habits today and test whenever you like, or never.

1

AT HOME

You take the sample

At your own pace, no travel needed.

2

BY POST

You send it

To the lab that analyses it.

3

ONLINE

You get the result

They let you know when it's ready.

IN EUROPE, ONE SERVICE THAT OFFERS THEM: **GETTESTED**



TEST 01

YOUR STARTING POINT

Heavy metals and minerals

With a hair sample: an approximate picture of your starting point.

gettested.io · metals in hair



TEST 02

FOOD

Glyphosate and pesticides

With a urine sample: detects residues of common herbicides.

gettested.io · glyphosate in urine



TEST 03

THE ENVIRONMENT

Microplastics in the blood

With a drop of blood: counts the microplastic particles in it.

gettested.io · microplastics

ⓘ Prices, turnaround times and conditions may change: check their website before ordering.



IN ALL HONESTY

A reference, not a diagnosis

They are an approximate reference. Hair metal analysis, in particular, is debated among specialists: take it as a starting point and discuss it with yours.

Seidel S. et al., JAMA, 2001.



WHAT THEY DON'T MEASURE

Not the ink, not the lymph nodes

They are tests on samples such as hair, urine or blood: **they don't measure the ink in your tattoos or what is in your lymph nodes.**

♥ For any health question, the best option is lab tests with your doctor.

IF YOU DECIDE TO DO IT

✓ It helps you understand your terrain better.

✓ It lets you follow your progress with the changes you make.

✓ It isn't meant to raise alarm, **but awareness.**

◆ **PAUSE** Before any number, what is your body telling you today?

PART III · CHAPTERS 09-11

III

Your skin

before, during and after

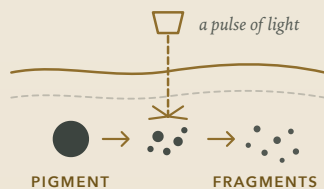
chapter 09 · if you decide to remove it

Let's talk about laser
without rushing

Neither for nor against: removing a tattoo is your decision. If you ever make it, let it be with all the information, in good hands and **without rushing**.

HOW LASER WORKS

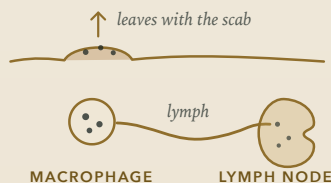
Barua S., *J Cutan Aesthet Surg*, 2015 · American Academy of Dermatology (AAD), 2019



1 · THE PULSE

It breaks up the pigment

The laser breaks the pigment up into smaller fragments.



2 · THE PATH

Scab and lymph

Some of it leaves with the scab; macrophages pick up the rest and carry it through the lymph to nearby nodes: the path on **p. 6**.



3 · TIME

Weeks between sessions

That's why several sessions are needed: the body clears the area little by little, and that time is part of the care too.

IN THE LAB

Why it matters who does it

Some colour pigments have been seen to form new compounds when they are broken down by laser or by a lot of sun. These are tests done outside the body, and how much of this happens in the skin is not known.

That's why the BfR recommends having tattoos removed **only by trained staff and in well-equipped centres**.

Schreiber, *Sci Rep* 2015 · Hering, *J Invest Dermatol* 2018 · BfR 2015.

IF YOU DECIDE TO REMOVE IT

In good hands, and unhurried

- ✓ Choose a **dermatologist or a medical professional experienced in laser**, and ask them anything you need to.
- ✓ **First, prepare your lymphatic system:** hydrate and get your drainage moving (**pp. 14-15**).
- ✓ Leave time between sessions.
- ✓ And afterwards, give your body a hand: **binders, chelators and protocols** (**p. 21**).

Care after each session: **lane C, p. 19**

◇ OUR ADVICE If you're going to remove it, this is the moment when the body needs the most help to move all of that: all of it has to go somewhere. You have to prepare the lymphatic system, so that everything that wants to leave the body finds a way out (**p. 12**).

◆ PAUSE If you're going to remove it, what's the rush?

chapter 10 · with new ink

Before and after getting tattooed

BEFORE GETTING TATTOOED

- ◆ Ask about the ink and **check the label (p. 8)**.
- ◆ If it's a large tattoo, avoid a long flight straight afterwards.

Source: EADV, Tattoos and Body Art Task Force, "Tattoo aftercare", 2021. The label and batch: Regulation (EU) 2020/2081.



shower
YES



bath, pool and sea
NO



sauna
NO

until it has fully healed

- ◇ OUR ADVICE *If you're going to get a tattoo, prepare your lymphatic system: hydrate and get your drainage moving, so that everything that wants to leave the body finds a way out (pp. 14–15).*

WHILE IT HEALS

Look after it like this

- ✓ **Shower, yes:** with plenty of water and little soap. Pat dry, without rubbing.
- ✗ **Bath, pool, sea and sauna, no,** until it has fully healed.
- ✓ Clean hands and clothes.
- ✗ Don't pick the scabs or scratch.
- ✗ Avoid clothes that rub, and sweating on the area.
- ✓ **Protect it from the sun with clothing** for months. Once healed, high-factor sunscreen.
- ✓ Moisturise with whatever your tattoo artist recommends and, once healed, with an unscented cream for weeks.
- ✗ No disinfectants or antibiotic creams, unless a doctor sees an infection.



Always tell your tattoo artist

They know which materials and inks they used, and that helps to find the cause. That's why it's worth keeping the photo of the label or the batch (p. 8).

WHAT'S NORMAL

- ◆ Tender and warm for a few hours or days.
- ◆ The skin peels in the first few weeks.
- ◆ Some redness and swelling that go down each day.
- ◆ With large tattoos, a feverish feeling in the first 12 hours that goes away the next day.

WHEN TO SEE A DOCTOR

- ◆ If it oozes more and more, or a yellowish-green fluid comes out.
- ◆ If it smells bad.
- ◆ If the redness hurts and spreads.
- ◆ If the pain, throbbing or burning gets worse.

Urgent: red lines spreading out from the tattoo, or a high or lasting fever, with flu-like symptoms.

IF IT LOOKS LIKE AN ALLERGY

Stop and seek advice

A red rash, sometimes with tiny blisters of clear fluid and a lot of itching: stop all aftercare products and seek advice.

- ◇ OUR ADVICE *The uses of our products on the skin are in the alternative uses guide, in the **guides library**. Never on a tattoo that is still healing.*

- ◆ PAUSE *Your skin is healing. Give it time, like the rest of you.*

chapter 11 · your week

Your week

with or without new ink

A three-lane plan that brings the habits and your skin together, so you don't have to think about it. **Find your lane and follow it this week.**

LANE A

No recent tattoo

your five habits, nothing more

EVERY DAY

 **Water**
One of the three, always to hand.

 **Rebounding**
A few minutes.

 **Move outdoors**
A walk.

 **Breathe**
Box breathing.

DAILY, IF YOU CAN

 **Sauna and drainage**
Sauna, dry brushing and, now and then, a lymphatic drainage massage.

New tattoo? Move to lane B until it heals.

The habits · pp. 14-15

LANE B

With a freshly done tattoo

until it has fully healed

WITH FRESH INK

- ◆ Water and breathing, as always.
- ◆ Gentle movement, with no rubbing or sweat on the area. If it's on your feet or legs, no walking barefoot on soil or sand.
- ◆ **Shower, yes.** Sauna, bath, pool and sea, no. Keep the brush and massage away from the area.
- ◆ Sun: clothing. And your tattoo artist's instructions.

ONCE IT HAS HEALED

- ◆ The sauna, gentle brushing, massage and the sea come back.
- ◆ High-factor sunscreen and an unscented cream for a few weeks.

According to the EADV, 2021 (p. 18), plus our own caution with the brush and going barefoot.

LANE C

If you're having a tattoo removed with laser

- ◆ **Before each session:** come with your questions, plenty of water and your drainage already going (p. 17).

AFTER EACH SESSION

AAD

- ✓ Wash the area twice a day with water and a gentle cleanser.
- ✓ Keep it moisturised and covered until the skin heals, with whatever your dermatologist recommends.
- ✓ While it heals, some redness, swelling and blisters may appear.
- ✓ Don't pop the blisters or pick the scabs.
- ✓ Out of direct sun, with clothing, for about 3 months.
- ✓ Once healed, broad-spectrum sunscreen, SPF 30 or higher.
- ✓ If the redness and pain get worse, it swells or there is pus, call your dermatologist.

- ◆ **Between sessions,** which are spaced weeks apart: your daily habits, without rushing.

◆ OUR ADVICE

Sauna, brushing and massage, only once the skin has healed.

American Academy of Dermatology (AAD), 2019 and aad.org · Barua S., 2015.

YOUR WEEK · TICK IT OFF

my lane **A** **B** **C**

	M	T	W	T	F	S	S
habits	☐	☐	☐	☐	☐	☐	☐
my skin	☐	☐	☐	☐	☐	☐	☐
I feel	☐	☐	☐	☐	☐	☐	☐

A day counts even if you only do the minimum version. For "I feel", one word is enough.

◆ **PAUSE** *If one day it doesn't work out, that's fine: tomorrow you come back to it.*

PART IV · CHAPTERS 12-13

IV Tools

when you choose them

chapter 12 · the basic protocol

alcalina

111 days, at your pace

We make tools too. That's why we'll tell you plainly: you come first; the tools, when you choose them. **alcalina is a tool, not a magic solution:** fulvic acid biominerals in drops that you can add to your routine to accompany the habits in this guide.

WE'LL TELL YOU
PLAINLY

alcalina accompanies your daily routine of caring for your drainage pathways (p. 11).

YOUR 111 DAYS · EACH MARK IS ONE DAY

3 months and 21 days



1 Start

21 DAYS

10 drops in a glass of water (about 250 ml), before breakfast if that suits you, or with food if it sits better with you.

If you've never done a detox, start gently, but start well.

2 Build up

30 DAYS

Little by little, **up to 20 drops a day**, in one or two doses.

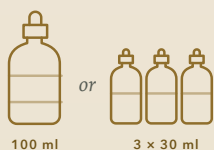
Water is the vehicle for the whole process.

3 Routine

60 DAYS OR MORE

10 to 15 drops a day, as just another part of your day.

If one day you decide to stop, notice how you feel without it: that's information too.



HOW MUCH YOU NEED

One 100 ml bottle or three 30 ml bottles

The 111 days add up to about 1,260-1,710 drops, depending on how quickly you build up.

HOW

- ✓ **At room temperature, with water free of chlorine and fluoride:** structured or spring water, filtered (reverse osmosis or any other filter) or bottled mineral water (p. 14).
- ✓ **If it bothers you:** go down to 5 drops and build up little by little.
- ✓ **Observe:** energy, digestion, mental clarity, rest and calm.

⚠ **Not during pregnancy or breastfeeding** (alcalina and shila:jit).

🌐 **Other support:** shila:jit (another source of biominerals) and ki:wami (fermented kōso enzymes): their product pages, on eu.bionobo.com (p. 24).

FIRST THINGS FIRST

If something doesn't feel right, lower the dose or stop, and seek advice.

Discomfort is not proof that something is working.

You are your own reference.

What some people notice when they start, and when to stop, in more detail: in the Beginner's Guide to Gentle Detox, in the library.



FULVIC BIOMINERALS

alcalina on
eu.bionobo.com

SCAN WITH YOUR CAMERA OR TAP

◆ **PAUSE** Today's dose isn't tomorrow's.

chapter 13 · deep detox protocol

When you're ready the deeper protocol

"We're here to give you a couple of tips to optimise your drainage. Then, if you want to go deeper and give a hand to your digestive system and liver, which carry much of what the body hasn't yet been able to eliminate, *here are these protocols*." **None of them is required.**

AFTER LASER, OR ANYTIME · A COUPLE OF TIPS

●● A binder

It binds certain substances **inside the gut** and leaves with the stool; most are not absorbed, so they act only in the digestive tract. For example, chlorella, activated charcoal, zeolite, clays or fibre.

Chlorella is an alga that is often used as a binder: in animal studies it reduced the absorption of some metals; in people, the studies are few and small. Activated charcoal binds metals poorly, and both it and zeolite can cause constipation if you don't drink enough water. Keep them apart from your medicines.

⊙ A chelator

It is a molecule that binds metals **also in the blood and tissues**, so the body can excrete them. Medical chelators such as DMSA or EDTA are used under medical supervision, for example in lead poisoning.

① **What we usually do:** daily habits, plenty of water, going to the toilet well and, when the time is right, a seasonal protocol. After laser, and before any binder, check with your healthcare professional. In the EU there are no authorised claims for "eliminating heavy metals" or "detoxifying", nor for fulvic acid: we don't claim it for any product. **alcalina** accompanies your daily routine of caring for your drainage pathways.

Binders and chelators *not the same thing*

WHAT WE KNOW ABOUT FULVIC ACID

"Fulvic acid is known as a natural chelator: it forms chelates with other compounds. What we do know is that it penetrates cells very well: because of its tiny size, it is credited with the ability to cross barriers other compounds cannot, such as cell barriers or the blood-brain barrier."

DANI, CO-FOUNDER OF bionobo®

In laboratory and soil studies, it forms complexes with metals such as lead, cadmium or mercury; that is why it is being researched as a "natural chelator".

YOUR PATH · FROM THE BOTTOM UP (P. 12)



Remineralise
alcalina or shila:jit
DAILY · P. 20



Gut
re:set · 24 hours

[View re:set](#)



Liver & gallbladder
be:liver · afterwards

[View be:liver](#)

ikigen = all three, in a single 4-day protocol

[View ikigen](#)



Do you go to the toilet
easily and regularly?

YES

You can carry on, if
you feel like it.

NO

Stay with the habits until
you do.

WITH NEW INK OR LASER · CALMLY

◇ OUR ADVICE

Not in the same week as a new tattoo or a laser session: first, let the skin heal. And your tattoo artist and your dermatologist always have the last word.

📖 Read them calmly before you decide: the re:set, be:liver and ikigen guides, and the beginner's guide, in the **guides library**.

Sears ME, *Sci World J*, 2013 · Wax PM, *J Med Toxicol*, 2013 · Shim JA et al., *Nutr Res Pract*, 2009 (in rats) · Song C et al., *Front Microbiol*, 2022 · Winkler J and Ghosh S, *J Diabetes Res*, 2018 · Regulation (EC) 1924/2006 · EFSA, 2010.

◆ **PAUSE** How are your habits today, compared with the first day?

 bonus · shopping

Your allies *what to look for*

This isn't a list of obligations: it's what we look for, so you don't have to start from scratch. **No rush: when you run out of something, swap it for a better version.**

◆ HOW TO FIND YOUR OWN *What to look for in each category, wherever you live.*



Water

HABIT 1

Any of the three waters in habit 1, whichever you have.



Rebounding

HABIT 2

A stable mini trampoline, or the bed or a gym mat.



Brushing

HABIT 3

A wooden body brush with natural bristles, no plastic.

 **WITH FRESH INK** keep the brush away from that skin while it heals.



Skin and sun

HABITS 3 AND 4

Certified organic, with sun protection. Sensitive skin or a recent tattoo: fragrance-free or essential-oil-free.

 **WITH FRESH INK** on a tattoo that's still healing, use whatever your tattoo artist tells you.



Fruit and vegetables

Seasonal and organic, straight from the farmer.



Beef

Certified organic and pasture-raised.



Fermented foods

Unpasteurised, and kept chilled.



Bone broth

Organic ingredients, a long, slow simmer, unpasteurised.

IN MORE DETAIL



What to look for in each food, at home and in the bathroom: in the Beginner's Guide to Gentle Detox, in the library.

 eu.bionobo.com/pages/guide-library

closing · what you can do

Your skin, your story *you choose*

Every tattoo tells a story.
Caring for the body that carries
it is part of that story too.



There are no magic pills, and no cleanse that fixes everything forever. What you do have are small habits, almost all of them free, that you repeat until they run on their own.

Letting go is hard, and at times it will feel like you're having a rough time, but your future self will thank you. Cleansing isn't only physical, it isn't only what comes out: it's everything that has been stuck for a long time. Habits, emotions... all of it.

Here, letting go isn't about your tattoos: *your story stays with you.* It's about rushing, habits and loads.

In the end, it's about understanding how our body works so we can optimise it. When you start to understand the lymphatic system, you start to adopt practices that help, and you'll notice it in your energy and in your body: *what the body can't eliminate robs you of energy.*

BEFORE CLOSING

Set your intention

The most important part is the intention; the habits sustain it.

What do you want?

What are you going to stop giving your energy to?

*You choose: one day or day one.
Your moment starts today.*

contact

Detox and tattoos



sumi · ink

A detox guide for people with tattoos

Thank you for making it this far. Your tattoos tell your story; so will whatever you do from today. Start with a single habit, the one that appeals to you most, and come back to this guide whenever you need it. It doesn't have to be perfect: all it takes is starting.

*Many of us have ink.
This guide is for us, and for you.*



GUIDES LIBRARY

All our guides, free

This one, the beginner's guide and the guides to re:set, be:liver and ikigen.

[eu.bionobo.com · guides library](https://eu.bionobo.com/guides-library)



NOTICE

This guide is inspiration, not health advice, and it is not meant to diagnose, treat or cure anything. We are not a medical team, and this guide does not replace the guidance of your tattoo artist or your dermatologist. To remove a tattoo, go to a dermatologist or a medical professional experienced in laser treatment. If you notice signs of infection or a reaction in a tattoo, see a doctor. No alcalina or shila:jit during pregnancy or breastfeeding. **If you have any medical condition or take medication, always, always consult your specialist.**



hola@bionobo.com

Any question about the guide or where to start.



eu.bionobo.com

The guides library and the product pages.

SOURCES

Schreiber I et al., *Sci Rep* 2017 · BfR, 2015 statement and FAQ · IARC, tattoo background and news item of 3 Dec 2025 · Regulation (EU) 2020/2081 (REACH, Annex XVII, entry 75) · ECHA 2017 · Ćwieląg-Drabek M et al., *Toxics* 2025 · Nielsen C et al., *eClinicalMedicine* 2024 · Clemmensen SB et al., *BMC Public Health* 2025 · McConnell T et al., *eClinicalMedicine* 2025 · Mo T et al., *JNCI* 2025 · Rietz Liljedahl E et al., *Eur J Epidemiol* 2025 · Baranska A et al., *J Exp Med* 2018 · Barua S, *J Cutan Aesthet Surg* 2015 · Schreiber I et al., *Sci Rep* 2015 · Hering H et al., *J Invest Dermatol* 2018 · EADV, *Tattoo aftercare*, 2021 · AAD, 2019 news release and laser page · StatPearls, *Physiology, Lymphatic System* · Seidel S et al., *JAMA* 2001 · JRC, *Safety of tattoos and permanent make-up*, 2016 · Samadelli M et al., *J Cult Herit* 2015 · Tighe M et al., *J Environ Prot* 2017 · TemaNord 2024:549 · Liu D et al., *Toxics* 2023.

alcalina, shila:jit, ki:wami, re:set and be:liver are food supplements. They are not intended to diagnose, treat, cure or prevent any disease, and do not replace a varied, balanced diet or professional medical judgement. Do not exceed the recommended daily dose. Keep out of the reach of children.

© 2026 bionobo® · registered trademark of Follow The Plants OÜ