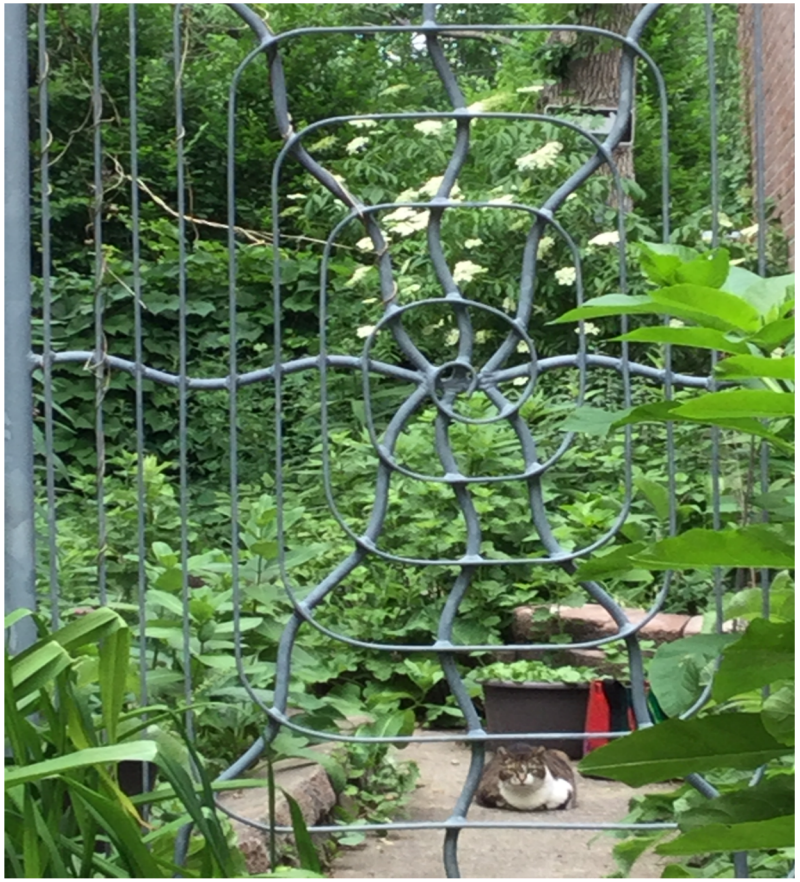
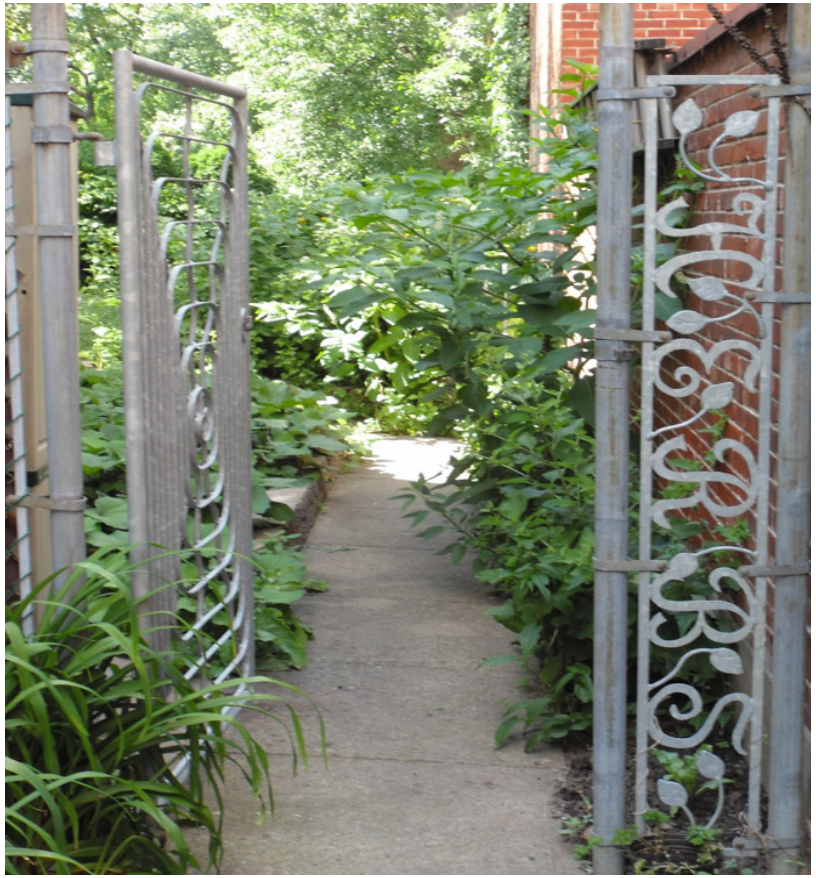
WELCOME to

HEALTH & HEALING from the GARDEN

with **Monica Giacomin**
Community Herbalist, Health Educator and
Directrice of HERBS on the Side Educational Botanical Sanctuary





Territorial Acknowledgement

I would like to begin by acknowledging that we, and our green nations, are residing on unceded Indigenous lands. The Kanien'kehá:ka Nation is recognized as the custodians of the lands and waters on which we gather today.

Tiohtià:ke/Montréal/Montreal is historically known as a gathering place for many First Nations. I respect the continued connections with the past, present and future in our ongoing relationships with Indigenous and other cultures within the Tiohtià:ke community.

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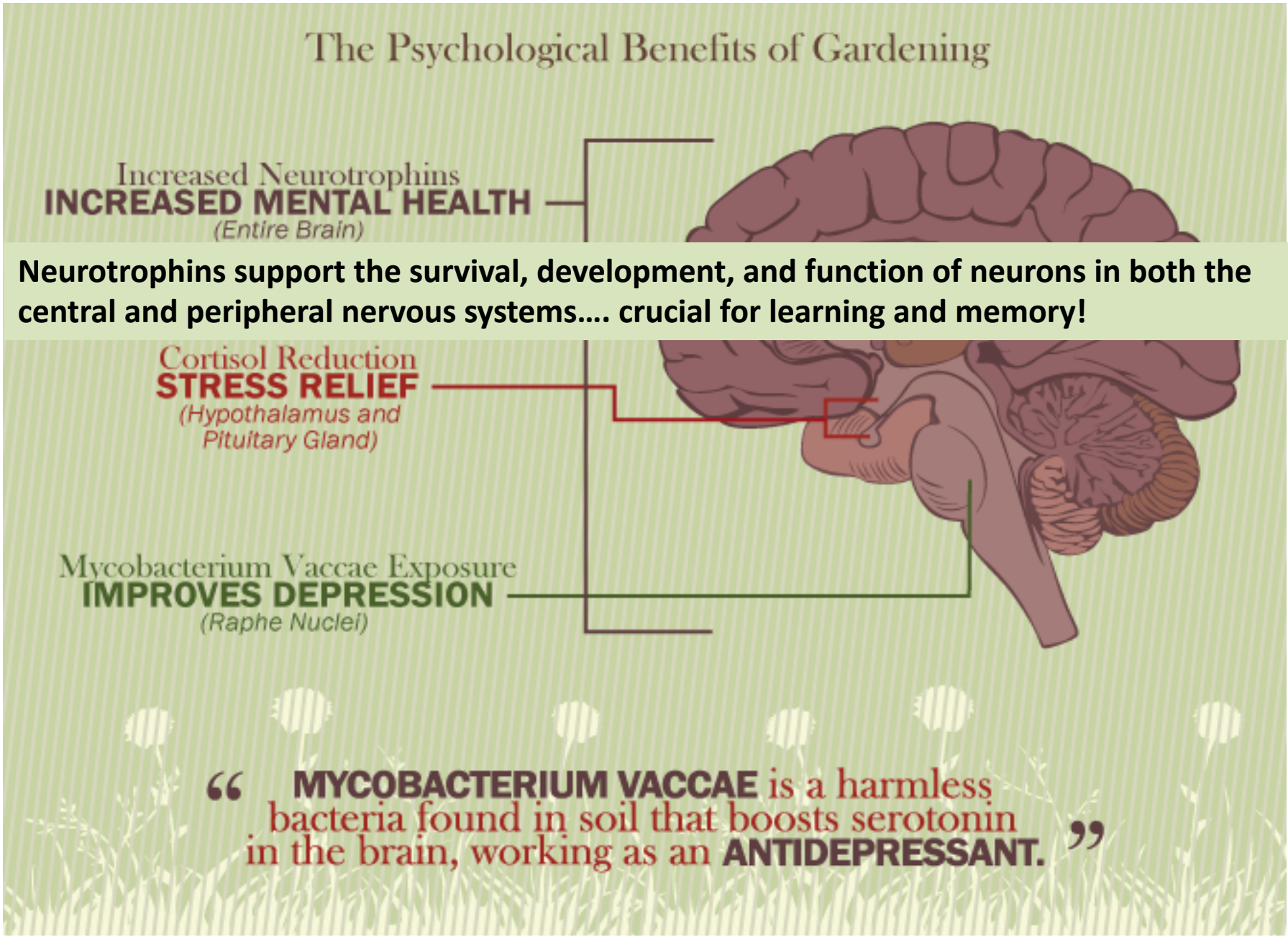
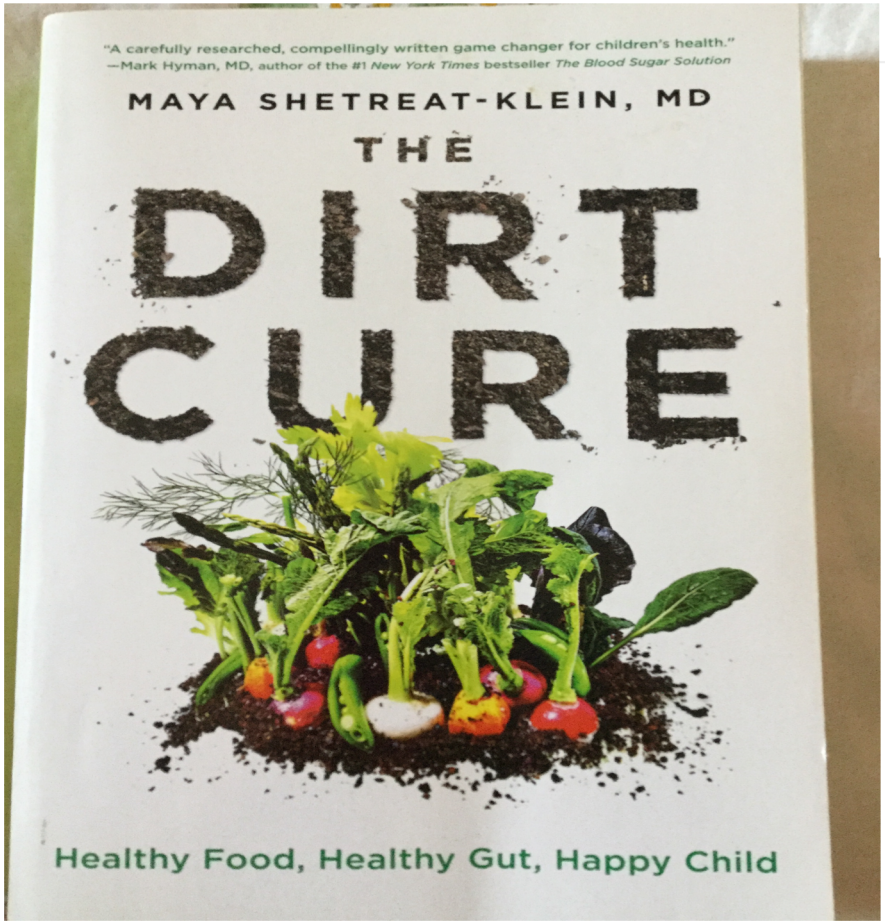
CELEBRATE LIFE



Neurotrophins support the survival, development, and function of neurons in both the central and peripheral nervous systems…. crucial for learning and memory!

www.fix.com/blog/health-benefits-of-gardening/



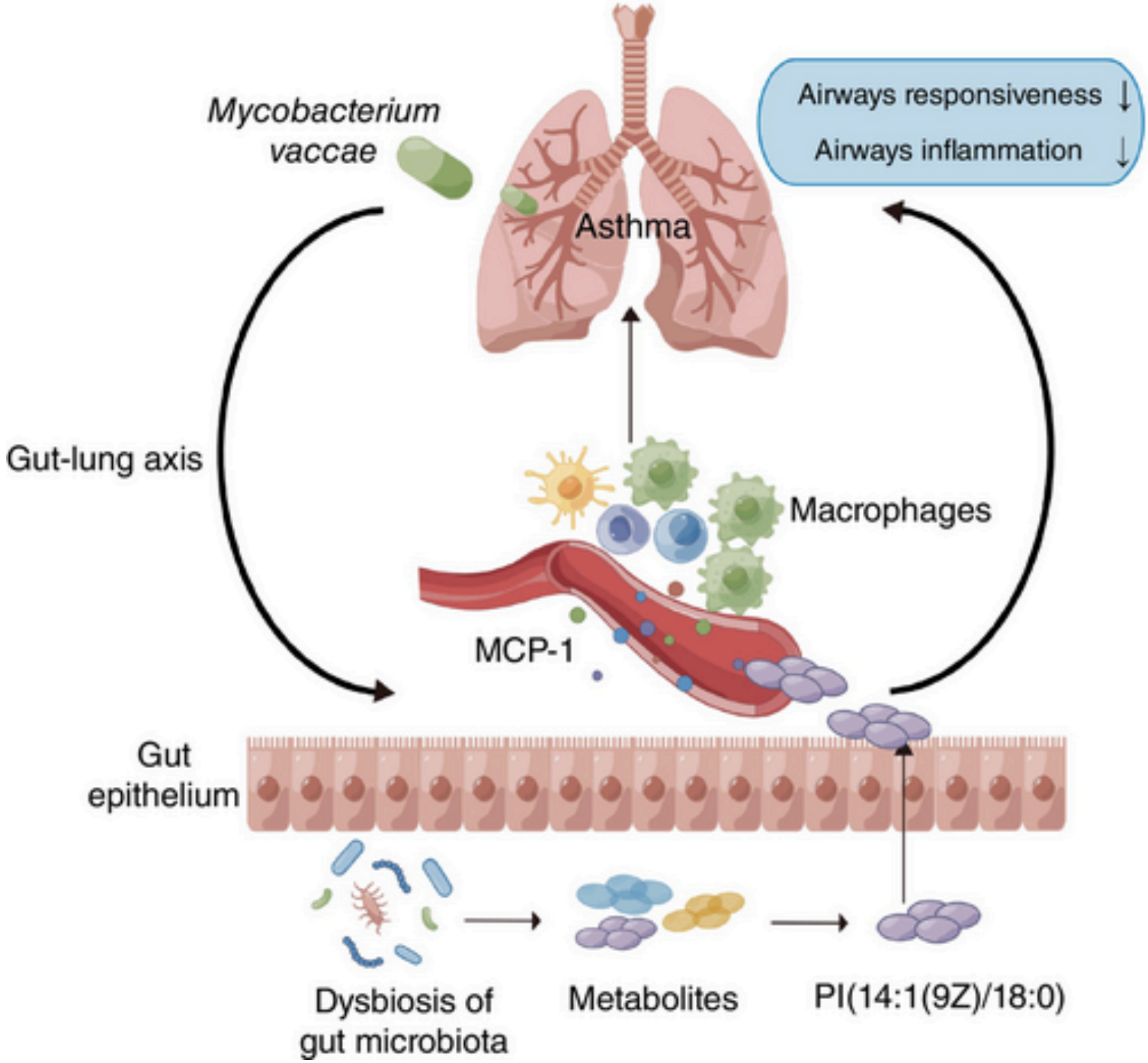
The New York Times Magazine

THE MENTAL HEALTH ISSUE

Can the Bacteria in Your Gut Explain Your Mood?

Mycobacterium vaccae, has been found to enhance **serotonin** production which in turn **improves mood** and **brain function!**

90% of our serotonin is made in the gut lining, which is regenerated every 3-5 days.



https://onlinelibrary.wiley.com/doi/full/10.1111/imm.13750

Newer research into the health of the gut microbiome suggests another essential piece of the puzzle, and that is the benefits of regularly spending time in the natural world.
This appears to work in two ways:
One is to expose people to a wide range of beneficial bacteria, which can contribute to the diversity of gut populations.
The other is that regularly spending time outdoors helps to lower stress levels and imparts a sense of well-being. Regular contact with nature-especially soil, plants, and natural air- introduces beneficial bacteria that strengthen immune systems, reduce stress, and improve overall microbial health compared to sterile urban environments.

GETTING OUT IN THE GARDEN ALLOWS YOU TO INTERACT WITH …

The SOIL:
A single teaspoon of rich, unpolluted soil contains up to one billion bacteria.

Plants and Trees:
Interacting with plant life releases volatile organic compounds that can interact positively with human biochemical pathways.

Fresh Air:
Provides a rich, varied array of microbes compared to indoor HVAC systems.

… ALL enhancing your microbiome and your immune system, along with your prebiotic and probiotic rich diet!

Are you consuming a dose of each on a daily basis?

How Can We Nurture our Microbiome?

DAILY PROBIOTICS
FERMENTED FOOD & BEVERAGES

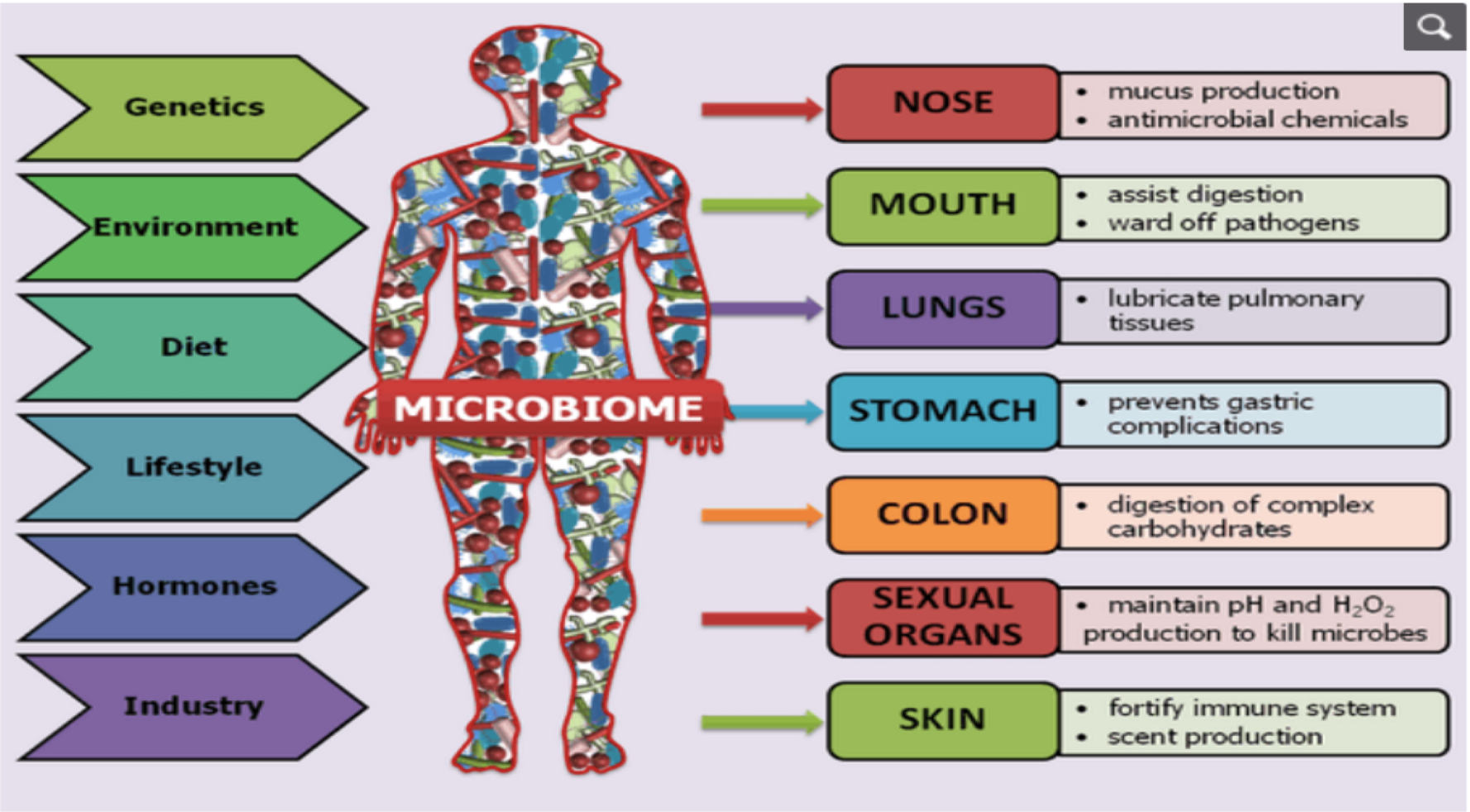
- Sauerkraut
- Miso
- Kimchi
- Beet kvass
- Kefir, plain (*with* fat if organic)
- Yogurt, plain (*with* fat if organic)
- Kombucha
- Natto
- Tempeh
- Vinegar (ideally with scobey)
- Pickles, olives (fermented)
- Sourdough bread

How Can We Nurture our Microbiome?

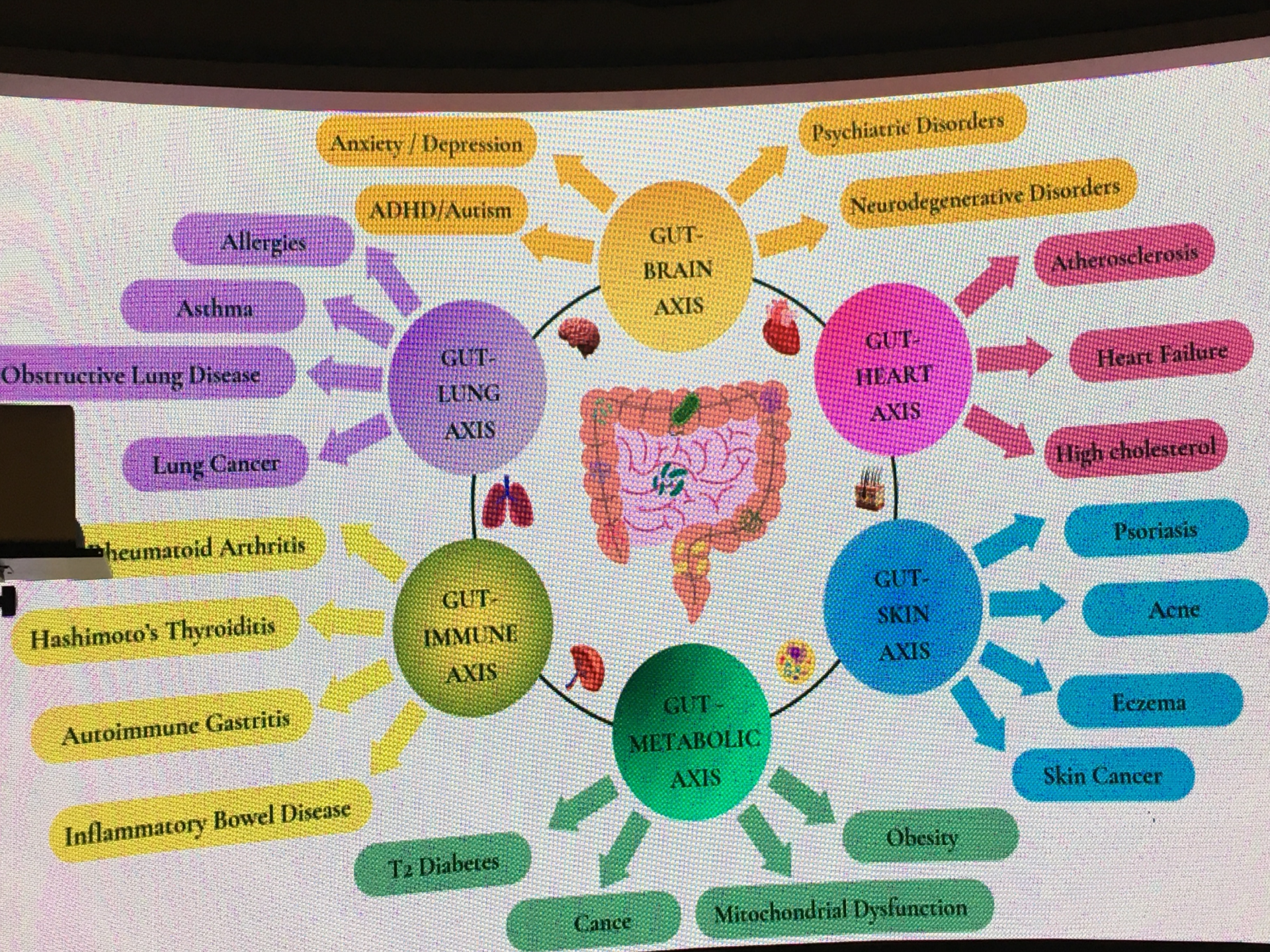
DAILY PREBIOTICS

Indigestible fibres (ie.Fructooligosaccarides (FOS) and Inulin) that feed your “good” bacteria.

- Garlic
- Onions & Leeks
- Beans
- Shiitake mushrooms
- Apples
- **Dandelion Greens & Rt.**
- Jerusalem Artichoke
- Asparagus
- **Chicory Root**
- **Burdock Root** /Gobo
- Oats
- **Unwashed greens, herbs**
- Barley
- Flaxseed
- Wheat Bran
- Seaweed
- Sweet potato
- Plantain bananas
- Artichoke hearts
- Kiwi with peel
- Cocoa
- Cassava Root
- Breastmilk

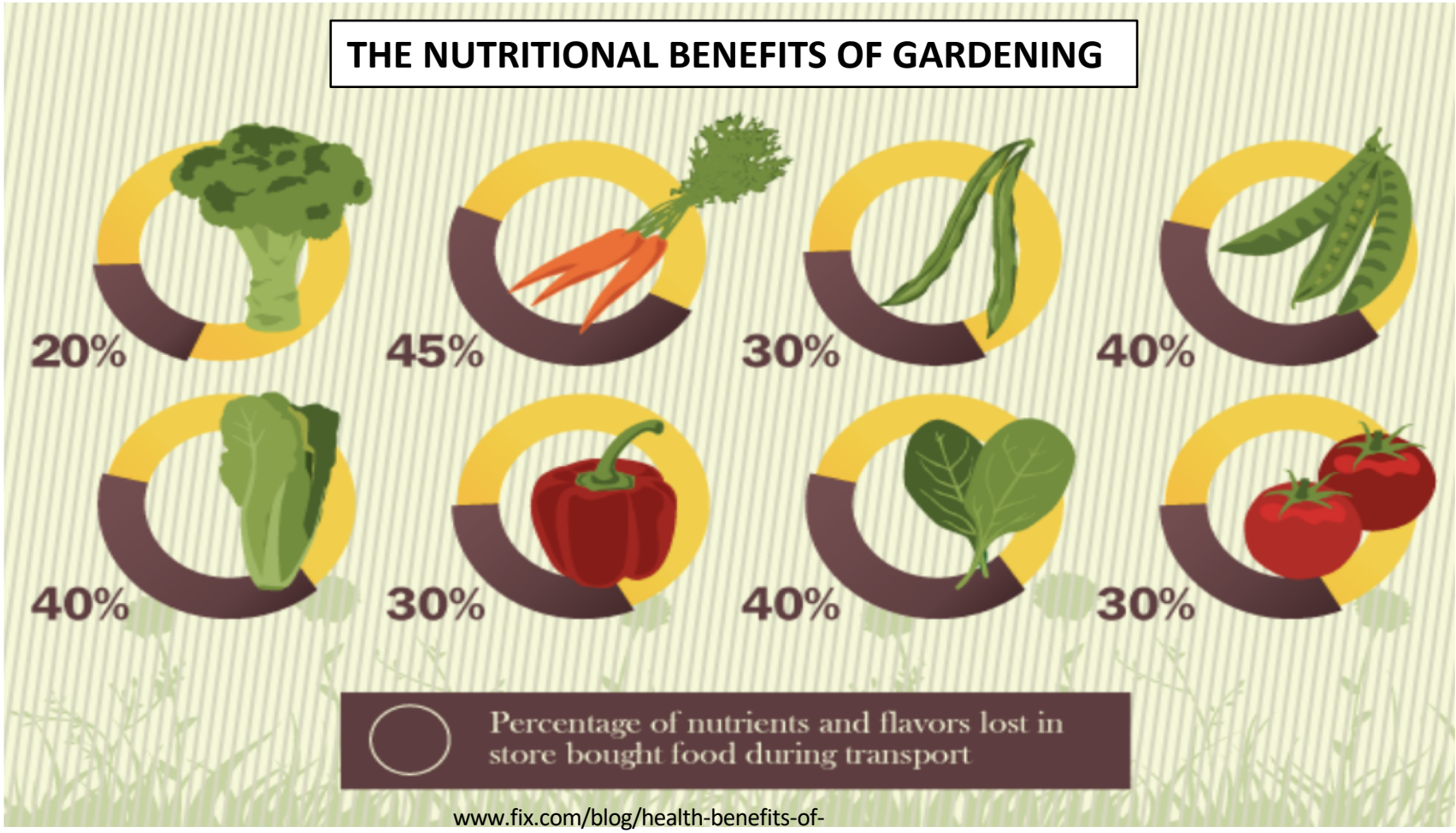


The human microbiome is a treasure trove waiting to be unlocked</h1>src="https://images.theconversation.com/files/282912/original/file-20190705-51278-50p95h.jpg?ixlib=rb 1.1.0&rect=0%2C0%2C5851%2C3894&q=45&auto=format&w=754&fit=clip" />


Anxiety / Depression
Psychiatric Disorders
ADHD/Autism
Neurodegenerative Disorders
GUT-BRAIN AXIS
Allergies
Atherosclerosis
Asthma
GUT-HEART AXIS
Heart Failure
Obstructive Lung Disease
GUT-LUNG AXIS
High cholesterol
Lung Cancer
Psoriasis
Rheumatoid Arthritis
GUT-SKIN AXIS
Acne
Hashimoto's Thyroiditis
GUT-IMMUNE AXIS
Eczema
Autoimmune Gastritis
GUT-METABOLIC AXIS
Skin Cancer
Inflammatory Bowel Disease
Obesity
T2 Diabetes
Mitochondrial Dysfunction
Cance

How can we nurture our microbiome beyond PRO & PREBIOTICS?

- Gentle-moderate exercise
- Managing our stress levels
- Getting enough sleep… 8 hours recommended
- Eating more vegies, especially greens
- Adding more fiber to daily diet
- Minimizing sugar and processed food
- Restricting the use of medications such as antibiotics, aspirin, ibuprofen
- Avoiding chemicals (glyphosate) … another reason to buy organic!
- Filtering chlorine out of water… get a shower filter too!
- Minimizing antibacterial products (soap, sanitizer, cleaning products)
- Getting your hands in the earth… and your feet too!
- Spending as much time as you can in a garden or neighbourhood parks and alleys… wherever nature beckons!



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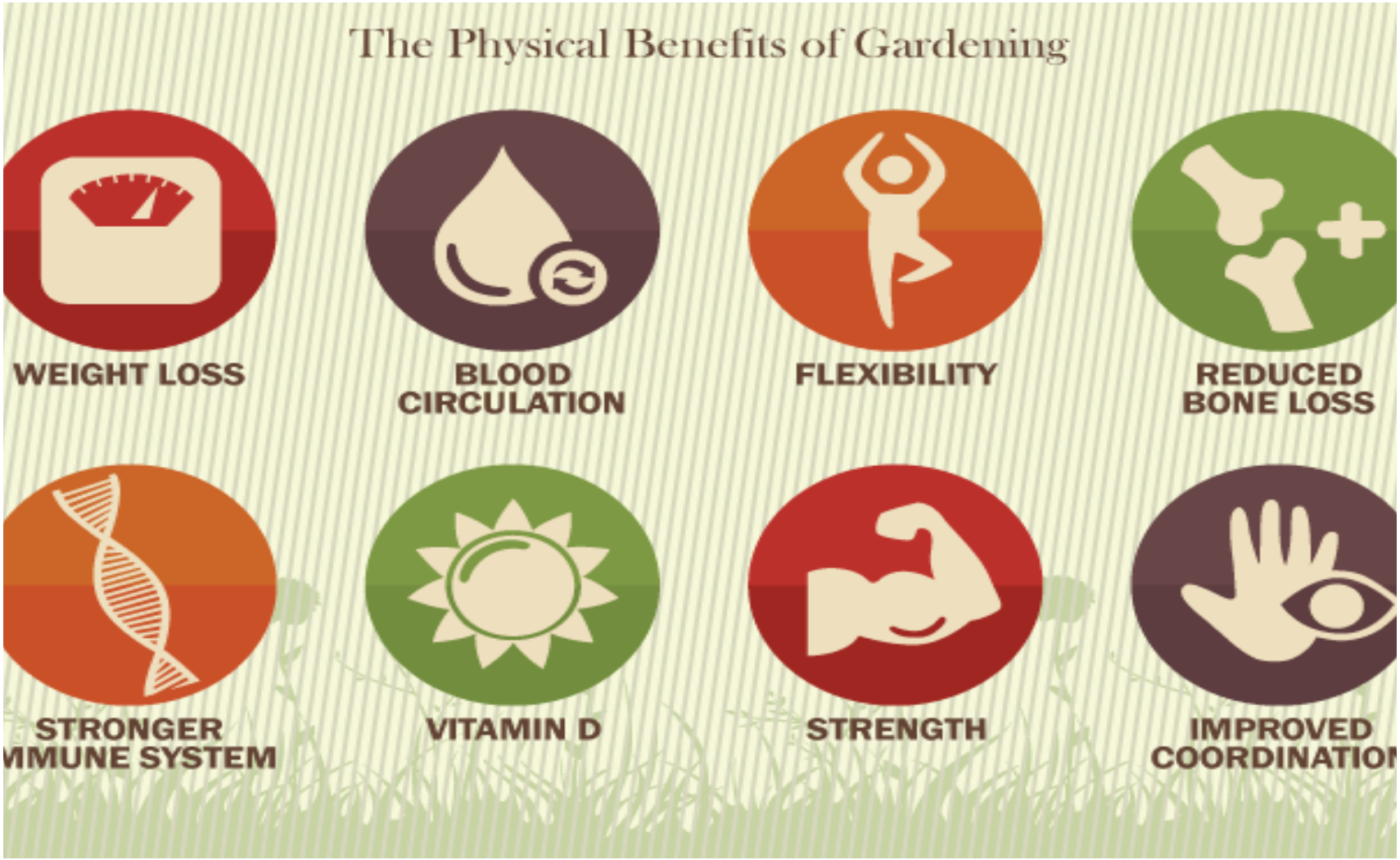
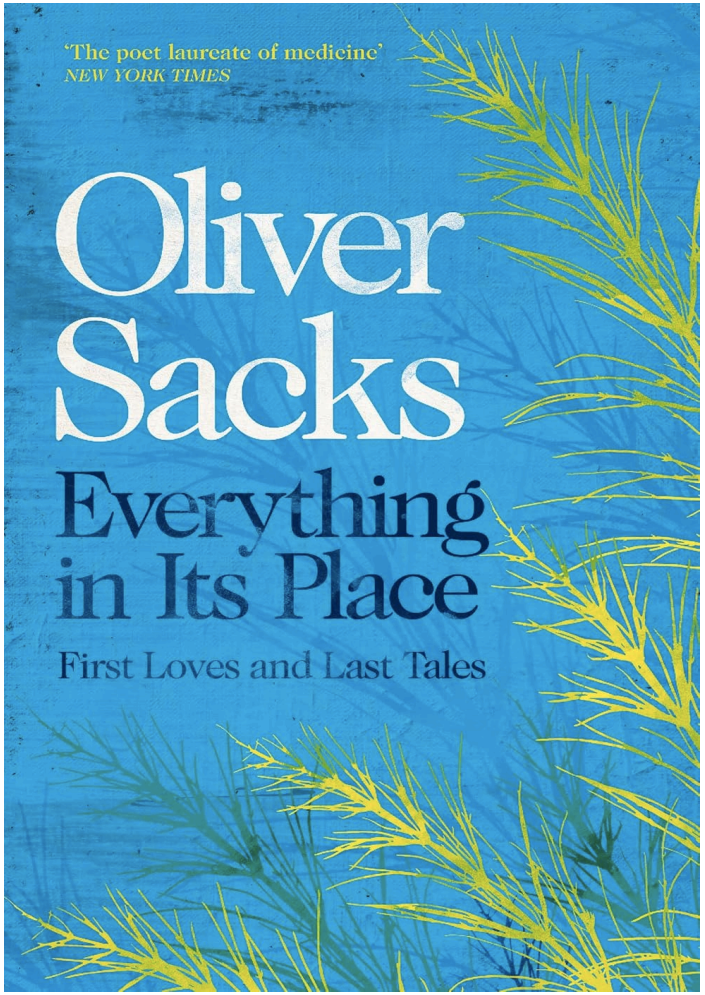


REASONS TO GET OUT IN The GARDEN!

Source: Jane Gates is a writer, artist, garden designer, landscape contractor and author of **All the Garden's a Stage: Choosing the Best Performing Plants for a Sustainable Garden.** Schiffer Publishing (May 18 2012)

Those unmatched rewards, both psychological and physiological, are what beloved neurologist and author **Oliver Sacks** (July 9, 1933–August 30, 2015) explores in “Why We Need Gardens,” found in



“As a writer, I find gardens essential to the creative process; as a physician, I take my patients to gardens whenever possible. All of us have had the experience of wandering through a lush garden or a timeless desert, walking by a river or an ocean, or climbing a mountain and finding ourselves simultaneously calmed and reinvigorated, engaged in mind, refreshed in body and spirit.”

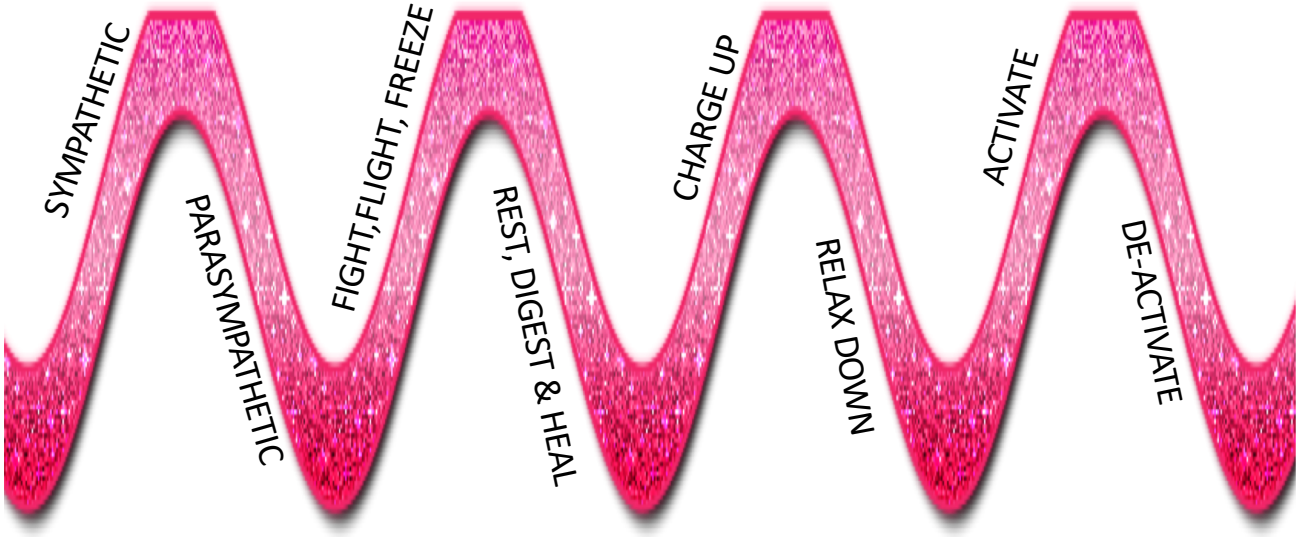
Clearly, nature calls to something very deep in us.

Biophilia, the love of nature and living things, is an essential part of the human condition. Hortophilia, the desire to interact with, manage, and tend nature, is also deeply instilled in us. The role that nature plays in health and healing becomes even more critical for people working long days in windowless offices, for those living in city neighborhoods without access to green spaces, for children in city schools, or for those in institutional settings such as nursing homes. **The effects of nature's qualities on health are not only spiritual and emotional but physical and neurological**. I have no doubt that they reflect deep changes in the brain's physiology, and perhaps even its structure.

"Why We Need Gardens," Everything in its Place: First Loves and Last Tales, **Oliver Sacks** (July 9, 1933–August 30, 2015)

BEN
BY DANIEL SHELTON
TIME SURE FLIES WHEN I'M WORKING IN THE GARDEN...
© 2009 Daniel Shelton Distr. by MWAM
www.bencomicstrip.com

THE AUTONOMIC NERVOUS SYSTEM
is part of our GUT- BRAIN AXIS
which is the biochemical communication between
our **G.I. tract, our Central Nervous System and our Microbiome**



When we're in FIGHT OR FLIGHT norepinephrine gets us ready for action!

IN THE BRAIN:

- 🌀 Arousal increases
- 🌀 Alertness intensifies
- 🌀 Attention focuses
- 🌀 Memory retrieval enhanced

IN THE BODY:

- ❤️ Heart rate increases
- ❤️ Blood pressure soars
- ❤️ Blood flow to the muscles surges
- ❤️ Blood flow to digestive system diminishes

But if you're always in high gear, you *may be* too exhausted to relax into parasympathetic mode…

- ☹ Digestive function falters
- ☹ Stress resistance declines
- ☹ Chances of getting sick increase
- ☹ Anxiety and panic attacks escalate
- ☹ Mood swings occur
- ☹ Depression & pessimism set in
- ☹ Inflammation occurs

😊 HERBS, and getting out in Nature, can nourish us long term, and be part of our daily self-care/ self-love, as we enjoy a slower, more relaxed parasympathetic mode which increases both our microbiome and ECS !

Dr. Sacks writes:
The importance of these physiological states on individual and community health is fundamental and wide-ranging. In forty years of medical practice, I have found only two types of non-pharmaceutical “therapy” to be vitally important for patients with chronic neurological diseases: music and gardens.

I cannot say exactly how nature exerts its calming and organizing effects on our brains, but I have seen in my patients the restorative and healing powers of nature and gardens, even for those who are deeply disabled neurologically. In many cases, gardens and nature are more powerful than any medication.

Welcome MILK~~WEED~~ROSE into your garden!

CANADA

Monarchs need more milkweed

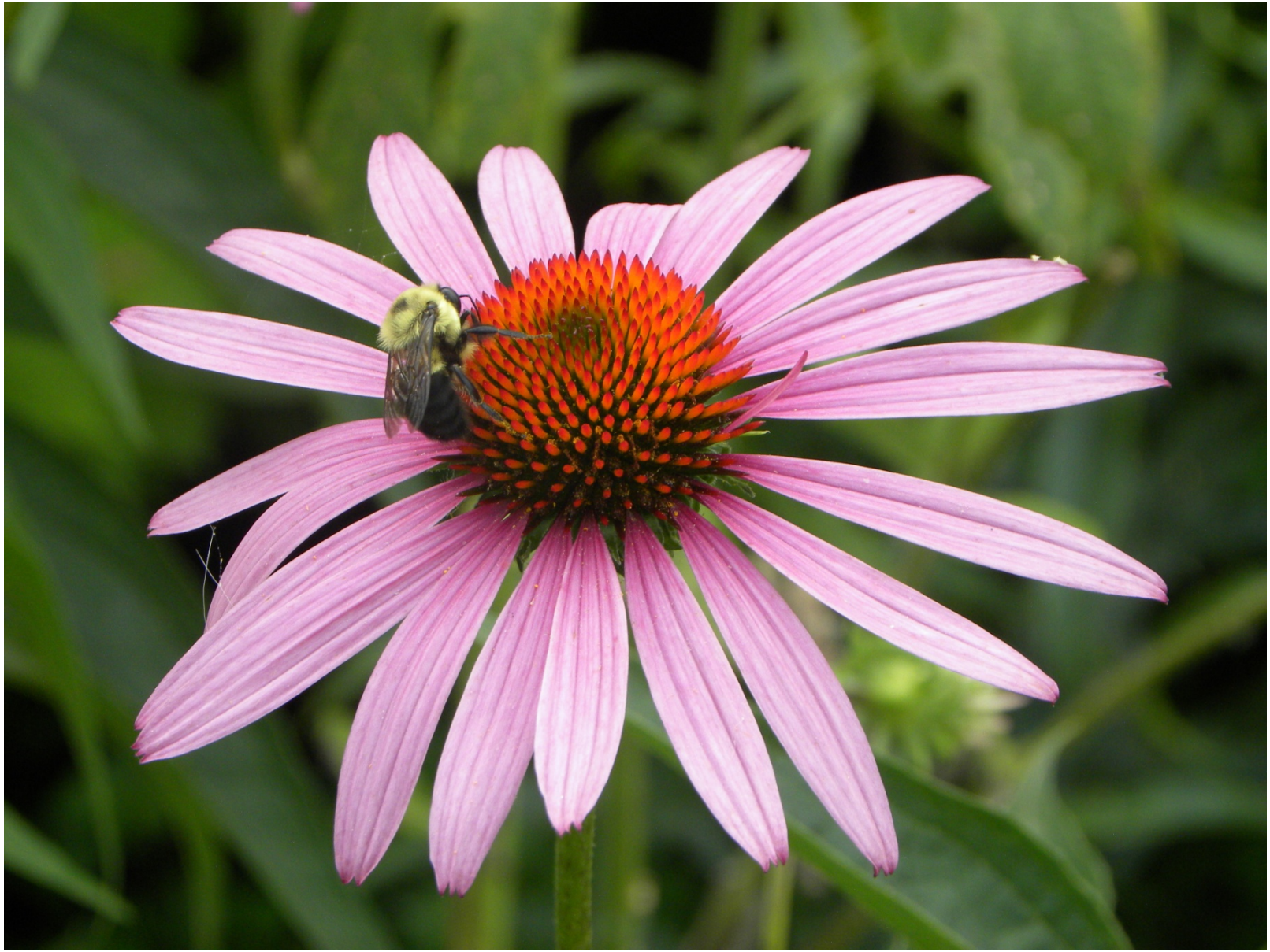
A concerted national effort to plant the traditionally unloved milkweed is needed to reverse a precipitous decline in the monarch butterfly population, conservationists say. They're hoping the federal government will step up with money and moral persuasion to aid in an effort they say needs to include power line, road and rail agencies. Estimates are that the migratory monarchs have declined by 90 per cent across North America over the past two decades, in part because of the eradication of milkweed, the only food plant the butterflies use as caterpillars.

Asclepias syriaca

Asclepias tuberosa

Asclepias incarnata

gardengatemagazine.com



Don't be too anxious to pull all those weeds

Experts claim that many common weeds are beneficial to the garden

STEPHEN BARRINGTON
CANADIAN PRESS

Diligent weeding has long been considered the tried-and-true path to an attractive, productive plot. But by being too diligent, Canadian gardeners may unknowingly be pulling out good with the bad.

Certain weeds are natural helpers, variously indicating poor soil conditions, providing always-needed nitrogen or promoting healthier, pest-free growth in nearby plants.

People need to be "less uptight about weeds," says Linda Gilkeson, research director for Applied Bio-Nomics, a Sidney, B.C., company that studies natural pest control.

"There are tremendous benefits if you have the right weeds. It's not a trivial effect, either. It's significant."

Such weeds as cornflower (also called bachelor's button, and often planted from seed as a wildflower), wild carrot (Queen Anne's lace) and goldenrod attract beneficial insects that control aphids, cabbage loopers and tomato hornworm.

In gardening lore, the herb valerian — also known as garden heliotrope — is said to strengthen nearby plants, making them pest-resistant. More practical, however, the weed attracts earthworms, necessary for good soil.

Weeds and insects

Goldenrod is one weed that allergy-sufferers can do without, but otherwise it can be important to a bloom-filled yard. Its many colorful flowers attract butterflies and bees, vital for pollination.

Milkweed is similarly helpful in attracting bees.

White, red and other varieties of clover are favorite stops for bees. But their main benefit is as a soil conditioner, since these leguminous weeds add nitrogen to the soil, making them natural fertilizers.

"Many people think gardening is a lot of work, that there's so much to do," Gilkeson says. "But it's a lot easier if they work with permanent native growth" in the garden, much of which is considered weeds.

Of all native growth, stinging nettles are perhaps the most annoying, especially to gardeners unfortunate enough to be stung. But out of the way near flower beds and vegetable gardens they repel aphids and plant lice.

Don't always blame the weeds that sprout up among flowers that seem frail — perhaps the soil is the problem.

Nature's litmus

English daisy and Queen Anne's lace will grow in relatively infertile spots, for instance. Growing in slightly better soil might be common groundsel, lambsquarters or chickweed.

Do you suspect that the soil may be either acid or alkaline, but don't know which? Look at any cornflowers growing in the patch — nature's litmus, the weed has blue blooms in alkaline soil, pink blooms in acidic.

Red sorrel, also known as sheep sorrel, usually grows in acidic soil. As an indicator it's not always ideal, however, since it can tolerate soil that's neutral to slightly alkaline.

Some weeds are the preferred food of hungry bugs that might otherwise chomp on more productive vegetable or fruit crops. Wild radish attracts flea beetles from tomatoes, squash and eggplant, for instance.

Where there are apple trees, common mullein — a weedy relative of colorful flowering mullein varieties — distracts apple orchard stinkbugs.

Having beneficial weeds in the garden "doesn't mean you have to tolerate a big mess," says Gilkeson, whose own garden includes a number of the natural helpers. "A few of them in with flowers and vegetables isn't going to hurt.

"If you want, you can relegate them to a back area of the garden or keep them in a sort of wild area as a more permanent planting."

It's possible to have too much of a good thing, however. Even beneficial weeds can take over a plot. Uncontrolled, they can rob other plants of light, food, water and space.

Nettles in a back corner of your garden helps to repel aphids and plant lice.

CLOVER

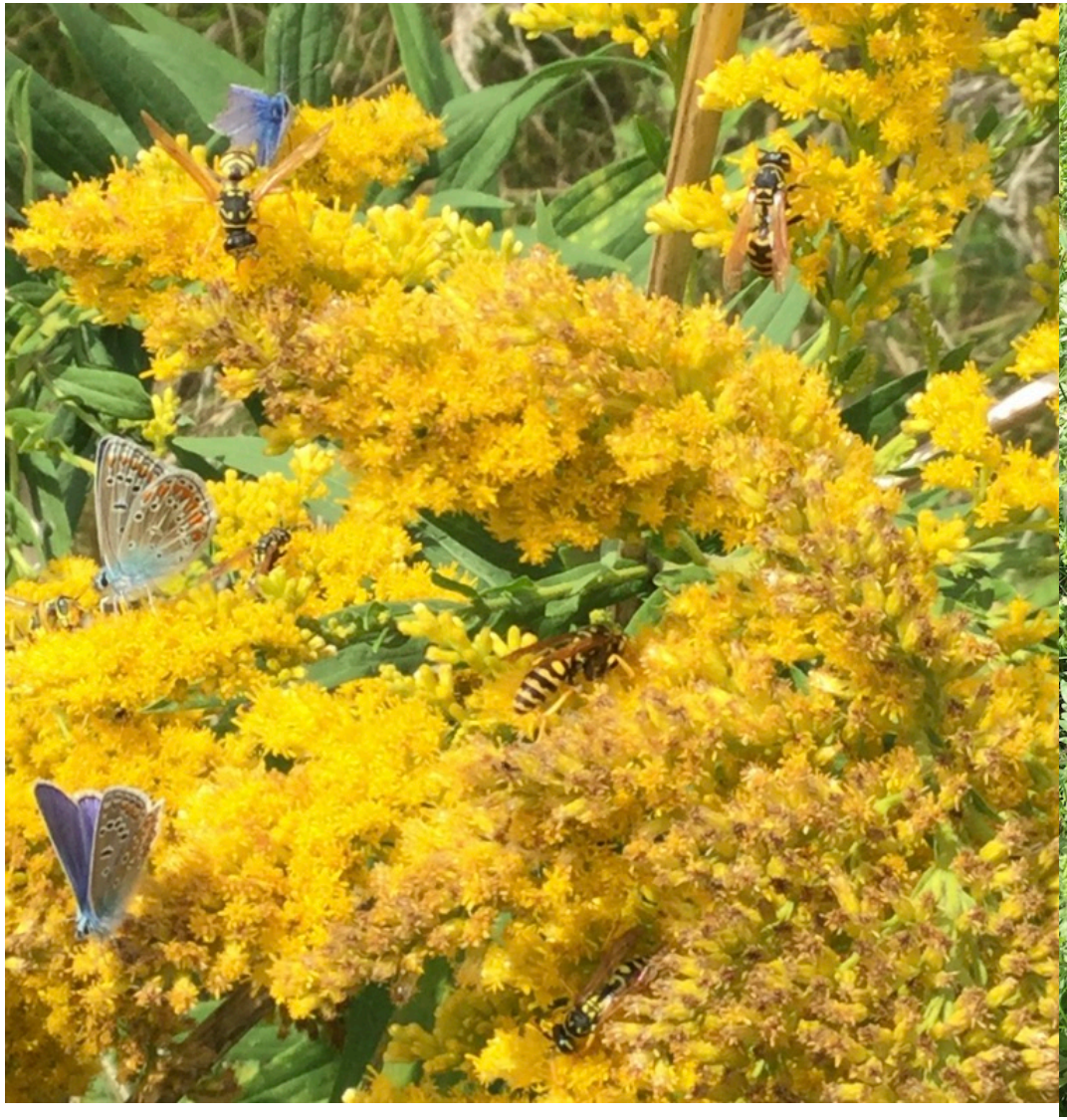
Adds Nitrogen to soil acting as a natural fertilizer. Bees love clover nectar!!!

VALERIAN

Makes nearby plants pest-resistant and stronger & attracts earthworms!

Attracts beneficial insects that control cabbage moths, aphids & tomato hornworm.

Which herb is responsible for hay fever allergies?



Benefits of Goldenrod
1. Has 7 times the antioxidants of green tea
2. Stops seasonal allergy symptoms
3. Supports urinary system
4. Makes a tasty tea
5. Probably grows near you
www.HerbalRemediesAdvice.org

CANADIAN EDITION / NOVEMBER 23, 1998 $3.95

TIME

U.S.-IRAQ: Going to the Brink

THE HERBAL MEDICINE BOOM

It's great business, but is it good for what ails us?

47 >
0 92567 10091 0

www.time.com

Free & Abundant Super Food!

Some weeds make superior eating and have two or three times the nutritional value of spinach or Swiss chard.

- young dandelion leaves…raw in salads or cooked greens
- chickweed…raw in salads or pesto
- stinging nettle…young leaves cooked
- lamb's-quarters…cooked leaves
- ground ivy… in salad, vinegar or honey
- burdock root…pickled, baked or roasted
- purslane... raw or cooked
- Jerusalem artichoke root…boiled, baked, and then pan fried

Try them sautéed in garlic and olive oil and drizzled with lemon juice. Then sprinkle with your herb of choice!

Nutritionally, purslane has:

- Seven times the **beta-carotene** of carrots
- Six times more **vitamin E** than spinach
- More **omega 3 fatty acid** than any other green

Significant amounts of:

- **Beta-carotene**
- **Vitamin C**
- **Calcium**
- **Iron**
- **Magnesium**
- **Potassium**
- **Antioxidants…found abundantly in ALL plants**

DANDELION'S NUTRIENTS

in 100 g of LEAVES

Vitamin A (~21-58,000 IU)	Support reproduction/heart / skin/vision/I.S./kidney function
Vitamin C (~ 35-652 mg.)	Encourages healthy I.S/collagen
Vitamin K (778.4µg)	Promotes bone formation/limits neuron damage in the brain.
Vitamin E (3.44mg)	Protects cell walls/antioxidant
Potassium(~400-2757 mg)	Helps reduce blood pressure & HR /counters sodium effects

HEALTH BENEFITING FLAVONOIDS

- Carotene-ß (5854 µg)
- Carotene-α (363 µg)
- Lutein- Zeaxanthin (13610 µg)
- Cryptoxanthin (121 µg)

- Carotenes help to protect from cancer, esp. lung and oral cavity
- Zeaxanthin may possess photo-filtering functions and help protect the retina from harmful UV rays

B-VITAMIN COMPLEX

- B1- Riboflavin (.29-1.8)
- B2- Thiamine (.23-1.9)
- B3- Niacin (.80)
- B6 -Pyridoxine (.251mg)
- B9-Folate (27 µg)

Maintain metabolism and optimum function of enzymes on a cellular level!

MINERALS

- Calcium (~252-4223 mg./100g)
- Iron (3-29mg)
- Magnesium
- Manganese

- Strong bones and teeth
- Iron promotes cellular respiration and red blood cell production.
- Regulates muscle and nerve function, blood sugar levels and BP
- Antioxidant production

  co-factor for the antioxidant enzyme, *superoxide dismutase.*

- Protein 2.7g
- Fiber 35 mg
- Carbs 9.2g
- Sugar 0.7g
- Copper 171mg /Promotes red blood cell production
- Zinc .41mg /Helps I.S. fight infection & viruses/Aids in healing of skin wounds
- Bitter taste ~ to stimulate digestion!

The Beloved and Despised Dandelion
Leaf & Root contain INULIN!

Dandelions are a nutritious, wild, amazing edible food!

You can eat the entire plant, including the seeds.

The roots are roasted and used as a coffee substitute.

The yellow flowers, which are extremely high in beta-carotene, can be pulled apart and sprinkled into salads, cereal, rice or desserts…or made into wine.

The leaves make a bitter and extremely nutritive addition to salad, soup or herbal tea.

Dandelion is a useful medicinal herb that supports: the liver and the digestive system, skin and urinary system.

Dandelion Wine
2020
Dandelion Wine
2020
Dandelion Wine
2020
Dandelion Wine
2020

Spring salad greens
OR
delicious,
nutritious,
vinegar additions!

VITALITY VINEGAR

- Fill a Mason jar with fresh herbs.
- Pour vinegar over the herbs to the very top of the jar and cover with plastic lid/or protected metal.
- Infuse at least six weeks
- Shake weekly, with healthy intentions
- Strain, bottle, label and ENJOY!

1000ml
900
800
700
600
500
10dl
9
8
7
6
5

Chickweed's Nutrients

Vitamin C
Thiamine
Niacin
Rutin... strengthens capillaries (bruising, varicose, hemorrhoids)
Coumarins ... soothe vascular system
Magnesium
Omega 6 EFA
Iron
Silicon Compounds ... Immune System, Cardiovascular Health

Beta Carotene
Riboflavin
Bioflavanoids
Calcium
Genistein ... potent cancer fighter
Manganese
Potassium
Zinc

Delicious & Nutritious Chickweed!

ACTIONS:

Astringent

Anti-microbial

Demulcent

Laxative

Vulnerary

Anti-Viral

Carminative

Expectorant

Refrigerant

Nourishes Lungs

LAMBSQUARTERS NUTRIENTS

A cooked half-cup serving (110 grams) of Lambsquarter greens contains:

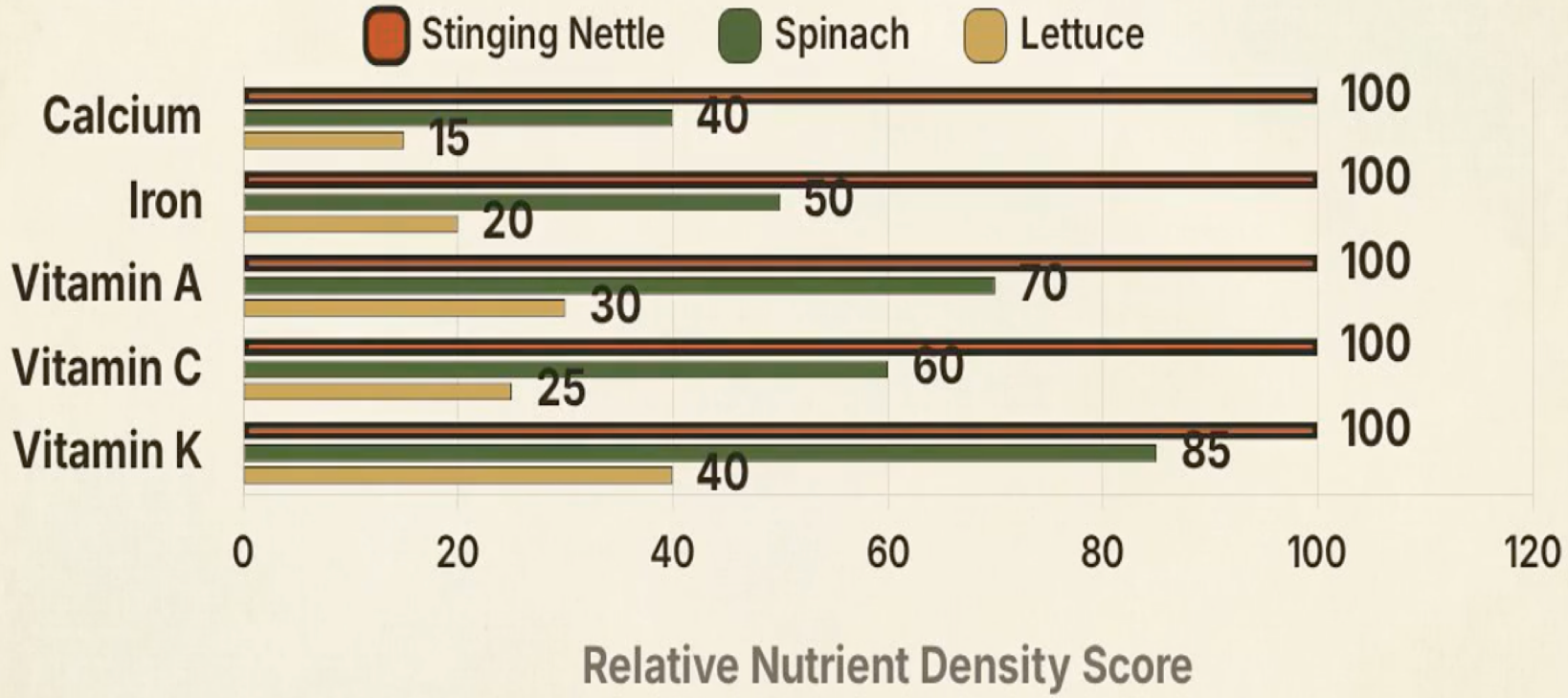
300 mg of calcium. (Swiss chard has 88 mg, spinach 9 mg.)

11,600 IU of vitamin A (Swiss chard has 6500, spinach 8100.)

B vitamins, especially riboflavin and folic acid.

More than 4 grams protein.

Nettle Dominates Nutritional Density



NotebookLM

Stinging Nettle/ Urtica dioica/l'Ortie

High in: protein, iron, calcium, magnesium, zinc, selenium, vitamin B, C, E, beta-carotene,

Nettle's Actions: Nourishing tonic, alterative, astringent, diuretic, expectorant, galactagogue, rubefacient, nutritive

Nettle is strengthening to the whole body due to its high mineral content. It rebuilds blood making it an excellent choice for iron deficiency even during pregnancy and while nursing.

Nettles nourish the adrenals which may alleviate chronic problems such as fatigue, exhaustion, headaches, repeated bouts of cold/flu and/or urinary tract infections.

Long-term use helps to relieve allergies and hay fever

NETTLE-KOPITA

NETTLE OMELETTE

NETTLE QUICHE

NETTLE PESTO

ORGANIC
NETTLE TIPS
£1.20
70ge
Keep refrigerated.
SOIL ASSOCIATION ORGANIC
GB-ORG-05 G7061
EU AGRICULTURE
Chegworth Valley
Water Lane Farm
Chegworth
Harrietsham
Kent ME17 1DE
chegworthvalley.com
CHEGWORTH VALLEY

NETTLE
ORTIE
LEAF CUT
FEUILLE COUPÉE
ORGANIC HERBS
PLANTES BIOLOGIQUES
40g
Directions for use
Pour 1 litre of boiling water
for 20 minutes. Filter.
Ingredients
Organic nettle leaf cut
TRADITION
ORGANIC - BIO
PROMOTION
PROMOTION
ORTIE FEUILLE COUPÉE
BIO
CLEF DES CHAMPS
$6.99
x1x40Gr
Rég. $7.99
$17.48/100gr
697026774574

Nourishing HERBAL INFUSIONS

BURDOCK -Arctium lappa

1-877-411-AQUA

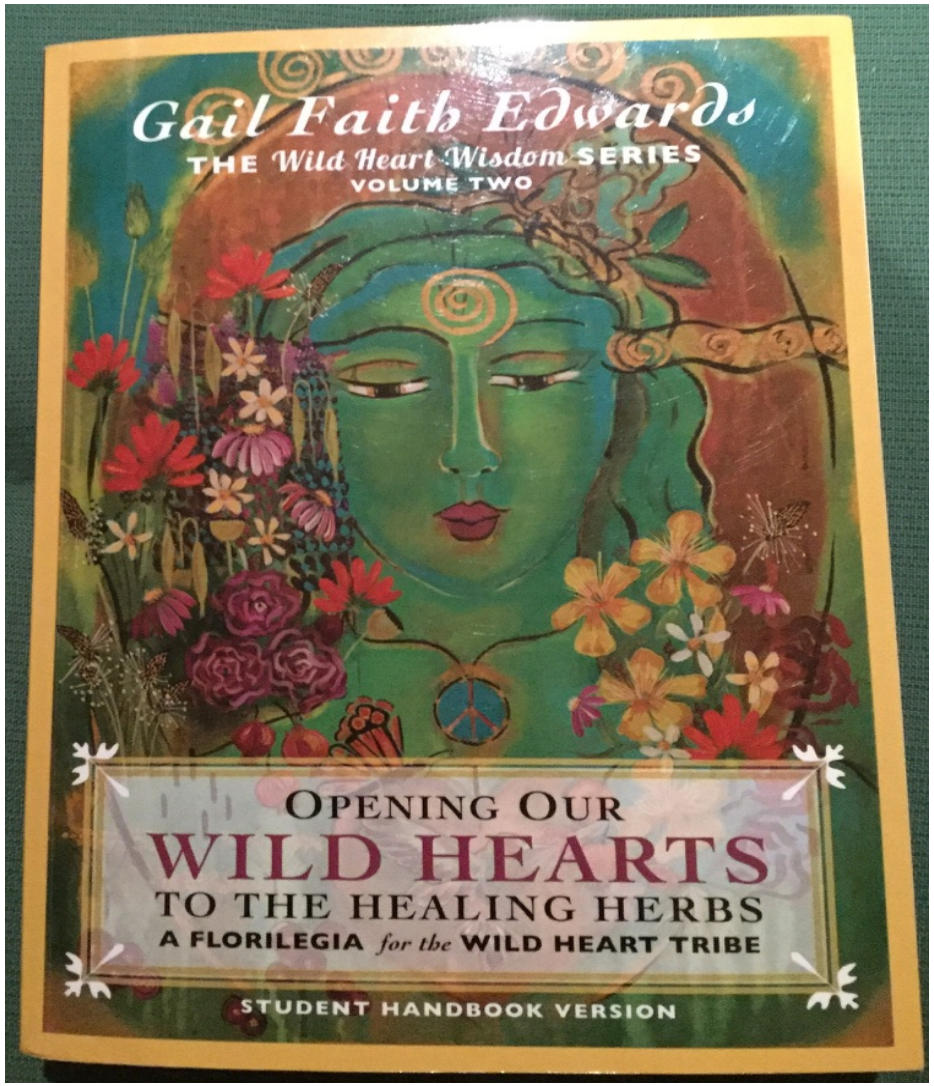
WIN
Serve chilled
FENTIMANS
EST. 1905
BOTANICALLY BREWED
TRADITIONAL
DANDELION & BURDOCK
UPEND BEFORE POURING
Fermented Botanical Dandelion & Burdock Drink with Ginger Extract
275ml
Best before: See neck
TICKETS TO SOME OF THE MOST FANTASTICAL EVENTS OF 2014

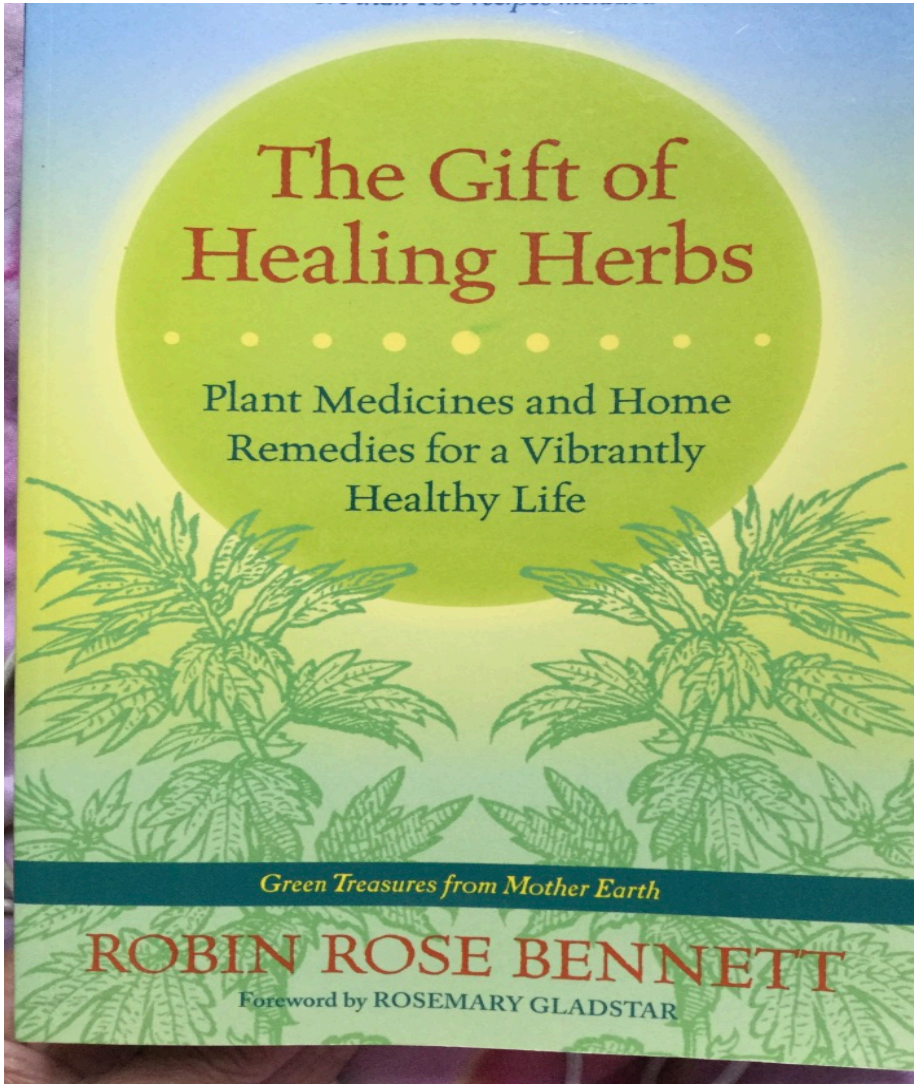
Other Inulin-containing Roots

Jerusalem Artichoke

FILL your Mason Jar with these wild greens and cover with vinegar for a tasty, nourishing tonic! How many can you identify?

If you're going to buy ONE book…





GUILDE DES HERBORISTES

PLANT (English)	PLANTE (Francais)	BOTANICAL NAME	Part(s) of Plant Used
Dandelion	Pissenlit	Taraxacum officinale	flower, leaf, root, sap
Plantain	Plantain	Plantago major/lanceolata	leaf, seed
Lemon Balm	Melisse	Melissa officinalis	leaf
Raspberry	Framboisier rouge	Rubus idaeus	leaf, fruit
Horsetail	Prele	Equisetum arvense	young shoots
Mallow	Mauve negligee	Malva neglecta	leaf
Chickweed	Mouron des oiseaux	Stellaria media	above ground plant
Coltsfoot	Tussilage	Tussilago farfara	leaf, flower
Comfrey	Consoude	Symphytum officinale	leaf, root
Mullein	Molene	Verbascum thapsus	leaf, flower
Heal-all	Prunelle vulgaire	Prunella vulgaris	above ground plant
Stinging Nettle	Ortie piquante	Urtica dioica	leaf, seed, root
Goldenrod	Solidage Verge d'or	Solidago canadensis	flowering tops
Motherwort	Agripaume cardiaque	Leonurus cardiaca	flowering tops
St. Johnswort	Millepertuis commun	Hypericum perforatum	flowers, buds
Yellowdock	Patience frisée/ crépue	Rumex crispus	fall root
Burdock	Bardane	Arctium lappa/minus	root, peeled stalk
Wood sorrel	Oxalide dressée	Oxalis stricta	leaf
Red clover	Trefle rouge	Trifolium pratense	flower
Valerian	Valeriane	Valeriana officinalis	fall root
Yarrow	Herbe a dinde	Achillea millefolium	flower, leaf
Hawthorne	Senellier	Crataegus monogyna	flower, leaf, fruit
Milkweed	Asclepiade	Asclepias syriaca	buds, flower
Wild parsnip	Panais sauvage	Pastinaca sativa	spring root
Sweet Violet	Violette	Viola odorata	leaf, flower
Mugwort	Armoise vulgaire	Artemesia vulgaris	leaf
Chicory	Chicoree sauvage	Cichorium intybus	leaf, root
Shepherd's purse	Bourse-a-pasteur	Capsella bursa-pastoris	above ground plant
Wild Strawberry	Fraise sauvage	Fragaria vesca	leaf, fruit
Jewelweed	Impatiente du cap	Impatiens capensis	flower,stem.leaf,root
Pepper/spearmint	Menthe poivrée /douce	Mentha piperita/spicata	leaf, flower
Lavender	Lavande	Lavendula officinale	leaf, flower
Chamomile (German)	Camomille/Matricaire	Matricaria recutita	flower
Ginkgo	Ginkgo	Ginkgo Biloba	yellow leaf, nut

ENJOY your WEEDS as you …

- ❤️ reap the physical and psychological benefits of spending time in the garden
- ❤️ discover delicious and nutritious wild food
- ❤️ make your own preventative medicine

Remember that gardening is scientifically proven to

- ❤️ make us happier
- ❤️ alleviate depression and anxiety
- ❤️ diversify our microbiome…& gut-brain axis
- ❤️ give us a vital dose of Vitamin N !

With GRATITUDE to all of my wise, generous, passionate teachers …

- **Holly Bellebuono,** School of Herbal Medicine, Martha's Vineyard, Community Herbalist Certification, 2018
- **Gail Faith Edwards**, Blessed Maine Herb Farm, Body Systems Herbal Medicine Correspondence Course (2019), Benedicaria (2021), Southern Italia Trip (2024)
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- **Mercedes Telles**… the first spark! Professional Development offering for College Outdoor Educators, 1989…life-changing experience meeting our medicinal herbs
- **Susun Weed**, Wise Woman Center, NY, 1990-2023; a variety of experiential and correspondence herbal courses

and for the abundance and nourishment of wild and not-so-wild herbs that grace my path year after year!