



breakfast brings benefits

and other strategies for community health

Erin Fredericks, MSN
FAMILIAR Foods



our modern lifestyle
is incompatible with health

outdated nutritional guidance

access & availability

agricultural & food policies

cost!

our food
choices

convenience

unregulated food industry

overburdened health system

our lack of knowledge



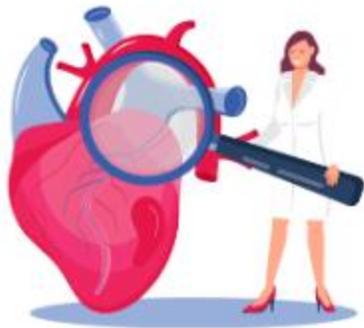
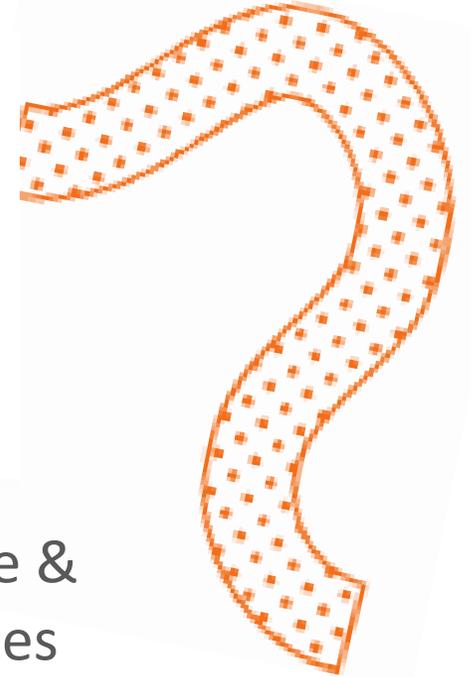
1950s

shift to feed lots, food processing



1990s

vegetable oil, fat-free & refined carbohydrates

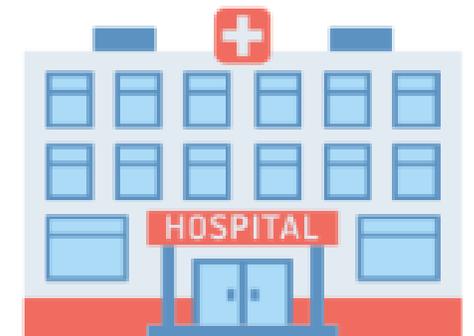


1970s-1980s

rise in cardiovascular disease

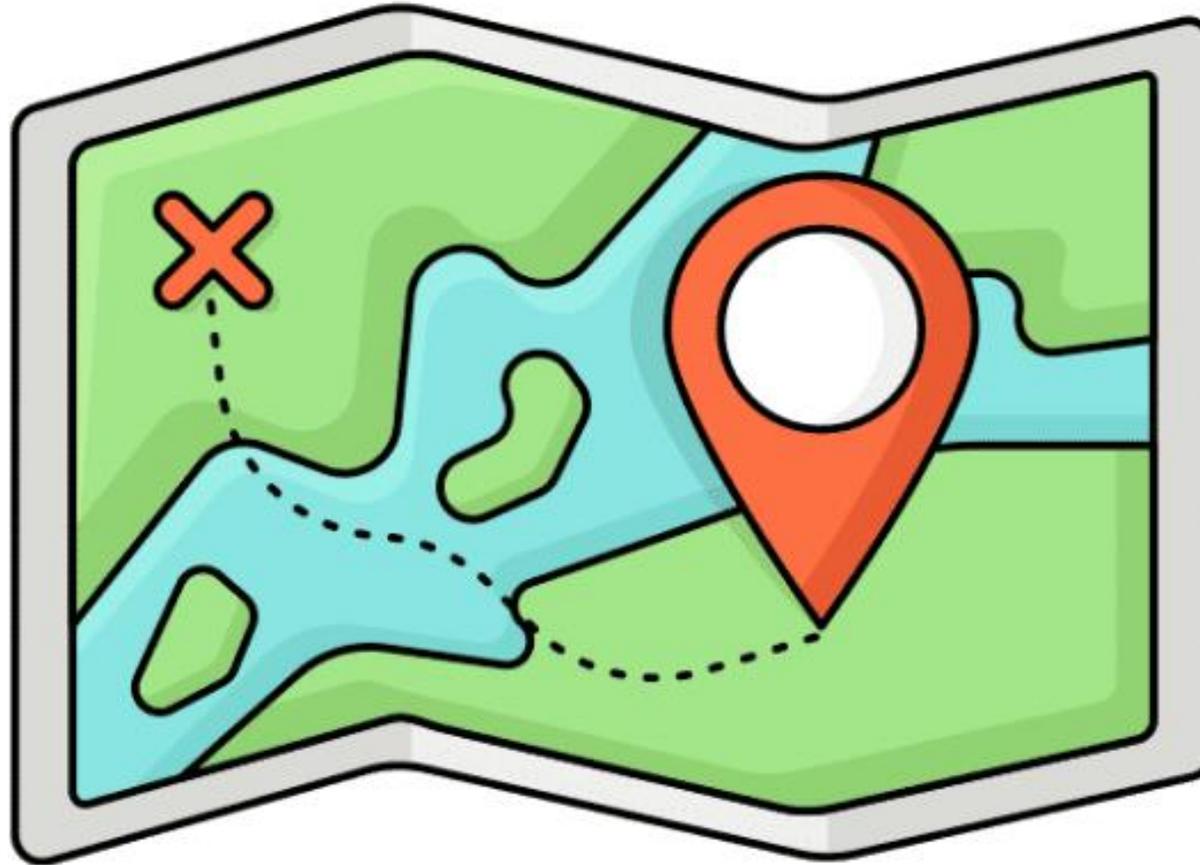
2010s-present
CVD &, inflammation,
chronic disease incidence

SKYROCKETS





disrupts our metabolism
destroys our microbiome
drives an inflammatory state



let's teach people how their bodies work
--- and offer easy, evidence-based ideas
for improving their **own** health

let's get
FAMILIAR



With every decade, our health needs change. And while we often feel these differences in our bodies, we were never taught how to adjust our daily routines.

FAMILIAR invites participants to discover how their bodies work --- and to take a more informed and positive role in their health and aging experience.

come learn the hows and whys to:

IMPROVE YOUR DIGESTION
STRENGTHEN YOUR MUSCLES & BONES
PROTECT YOUR BRAIN & HEART
CALM INFLAMMATION,
SUPPORT YOUR DETOX ORGANS
MOVE MORE, SLEEP BETTER

small-group format
active learning environment
take-home worksheets
recipes & resources

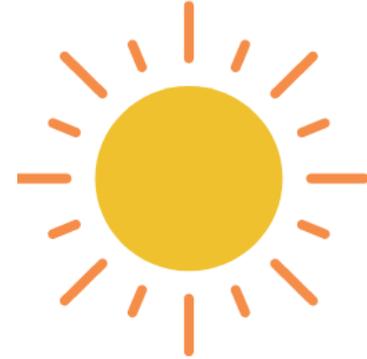
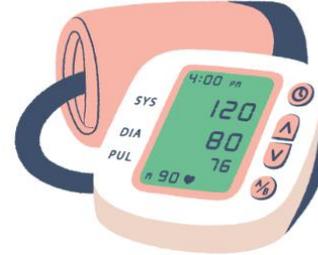
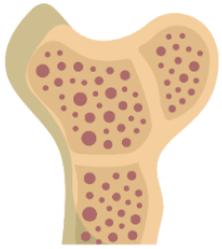


a public health program

With every decade, our health needs change.
We may feel these differences in our bodies –
but don't always know how to
adjust our daily routines.

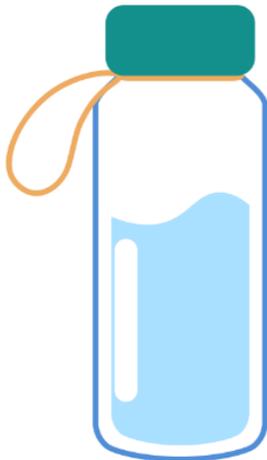
aging in place
family caregivers

*Food As Medicine for Independence & Longevity In Aging & Retirement

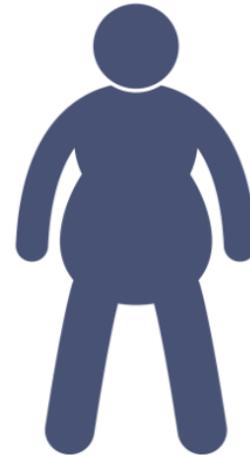


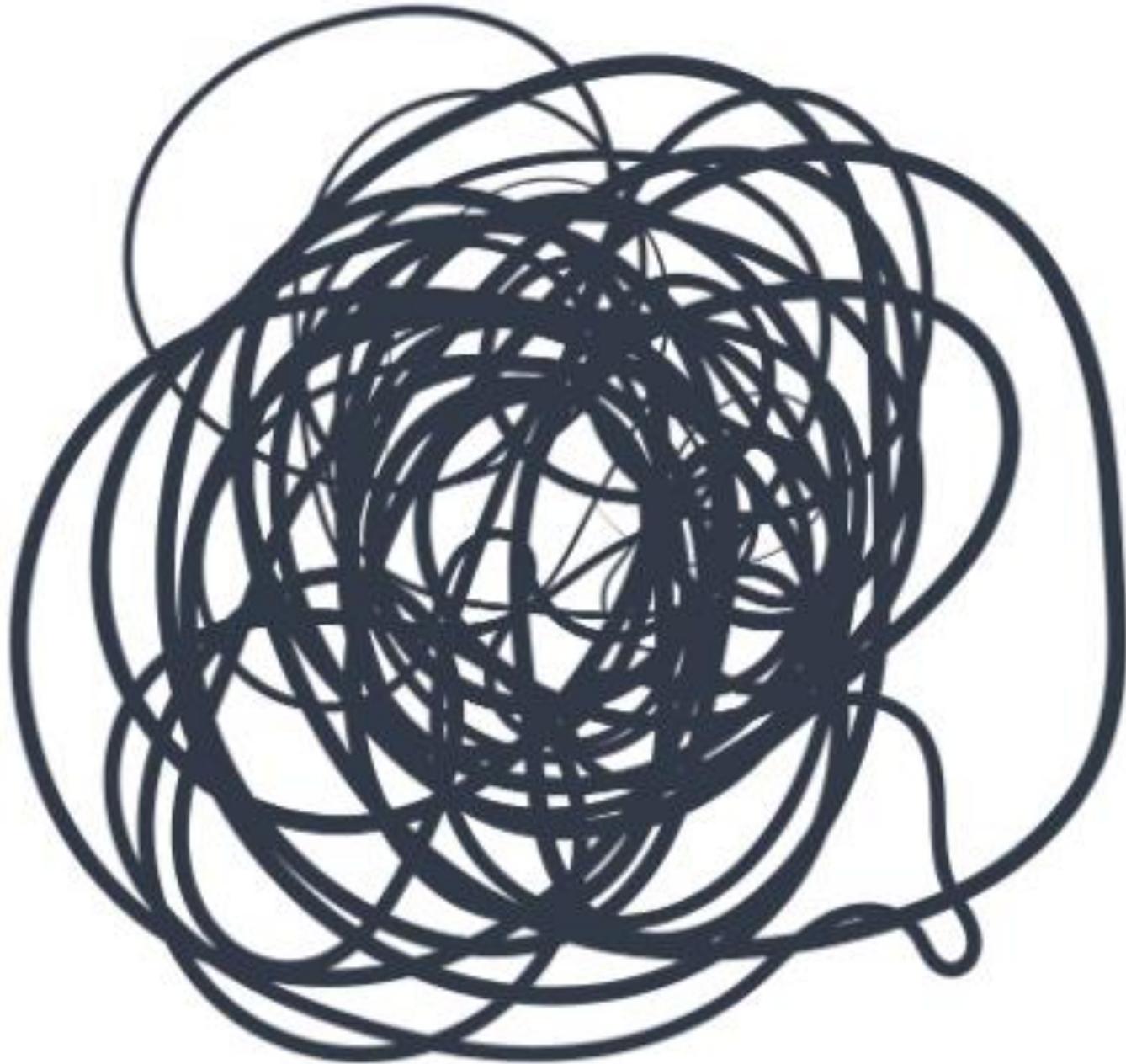
Nutrition Facts	
Serving Size 100 g	
Amount Per Serving	
Calories 250	Calories from fat 10
% Daily Value*	
Total Fat 4%	4%
Saturated Fat 1.5%	4%
Trans Fat	
Cholesterol 55mg	20%
Sodium 150mg	15%
Total Carbohydrate 10g	3%
Dietary Fiber 5g	
Sugars 3g	
Protein 15%	
Vitamin A 1%	Vitamin C 5%
Calcium 2%	Iron 2%

*Percent Daily Values are based on a diet of 2,000 calories. Your daily values may be higher or lower depending on your calorie needs.



FAMILIAR™





metabolic
dysfunction

metabolic control

improves brain, heart & immune health

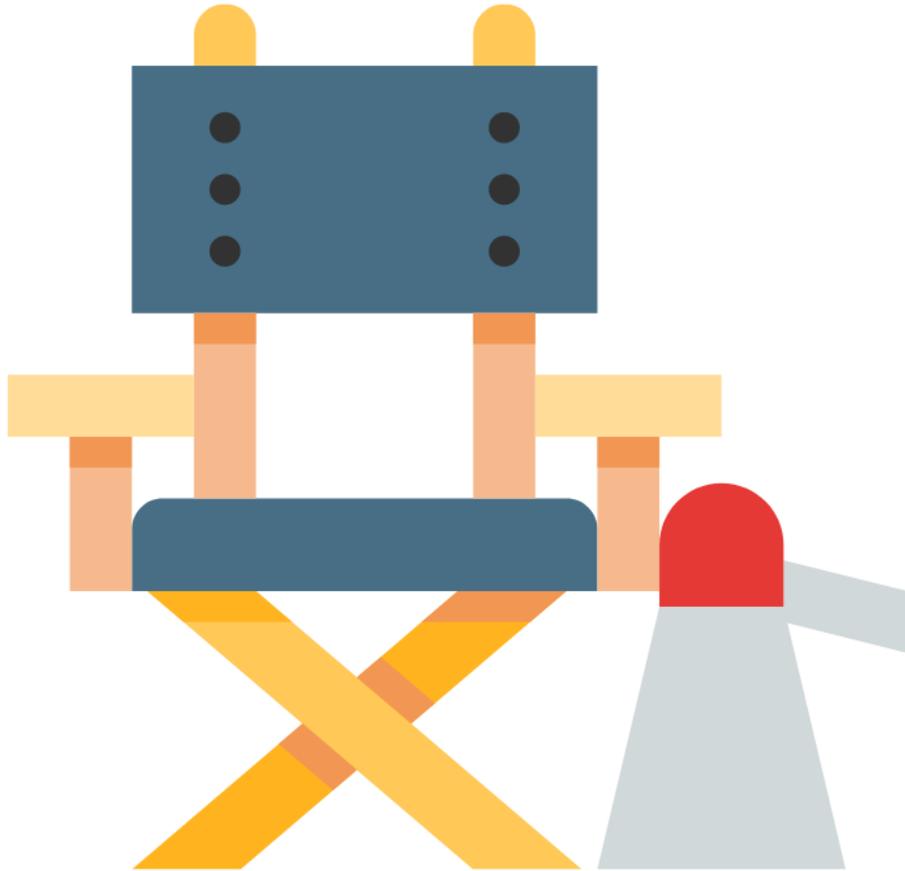
reduces risk for:

diabetes & obesity

auto-immune, cancer, depression

Alzheimer's, Parkinson's

and other nervous system dysfunction



diseases of older age appearing earlier in life

sarcopenia



increases risk of:
falls & fractures, cardiac & respiratory
disease, cognitive impairment, mobility
disorders, frailty, loss of independence & QoL

estimated 20% of the general population

increases:
length of stay
hospital costs by 34% (OA) and 59% (MA)

onset at 40 ---- accelerates at 60

sleep

changes our eating behavior

alters metabolic rate

influences food choice

affects our risk of obesity
(and neurological disease!!!)



WHY WE
GO BIG WITH BREAKFAST



mouth, tongue, throat:
chewing, swallowing
simple carbohydrates

eyes, ears, nose:
activate digestive enzymes

stomach:
churning, acidic
protein & fats

liver:
metabolic commander

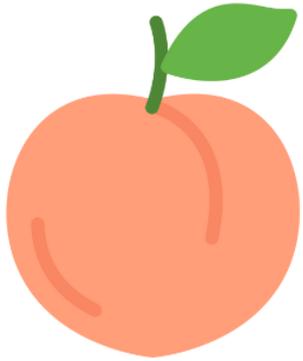
pancreas:
digestive enzymes
insulin/energy use

gallbladder:
bile/fat

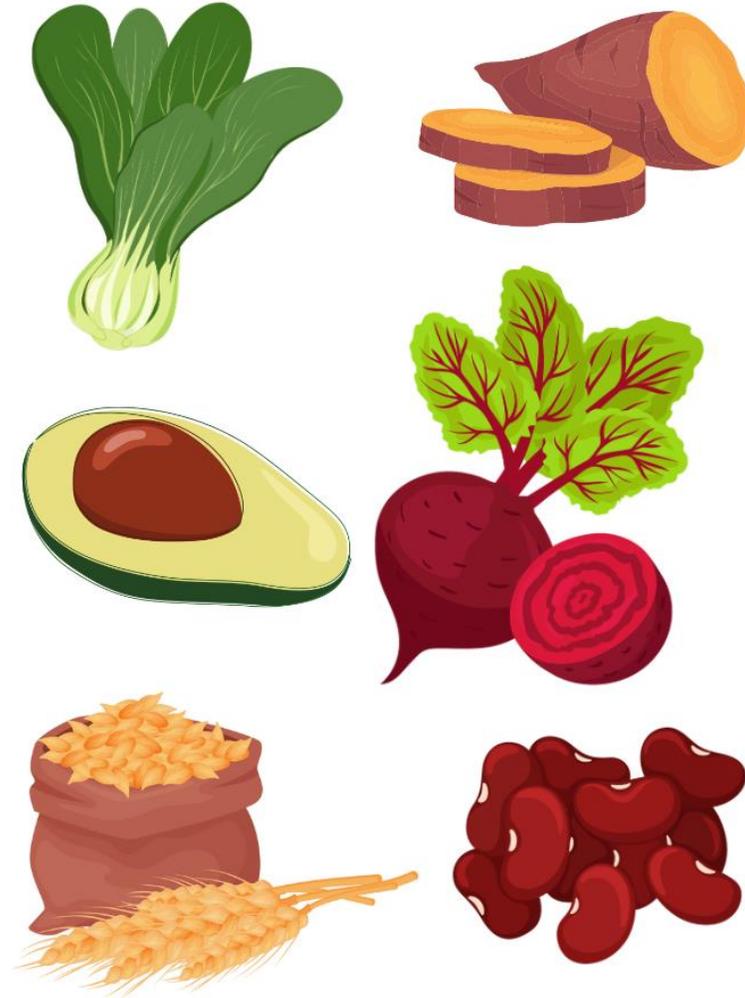
small intestine:
nutrient absorption

large intestine:
complex carbohydrates, cholesterol
stool formation
microbiome

digestion



simple carbs



complex carbs



REFINED carbs



fruit
= glucose + fructose
(single molecules)

+ fiber
+ vitamins/minerals
+ phytonutrients
+ water



fructose



sucrose
= glucose + fructose
(two molecules joined)



fatty liver

KEEP
FRUCTOSE

>10 g



weight
gain



fatigue



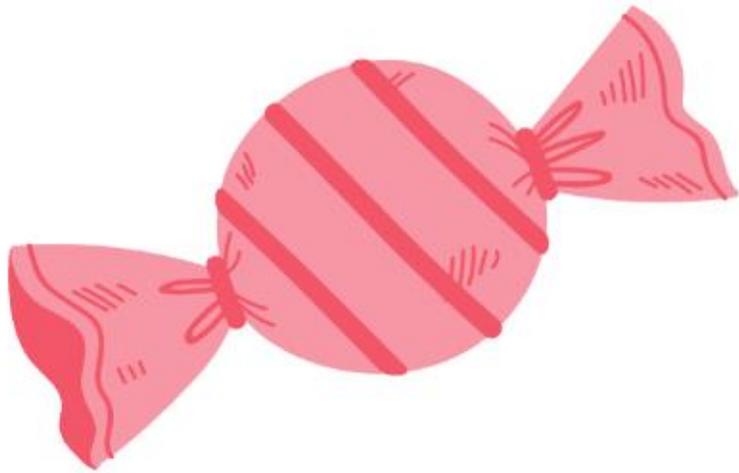
100% orange
juice, with pulp
8 oz bottle
= 23 g of sugar



high-fructose
corn syrup
20 oz bottle
= 55 g of sugar



feeds
harmful
bacteria



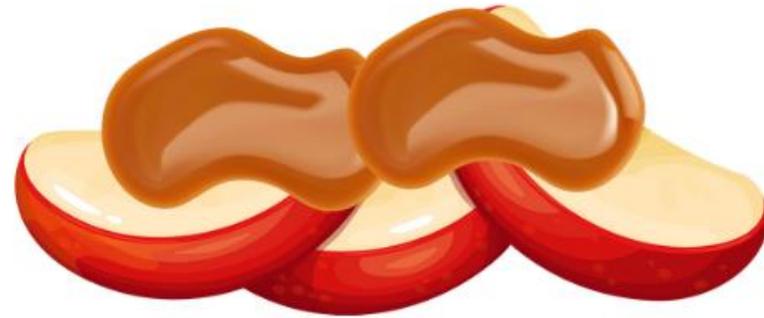
2 sugar molecules*

immediate



2 sugar molecules*
+ fiber

slower



2 sugar molecules*
+ fiber + protein + fat

slowest

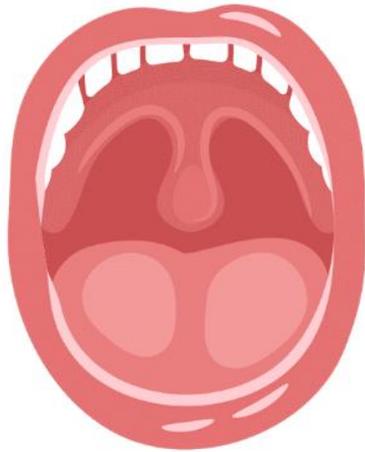
carbohydrate absorption

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* glucose + fructose

insulin released

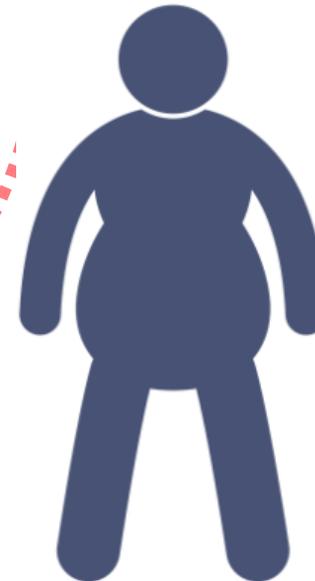
blood
sugar
rises



glucose
+ protein
delivered to
muscles
...or to fat
storage



blood sugar drops



blood sugar BOMBS



refined carbohydrates with little protein or fiber





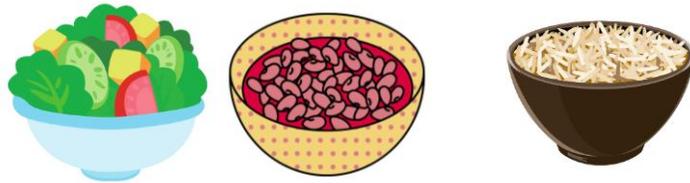
what's insulin resistance?

in practice: blood sugar basics



low-fat, vegetarian diets improve diabetes & CVD

meal order matters –
veggies first! protein....
and then starchier sides



cook your grains & tubers,
let cool, THEN eat.

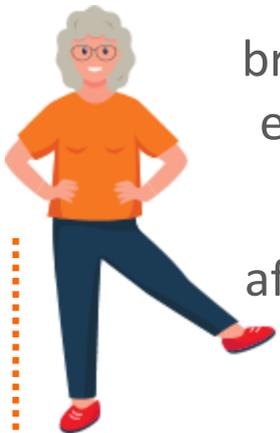


sipping
vinegar
before a meal?



breakfast is
essential!

move
after eating



< **25 g** sugar/daily

< **1** sweetened drink/week



bitter, tannic foods
support blood-sugar
regulating bacteria



herbs & spices
in EVERYTHING



PROTEIN

20 Amino Acids

= 1000s
of protein combinations

zzZ

regulatory

MOOD

transport



structural



immuno

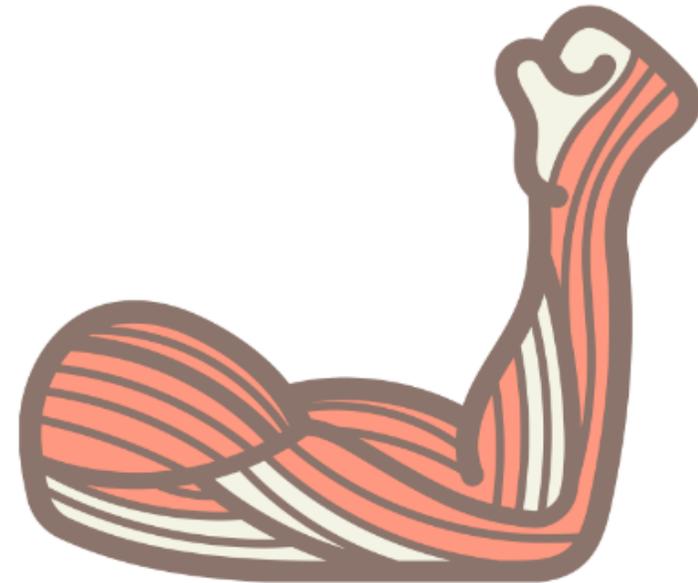
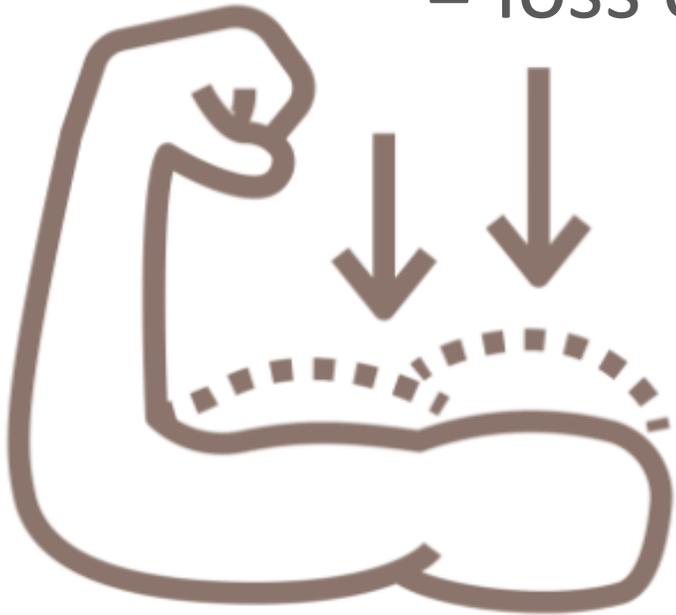


~~sarcopenia~~

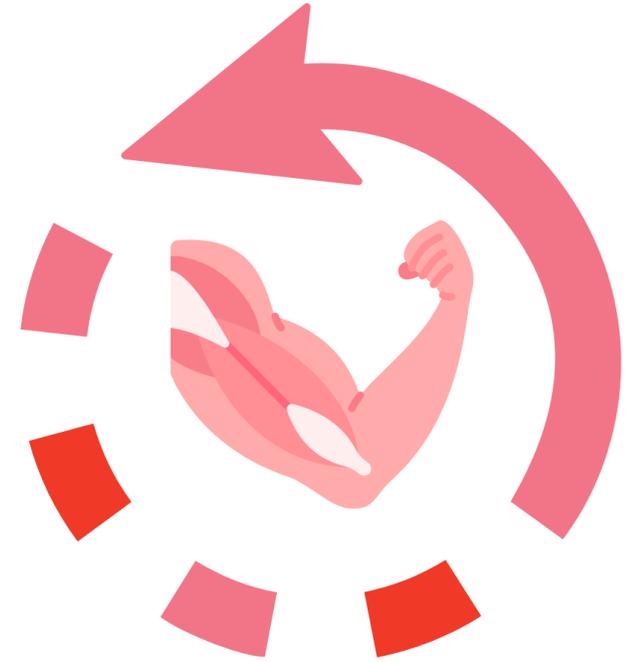
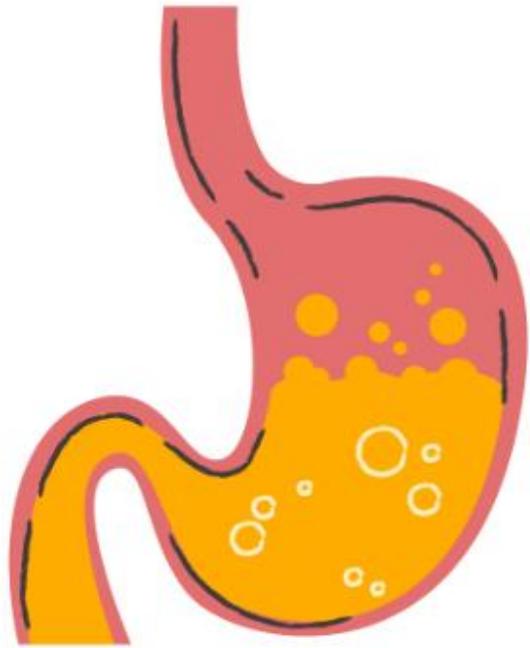
loss of muscle mass & strength

= loss of independence & quality of life

IT'S REVERSIBLE!



we've underestimated our protein needs



reduced stomach acid
= we have a hard time
digesting protein

chronic inflammation
= we need extra protein

anabolic resistance
= we “forget”
to rebuild

30 g
protein



at every meal, 3x day
total > 90 g daily

BREAKFAST
LUNCH
DINNER



eating breakfast.....

improves blood sugar control, reduces evening snacking

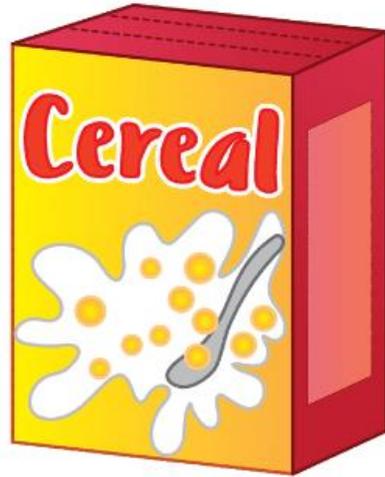
changes our cholesterol particle size, improves our CV profile

and among post-menopausal women?

higher protein intake =
improved muscle function (and slowed rate of decline)
greater upper & lower extremity strength
lowered BMI, improved osteopenia & osteoporosis

HIGH PROTEIN BREAKFASTS (vs high protein dinners)
improved muscle volume & grip strength

breakfast of champions?



Cheerios = 12 g protein, 3 fiber
All-Bran = 15 g protein, 16 g fiber

too little protein, possibly low fiber
HIGH SUGAR (25 g)

= 26 g protein, 4 g fiber

good protein, low fiber
HIGH FAT (27 g)

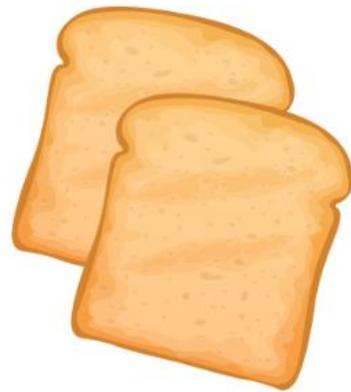
classic scramble with toast & savory sides

high protein, lower fat

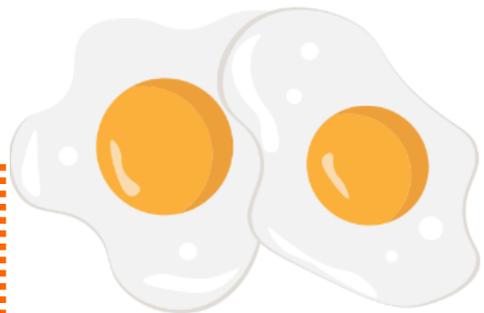


15 g protein
7.5 g fat

or

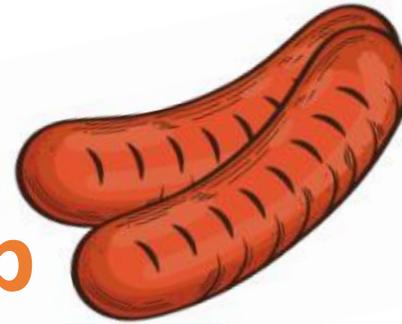


2 slices toast
8 g protein
4 g fiber

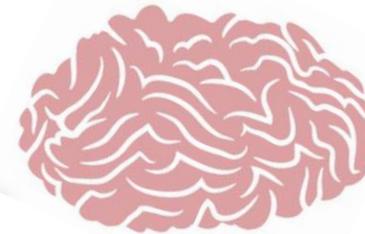


13 g protein, 9 g fat

swap

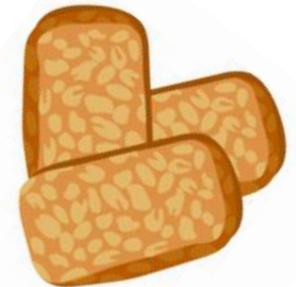


sausage links
5 g protein, 17 g fat
.8 g BCAAs



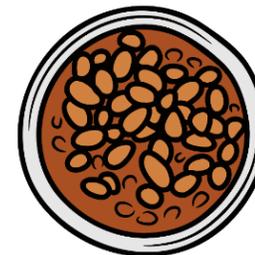
homemade turkey sausage
16 g protein, 6 g fat
2.7 g BCAAs

with



tempeh
11 g protein, 3 g fat
5 g fiber

or



beans
8 g protein, 1 g fat
9 g fiber

huevos rancheros

high protein, high fiber

1.5 g protein

= < 1 gram

2 g protein

13 g protein

= 17 g

= 36 g protein
14 g fiber

8 g protein

4 g protein

7 g protein

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vegan whole grains

high protein, high fiber

1 oz cashews

= 33 g protein
15 g fiber
21 g fat

2 oz tempeh

1 cup whole grain porridge

1 cup cooked kale

= 29 g protein
16 g fiber
35 g fat

1/4 cup hummus

1/2 cup cucumber

2 slices whole grain toast

2 T peanut butter

1/2 cup berries

everything seed mix (hemp & pumpkin)

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low-fat cottage cheese with cereal, nuts, seeds & fruit

cottage cheese = 2X protein of milk + low sugar

.5 g protein

.5 g protein

6 g protein*

12 g protein

= 19 g

5 g protein*

= 24 g

= 30 g
* 3 g BCAAs
9 g fiber

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bean soup for breakfast?

lentils – .5 cup
9 g protein, 8 g fiber

collard greens – 1 cup
3 g protein, 4 g fiber

bone broth – 1.5 cups
23 g protein, 0 g fiber

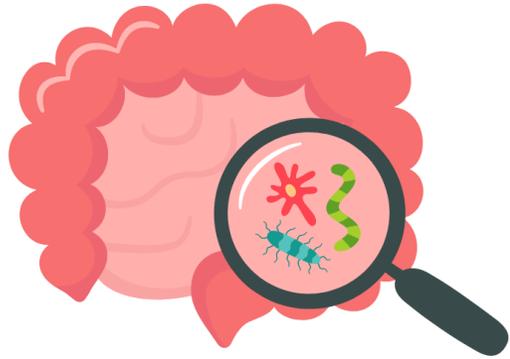
wild rice – .33 cup
2.5 g protein, 2 g fiber

42 g protein, 14 g fiber

yogurt – .25 cup
4 g protein, 0 g fiber

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tryptophan



gut bacteria

serotonin



sun

zinc, magnesium, B6*

melatonin



making melatonin



get outside to reset the clock. even when it's cloudy.

high-protein breakfast with:
colorful & fiber-rich plant carbohydrates
dark leafy greens, nuts, seeds
lower fat preferred

stay hydrated. move your body.



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TRYPTOPHAN

animal protein; soy & legumes
oats, nuts
seeds, especially squash & pumpkin

ZINC

beef, shellfish, pumpkin seeds, lentils

B6

salmon, chicken, tofu, pork, beef
sweet potatoes, winter squash, potatoes
bananas, avocados



MAGNESIUM

dark leafy greens, especially spinach
seeds, especially squash & pumpkin
legumes, especially lima, chickpea & kidney
tuna, mackerel
almonds, cashews, brazil nuts
dark chocolate, bananas
quinoa and brown rice



eggs
stew

tofu scramble with pumpkin seeds

yogurt with almonds, pepitas, banana, pistachios
& oat granola

savory oatmeal with roasted squash, greens, seasoned
lentils, avocado

overnight oats with nuts & seeds,
and cottage cheese

bean soup with bone broth, greens & grains

veggie hash with grilled chicken
and harissa cashew dressing

mackerel with veggie-rich potato salad

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morning sunlight aligns
the circadian clock
& boosts melatonin
production



listen to your body.
adjust your
bedtime,
8pm might
be a new
normal



cortisol spikes change
melatonin patterns,
address your stress

resistance exercise extends
& improves sleep



self-care routines and other
nightly rituals, physical
touch is relaxing.



FAMILIAR™

make
melatonin
with a high
protein
breakfast



sugar, sodium & light
disrupt sleep patterns.
turn off the tv!



sodium

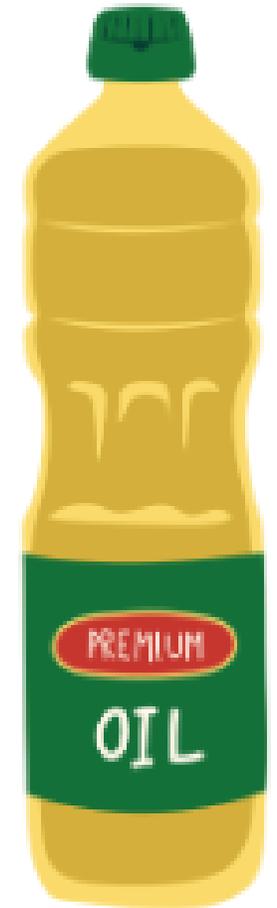


**even small sodium
reductions make
significant differences in our
heart attack & stroke risk**



omega-3

vs.



omega-6



MOVEMENT IS A GAME-CHANGER

SIGNIFICANT & MEANINGFUL muscle gains
with high-protein + strength training combo

DO SOMETHING DAILY

strength training 2-4x weekly (total body)
housework, sitting/standing exercises, stairs, lifting groceries
flexibility & balance practice – tai chi, qigong
avoid sitting more than 7 hrs./day (doesn't have to be consecutive!)





bringing back food as community

bringing forward food as culture



Oregon
Older Adult Behavioral Health Initiative



Columbia Pacific CCOTM
Part of the CareOregon Family



UP NEXT: MEASUREMENT

new diagnostic guidelines:
such as TUG, gait and grip strength
+ quality of life

seeking community partners

APPENDIX – CURRENT SIX WEEK SYLLABUS

gut feelings: improving digestion & expanding your microbiome

strengthen your body: (re)building muscle & bone

blood sugar basics: essentials for your brain & heart

calm inflammation: what harms & what heals

waste management: detoxifying the body

put it all together: move more, sleep better



APPENDIX – TAKE HOME RESOURCES

Participants receive a 80+-page printable workbook with lecture notes, nutritional charts, menu ideas, self-assessments and goal-setting suggestions. Dozens of recipes, videos and other external resources expand each weekly chapter into practical, at-home terms.

STEP 2: GO FIBER-FORWARD

Fiber is a well-known digestive health aid, and a fundamental food source for our gut bacteria. Fiber-rich foods provide the fertile, prebiotic landscape for our bacteria's survival – yet these can be elusive in our diets, as fiber is found exclusively in plant foods. Eating beans, ideally 2+ servings a day, will make a measurable dent in your daily requirements. Layering in a variety of fruits and vegetables, whole grains and nuts will close the gap. Consider how and where you might include more fiber-rich plant foods in your day – with some gradual changes and a little attention, you can readily meet your daily fiber goal (and will start feeling positive changes in your body).

Women 21 grams Men 30 grams

*Institute of Medicine

Recommended (Minimum) Fiber Intake at 50+ Years of Age*

TAKE ACTION:

This week, think about adding 5-10 extra grams into your day. Review the enclosed chart for ideas. You'll want to be moderate here, increasing your consumption over several weeks; this minimizes your physical discomfort as your body acclimates to its higher fiber intake. **And please remember to drink plenty of water – it's a necessary component of fiber digestion and will help to prevent constipation.**



Step 3: It's All About the Alliums

Our gut bacteria will flourish with all kinds of fiber – but they have particular fondness for a specific-type called Inulin - found in the bulb structure of different plant foods. And while the edible bulbs of Sun Chokes and Artichokes are a gut bacteria favorite – a more consistent way to increase your Inulin intake is through the bulbs of the

Allium family: Onions, Garlic, Leeks, Scallions, Shallots.

Luckily, these are integral ingredients of countless recipes, so this might be an easier-to-execute dietary enhancement.

Enjoy them Raw or Cooked

Their Flavor Softens when Cooked

A Savory Backbone of Stews and Braises

Raw Shallot takes Vinaigrette to a new Level

Sliced Scallions are Subtle

Red Onion sweetens Salsas and Slaws



Tip: To maximize their nutritional value, allow your alliums to rest for about 10-15 minutes after you've sliced/diced them. While this won't affect your onion's fiber content – alliums contain potent phytochemicals (why your eyes sting; why they have so much flavor, etc.) which provides additional health benefit. Some of these nutrients may be destroyed by heat – but a brief stopover on the cutting board leaves time for a protective enzyme to go to work, saving some vital nutrients from the impact of heat. This is an unnecessary step if you're serving these raw.

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DAILY SQUARES



BEING BONE-FRIENDLY

Calcium is the most prevalent mineral in our bodies; we store nearly all in our bones and teeth, while the remainder circulates through our blood, vitally aiding muscle contraction, nerve signaling, hormone secretion, blood pressure regulation and blood clotting. Our bodies will release calcium from our bones when our calcium blood levels get too low - putting our bone health (and our overall health!) at risk when we don't consume enough in our diet. Calcium supplementation may contribute to cardiovascular plaque formation, so is not recommended.

Calcium can be found in dairy products, like plain yogurt and cheese (harder cheeses especially) --- but try not to rely on dairy to meet your calcium needs. Introduce more cooked cruciferous* vegetables to your diet - this family of vegetables delivers the most highly absorbable form of calcium to the body. Cooked bok choy, broccoli, kale and collard greens are important foods to keep in regular rotation. Other noteworthy calcium sources to include: white beans, almonds, tahini, flax seed, chia seed, sardines (with bones)

say* - tempeh, edamame, tofu



*those with thyroid disorders should exercise caution with soy & cruciferous consumption

Protein provides the physical foundation to every part of our body. More than just our muscle structure, there are 20 different amino acids which comprise the backbone of our very functioning. We need proteins to make antibodies and hormones, to heal from illness or injury AND MUCH, MUCH MORE. We risk losing muscle mass as we get older, particularly as our bodies become less inclined to rebuild muscle tissue. Muscle loss makes us more vulnerable to falls and frailty.



vegetable-based proteins

can be easier on the digestive system, especially in old age. Increased vegetable protein consumption is consistently linked to a healthier aging experience and increased longevity. This is likely due to the wide range of amino acids found in vegetables, as well as the unique array of antioxidants, phytonutrients, and fiber found in plant foods --- and because plant foods support a healthy microbiome. Soy, quinoa, lentils, and buckwheat are the only complete vegetable proteins. Vegetarians need to eat complementary vegetable proteins. Eg, beans and whole grains together --- in order to satisfy their essential amino acid requirements.



animal proteins

may be an important component of a muscle-building diet, because they have the distinction of being "complete", meaning they contain all 9 of the essential amino acids that we must find from our diet (vs make internally). Small portions of animal protein, preferably grass fed, can be a dense source of protein, vitamins, healthy fats, and minerals.



APPENDIX – PROGRAM OBJECTIVES



- increase consumption of unprocessed foods, especially leafy vegetables, fruits, legumes, whole grains, nuts, lean protein, while reducing consumption of added sugars, saturated fats and sodium
- improve nutritional literacy, including understanding food labels, portion size
- promote revised RDIs for older adults, and bring awareness to nutrients of concern, like B12, B6, Vitamin D
- enhance menu planning skills, with emphasis on high-protein, high-fiber, nutrient-dense choices
- encourage healthy lifestyle behaviors, especially exercise, sleep, mindfulness, sunshine
- promote community health improvements and social inclusion through interactive, small-group, person-centric model
- provide an accessible (virtual) learning environment which promotes health and capacity-enhancing behaviors through weekly goal setting & action planning

FAMILIAR aligns with principles established by the Action Plan for an Age-Friendly Portland (2013), most especially: helping to improve older adult wellness and preventative health care, and to encourage social participation and life-long learning opportunities. FAMILIAR recognizes the diversity of our older adult population, respects personal decision-making and honors participants' individual contributions.

APPENDIX – TESTIMONIALS

This class was the most valuable and informative class I have taken in years. I strongly recommend it to any person interested in improving their health. – Chris

I highly recommend this class. Very clearly presented, highly approachable, and a great way to kick-start good eating habits – Helen



As a retired RN and someone interested in health for most of my life, I found this class to have much to offer, and would highly recommend it. The positivity, the accessibility and the great presentation visuals --- teaching adults, especially us older ones, is an art. Recipes are fantastic. - Phyllis

In all the classes I've taken since the pandemic, started, this is by far the BEST! As a retired teacher, I am aware of all the educational nuances that make up a great class. This hits the mark on all of them. - Emma

I feel a dramatic difference in my well-being --- and a comfort I haven't felt for awhile. - Margaret

Thank you for this marvelous class on food health! I have learned so much and plan to incorporate many of these ideas into my daily diet. I so appreciate this gift! - Sue

I am grateful to be able to participate and love the sense of community. – Janet

This is a valuable resource, and every class is so motivating. I've set some new health goals and keep the handouts on my fridge for daily reference. - Diana



Thank You Partners!

