EAT FOR ENERGY

HOW TO BEAT FATIGUE, SUPERCHARGE YOUR MITOCHONDRIA, AND UNLOCK ALL-DAY ENERGY

AUDIOBOOK SUPPLEMENTAL MATERIAL

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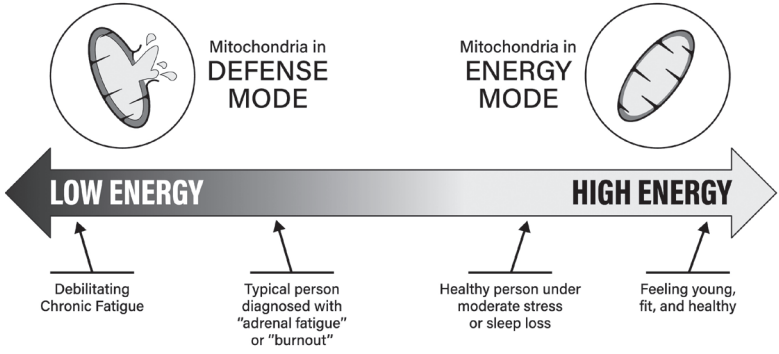
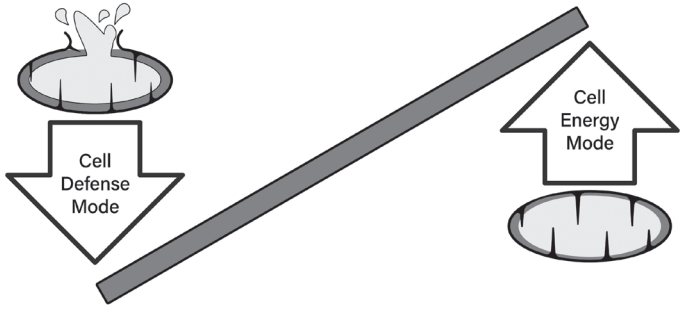
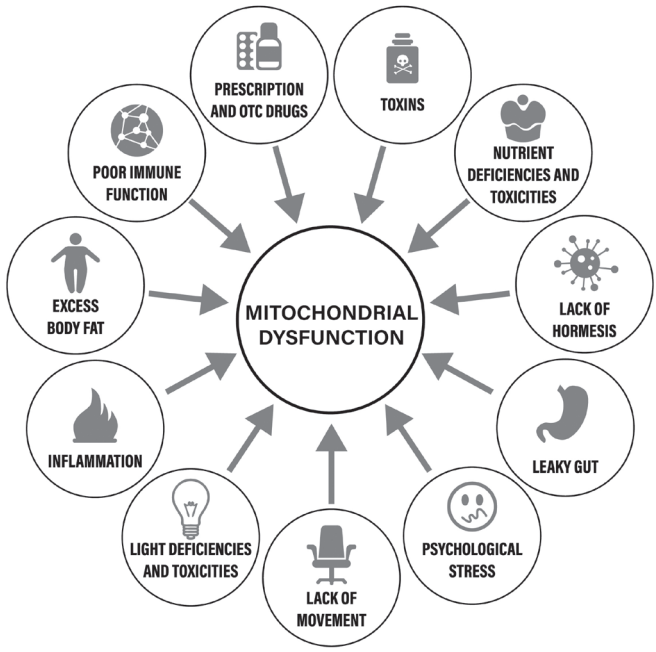
SYMPTOMS OF MITOCHONDRIA BEING SHUT DOWN

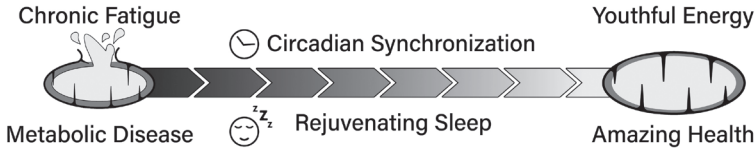
- Brain fog
- Chronic inflammation
- Poor detoxification
- Poor stamina
- Poor mental and physical performance
- Chronic fatigue

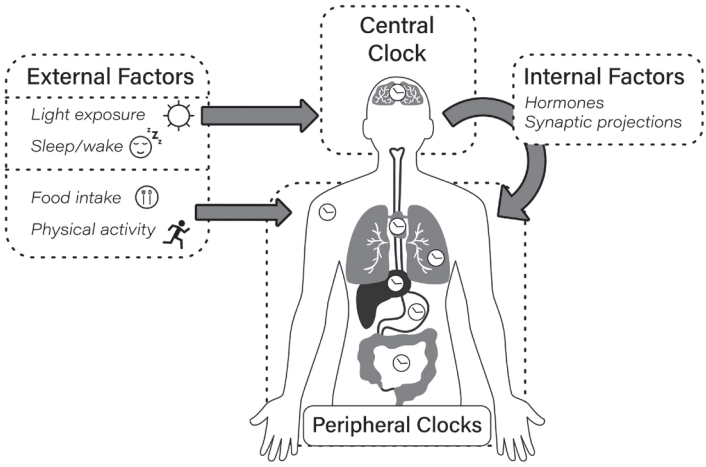
Mitochondrial shutdown is the fundamental reason for chronic low energy levels.

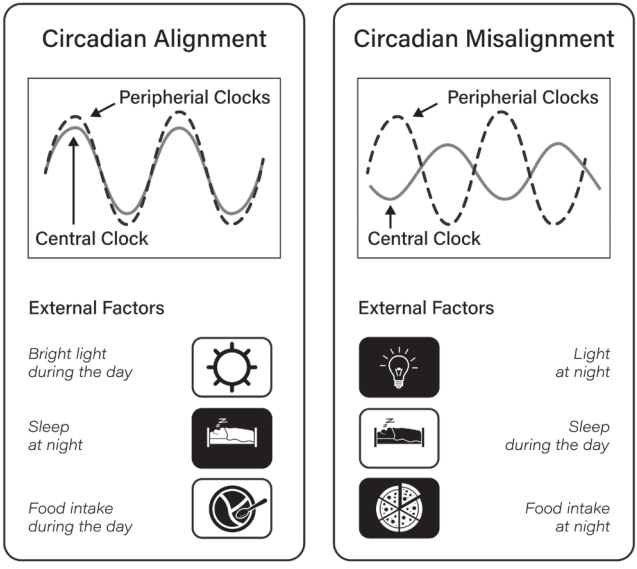


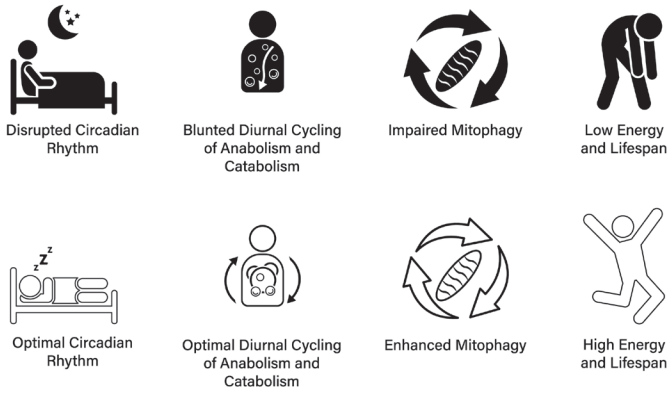


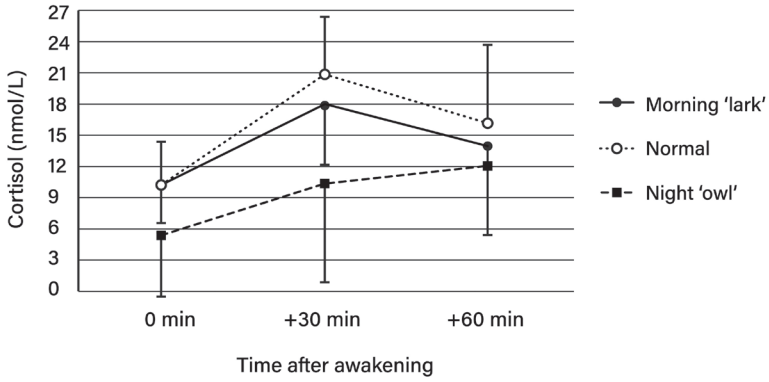

PRESCRIPTION AND OTC DRUGS
TOXINS
POOR IMMUNE FUNCTION
NUTRIENT DEFICIENCIES AND TOXICITIES
EXCESS BODY FAT
MITOCHONDRIAL DYSFUNCTION
LACK OF HORMESIS
INFLAMMATION
LEAKY GUT
LIGHT DEFICIENCIES AND TOXICITIES
LACK OF MOVEMENT
PSYCHOLOGICAL STRESS

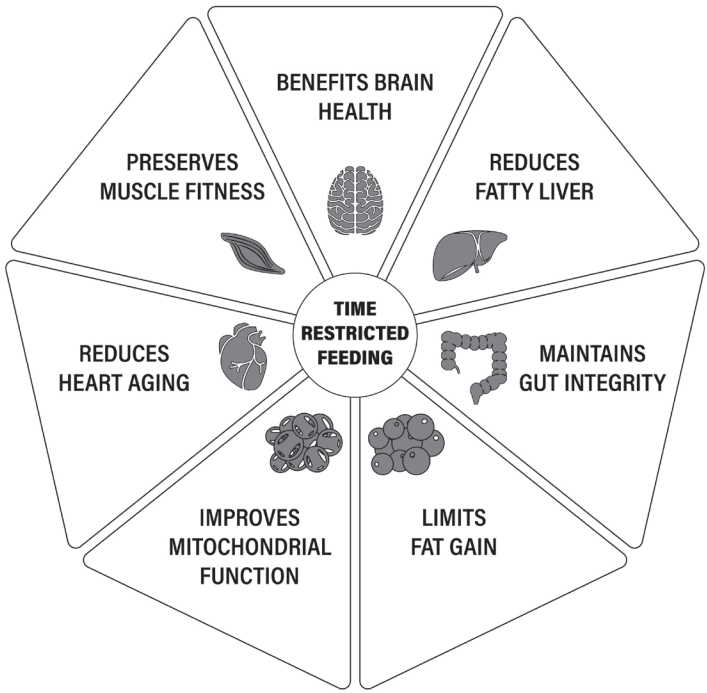

Chronic Fatigue
Youthful Energy
Circadian Synchronization
Rejuvenating Sleep
Metabolic Disease
Amazing Health


Central Clock
External Factors
Light exposure
Sleep/wake
Food intake
Physical activity
Internal Factors
Hormones
Synaptic projections
Peripheral Clocks


Circadian Alignment
Peripheral Clocks
Central Clock
External Factors
Bright light during the day
Sleep at night
Food intake during the day
Circadian Misalignment
Peripheral Clocks
Central Clock
External Factors
Light at night
Sleep during the day
Food intake at night


Disrupted Circadian Rhythm
Blunted Diurnal Cycling of Anabolism and Catabolism
Impaired Mitophagy
Low Energy and Lifespan
Optimal Circadian Rhythm
Optimal Diurnal Cycling of Anabolism and Catabolism
Enhanced Mitophagy
High Energy and Lifespan


Cortisol (nmol/L)
27
24
21
18
15
12
9
6
3
0
0 min
+30 min
+60 min
Time after awakening
Morning 'lark'
Normal
Night 'owl'


BENEFITS BRAIN HEALTH
REDUCES FATTY LIVER
MAINTAINS GUT INTEGRITY
LIMITS FAT GAIN
IMPROVES MITOCHONDRIAL FUNCTION
REDUCES HEART AGING
PRESERVES MUSCLE FITNESS
TIME RESTRICTED FEEDING

- ☐ **Confine your food and caloric beverage intake to a time-restricted window.**
  - ☐ Consume all your calories within 12 to 14 hours.
  - ☐ Consume all your calories within 10 to 12 hours.
  - ☐ Consume all your calories within 6 to 10 hours.

- ☐ **Do not eat or consume caloric beverages at night or close to bed.**
  - ☐ Stop eating before 10 P.M.
  - ☐ Stop eating before 9 P.M.
  - ☐ Stop eating before 8 P.M.
  - ☐ Stop eating before 7 P.M.

- ☐ **Consume most of your calories in the morning and afternoon (e.g., breakfast and lunch).**
  - ☐ Consume roughly 30 percent of your calories before 3 P.M.
  - ☐ Consume roughly 50 percent of your calories before 3 P.M.
  - ☐ Consume roughly 70 percent of your calories before 3 P.M.

- ☐ **Be consistent with your mealtimes.**
  - ☐ Eat 1 meal at the same time each day.
  - ☐ Eat 2 meals at the same time each day.
  - ☐ Eat all meals at the same time each day.

- ☐ **Limit your intake of rapidly digestible carbohydrates at dinner.**

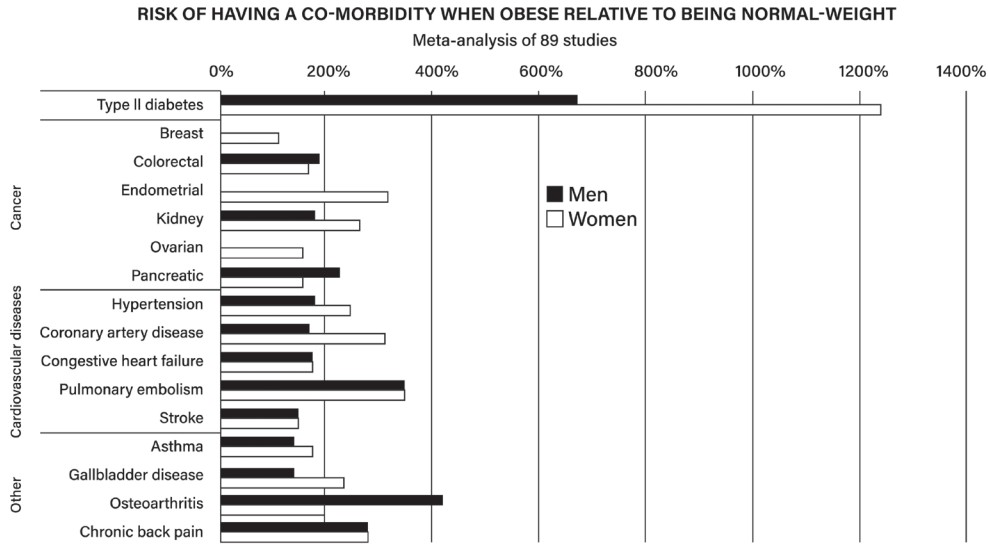
- ☐ Do not consume rapidly digested carbohydrates at dinner 2 to 3 days per week.
- ☐ Do not consume rapidly digested carbohydrates at dinner 4 to 5 days per week.
- ☐ Do not consume rapidly digested carbohydrates at dinner more than once per week.

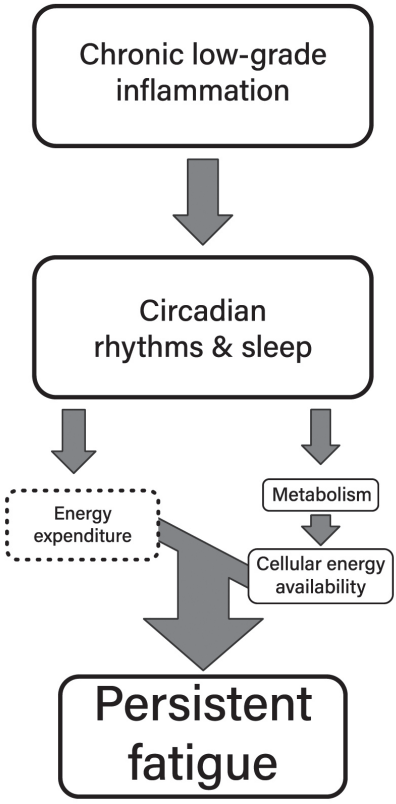
☐ **Limit your intake of alcohol.**

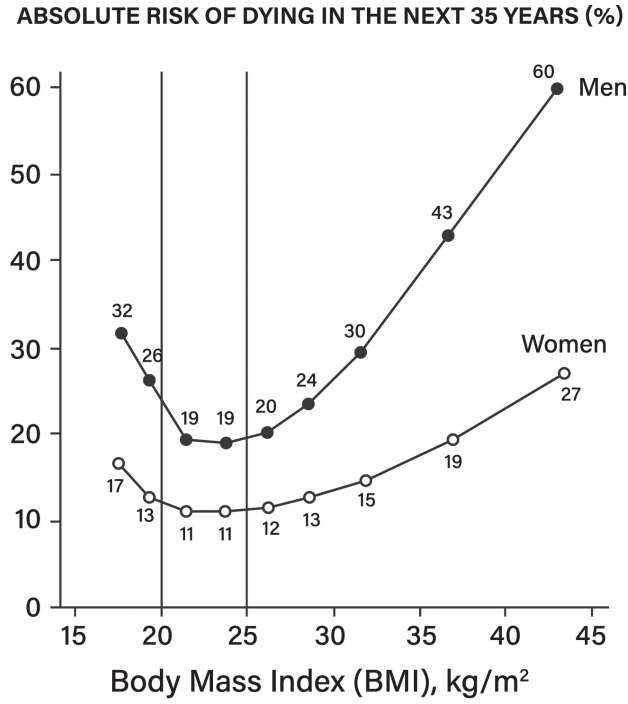
- ☐ Drink no more than one drink per night 2 to 3 days per week.
- ☐ Drink no more than one drink per night 4 to 5 days per week.
- ☐ Drink no more than one drink per night 6-plus days per week.

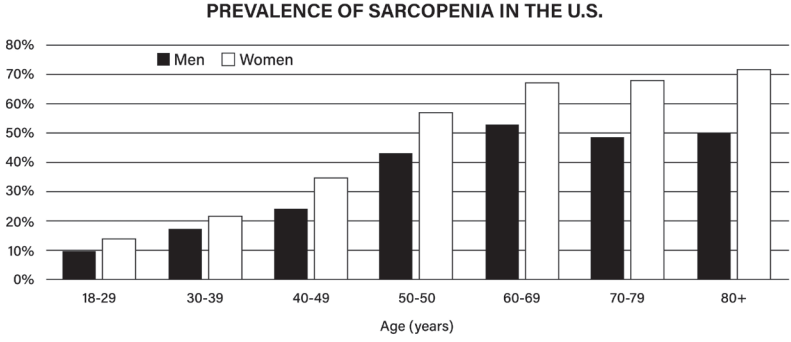
☐ **Reduce caffeine consumption in the afternoon and evening.**

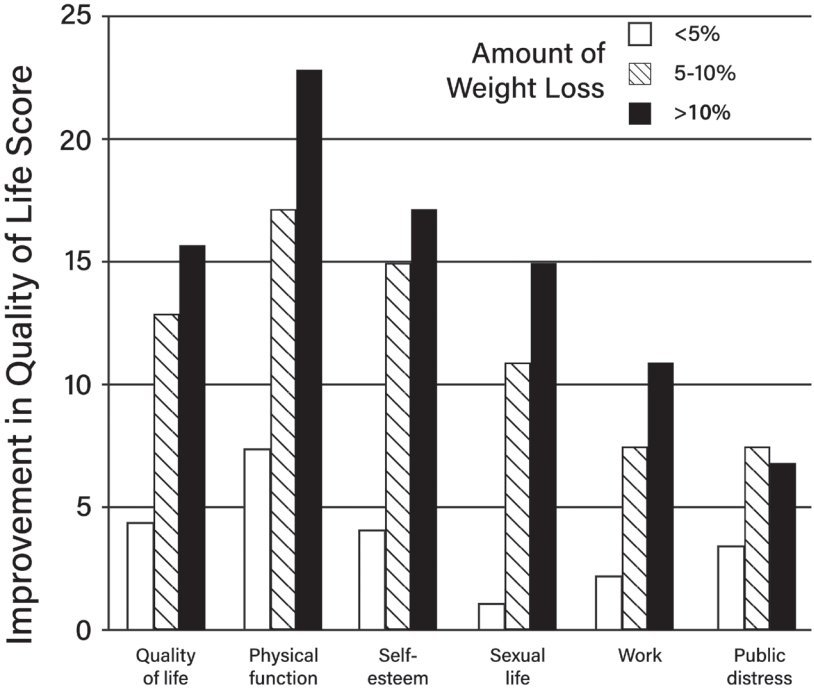
- ☐ Stop drinking caffeine past 4 P.M.
- ☐ Stop drinking caffeine past 2 P.M.
- ☐ Stop drinking caffeine past 12 P.M.

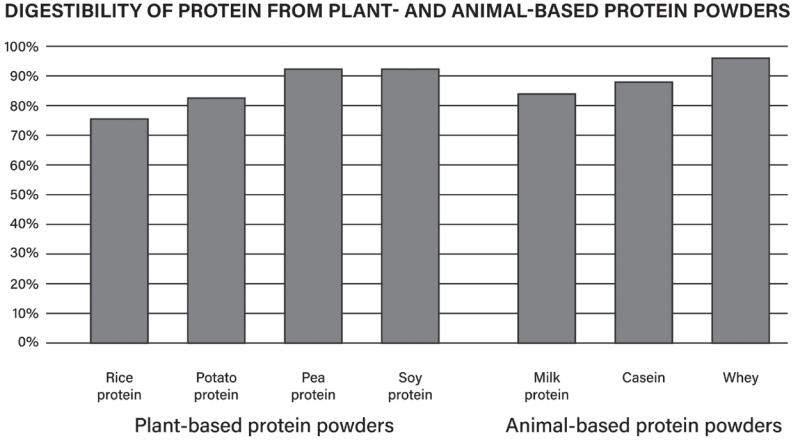

RISK OF HAVING A CO-MORBIDITY WHEN OBESE RELATIVE TO BEING NORMAL-WEIGHT
Meta-analysis of 89 studies
0%
200%
400%
600%
800%
1000%
1200%
1400%
Type II diabetes
Breast
Colorectal
Endometrial
Kidney
Ovarian
Pancreatic
Hypertension
Coronary artery disease
Congestive heart failure
Pulmonary embolism
Stroke
Asthma
Gallbladder disease
Osteoarthritis
Chronic back pain
Cancer
Cardiovascular diseases
Other
Men
Women


Chronic low-grade inflammation
Circadian rhythms & sleep
Energy expenditure
Metabolism
Cellular energy availability
Persistent fatigue


ABSOLUTE RISK OF DYING IN THE NEXT 35 YEARS (%)
60
50
40
30
20
10
0
15
20
25
30
35
40
45
Body Mass Index (BMI), kg/m²
Men
Women
32
26
19
19
20
24
30
43
60
17
13
11
11
12
13
15
19
27


PREVALENCE OF SARCOPENIA IN THE U.S.
80%
70%
60%
50%
40%
30%
20%
10%
0%
Men
Women
18-29
30-39
40-49
50-50
60-69
70-79
80+
Age (years)


Improvement in Quality of Life Score
25
20
15
10
5
0
Amount of Weight Loss
<5%
5-10%
>10%
Quality of life
Physical function
Self-esteem
Sexual life
Work
Public distress


DIGESTIBILITY OF PROTEIN FROM PLANT- AND ANIMAL-BASED PROTEIN POWDERS
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Rice protein
Potato protein
Pea protein
Soy protein
Milk protein
Casein
Whey
Plant-based protein powders
Animal-based protein powders

Fibrous Vegetables				
Artichokes	Cabbage	Dandelion greens	Mushrooms	Spinach
Arugula	Cauliflower	Eggplant	Mustard greens	Summer squash
Asparagus	Celery	Garlic	Okra	Tomatoes
Beet greens	Chard	Green beans	Onions	Turnip greens
Bok choy	Chives	Kale	Pea sprouts	Watercress
Broccoli	Collard greens	Leek	Peppers	Zucchini

- ☐ **Ensure that your diet is providing you with adequate protein daily.**
  - ☐ Calculate your ideal protein intake and eat it 1 to 2 days per week.
  - ☐ Eat sufficient protein 3 to 4 days per week.
  - ☐ Eat sufficient protein 5 to 6 days per week.
  - ☐ Eat sufficient protein every day.

- ☐ **Eat sufficient protein at every meal.**
  - ☐ Calculate your ideal protein intake per meal and eat at least that amount at 1 meal per day.
  - ☐ Eat sufficient protein at 2 meals per day.
  - ☐ Eat sufficient protein at every meal.

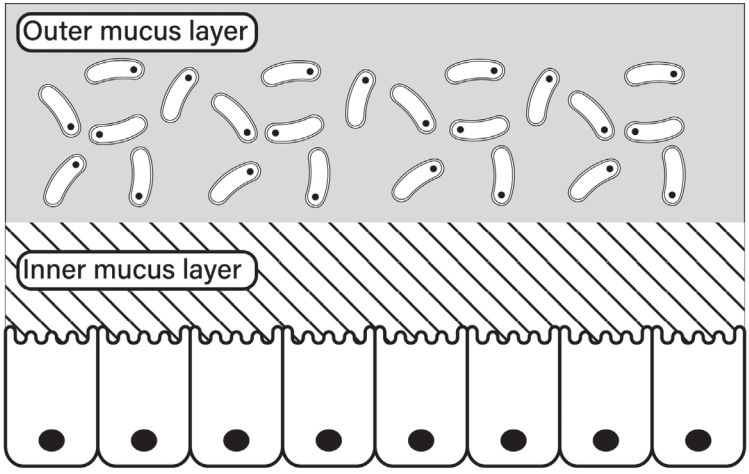
- ☐ **Minimize snacking and reduce your meal frequency.**
  - ☐ Eat 2 to 4 meals per day plus 2 to 3 snacks (including caloric beverages).
  - ☐ Eat 2 to 4 meals per day plus 1 to 2 snacks (including caloric beverages).
  - ☐ Eat 2 to 4 meals per day with zero snacking (including caloric beverages).

- ☐ **Eat a diet based on mostly whole foods.**
  - ☐ Eat 1 meal per day that is prepared from scratch and/or contains only minimally processed ingredients that you could find in nature.
  - ☐ Eat 2 meals per day that are prepared from scratch and/or contain only minimally processed ingredients that you could find in nature.

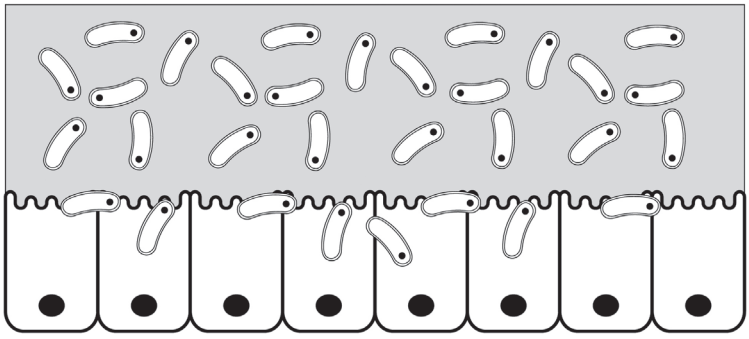
- ☐ On 3 to 4 days per week, eat only meals that are prepared from scratch and/or contain only minimally processed ingredients that you could find in nature.
- ☐ On 5 to 6 days per week, eat only meals that are prepared from scratch and/or contain only minimally processed ingredients that you could find in nature.

☐ **Eat a diet based on fibrous vegetables.**

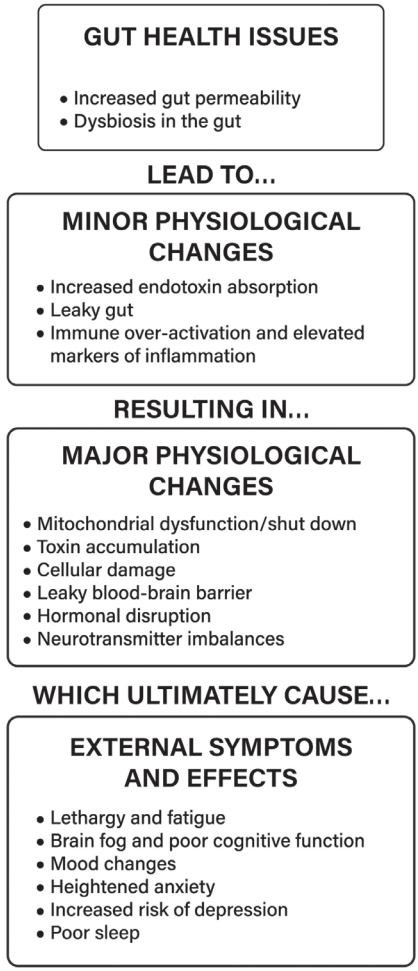
- ☐ Consume fibrous vegetables with 1 meal per day.
- ☐ Consume fibrous vegetables with 2 meals per day.
- ☐ Consume fibrous vegetables with every meal.



HEALTHY MUCUS LAYER



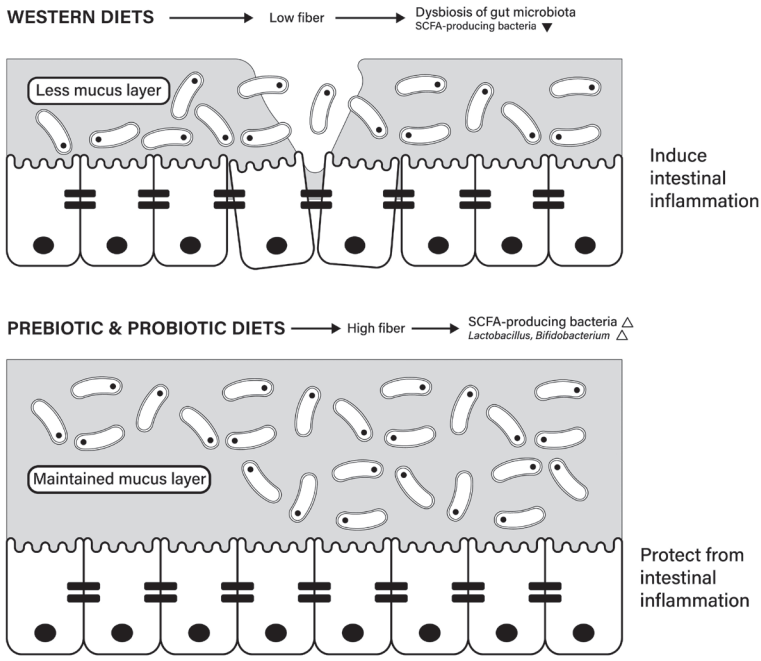
DYSBIOSIS DEGRADED MUCUS LAYER


GUT HEALTH ISSUES
• Increased gut permeability
• Dysbiosis in the gut
LEAD TO...
MINOR PHYSIOLOGICAL CHANGES
• Increased endotoxin absorption
• Leaky gut
• Immune over-activation and elevated markers of inflammation
RESULTING IN...
MAJOR PHYSIOLOGICAL CHANGES
• Mitochondrial dysfunction/shut down
• Toxin accumulation
• Cellular damage
• Leaky blood-brain barrier
• Hormonal disruption
• Neurotransmitter imbalances
WHICH ULTIMATELY CAUSE...
EXTERNAL SYMPTOMS AND EFFECTS
• Lethargy and fatigue
• Brain fog and poor cognitive function
• Mood changes
• Heightened anxiety
• Increased risk of depression
• Poor sleep

Best Sources of Prebiotic Fiber		
Absolute Best	**Great**	**Good**
Artichokes	Cardoon	Endive
Jerusalem artichokes	Leeks	Spaghetti squash
Salsify	Peppers	Pumpkin
Onions	Carrots	Zucchini
		Brussels sprouts
		Cauliflower

Common food sources of inulin and FOS prebiotics.

Resistant Starches		
Resistant Starch	**Description**	**Food Sources**
Type I	Physically inaccessible	Minimally processed whole grains
Type II	Uncooked amylose	Raw potatoes and green bananas
Type III	Retrograde	Cooked and cooled starches like potatoes and rice
Type IV	Chemically modified	Synthetic; not found in nature
Type V	Amylose-lipid complex	High-amylose starches cooked in the presence of fat, such as stir-fried rice


WESTERN DIETS
Low fiber
Dysbiosis of gut microbiota
SCFA-producing bacteria ▼
Less mucus layer
Induce intestinal inflammation
PREBIOTIC & PROBIOTIC DIETS
High fiber
SCFA-producing bacteria △
Lactobacillus, Bifidobacterium △
Maintained mucus layer
Protect from intestinal inflammation

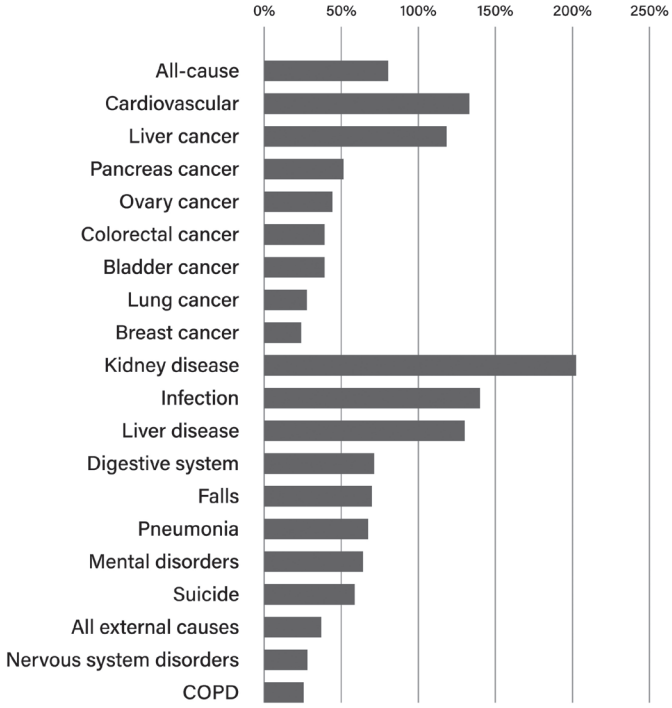
- ☐ **Eat a diet based on fibrous vegetables.**
  - ☐ Consume fibrous vegetables with 1 meal per day.
  - ☐ Consume fibrous vegetables with 2 meals per day.
  - ☐ Consume fibrous vegetables with every meal.

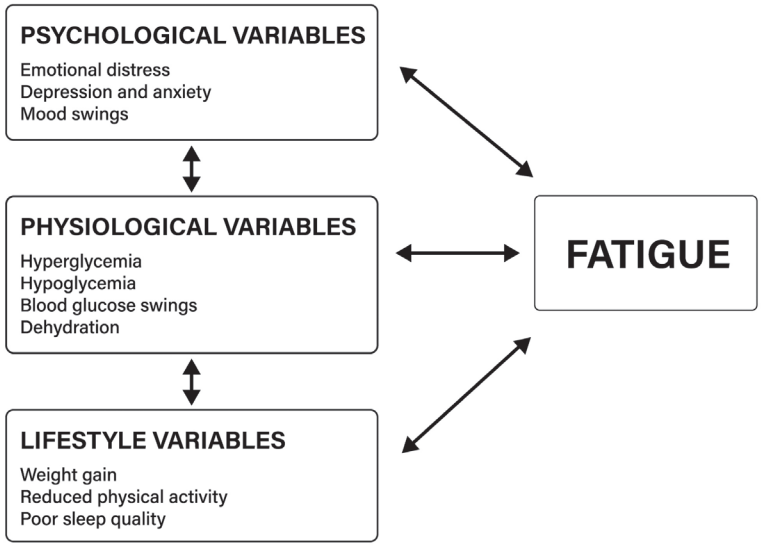
- ☐ **Incorporate prebiotic vegetables into your diet.**
  - ☐ Eat "great" or "good" sources of prebiotic vegetables with 1 meal per day.
  - ☐ Eat "great" or "good" sources with 2 meals per day.
  - ☐ Eat "great" or "good" sources with every meal.
  - ☐ The above, plus adding an "absolute best" source at 1 or more meals.

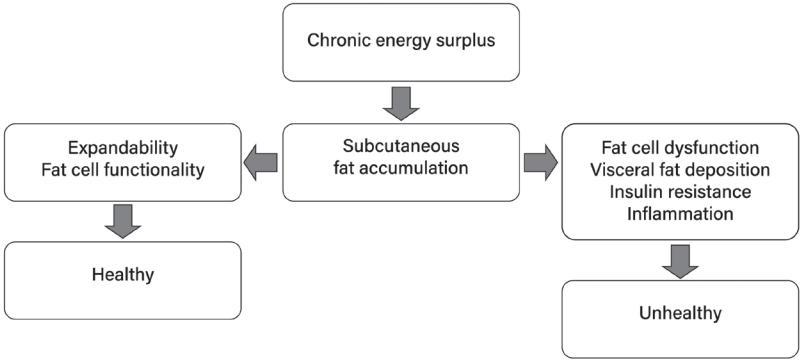
- ☐ **Incorporate resistant starch into your diet (Note: you do not need to use all of these; pick whichever is most convenient for you given your dietary preferences).**
  - ☐ Consume raw, minimally processed whole grains at 1 or more meals.
  - ☐ Consume green banana or potato starch at 1 or more meals.
  - ☐ Consume cooked and cooled starches at 1 or more meals.
  - ☐ Consume cooked and cooled rice that was cooked with coconut oil.

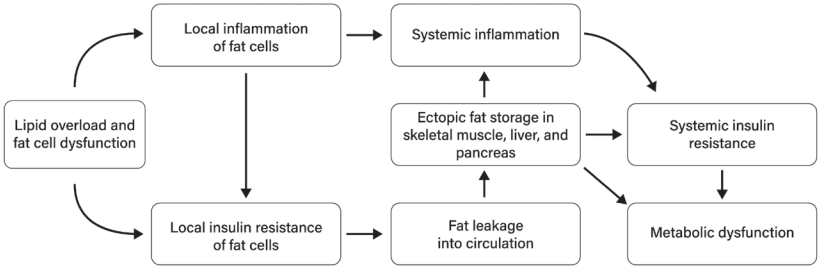
- ☐ **Repopulate your gut with natural probiotics (Note: most important if you are coming from a historically low-fiber diet).**
  - ☐ Consume fermented foods with 1 meal per day.
  - ☐ Consume fermented foods with 2 meals per day.
  - ☐ Consume fermented foods with every meal.

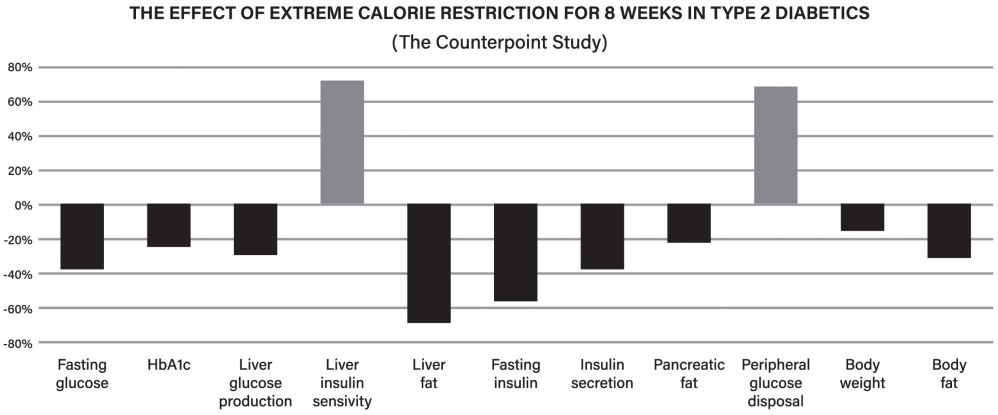
RISK OF DYING FROM VARIOUS CAUSES IF YOU HAVE TYPE 2 DIABETES
(% increase compared to not having diabetes)

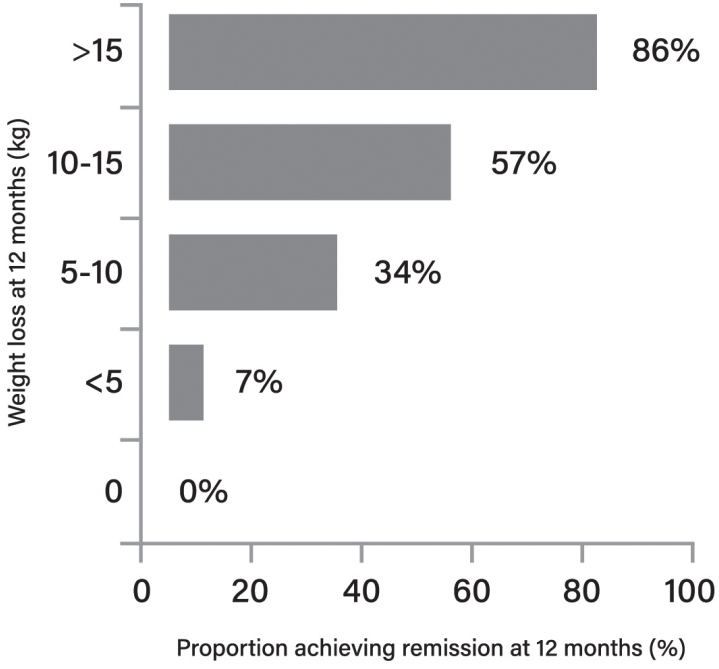



PSYCHOLOGICAL VARIABLES
Emotional distress
Depression and anxiety
Mood swings
PHYSIOLOGICAL VARIABLES
Hyperglycemia
Hypoglycemia
Blood glucose swings
Dehydration
LIFESTYLE VARIABLES
Weight gain
Reduced physical activity
Poor sleep quality
FATIGUE

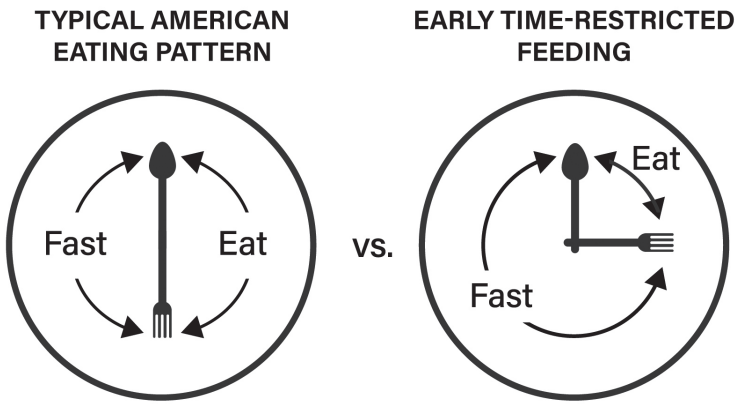

Chronic energy surplus
Subcutaneous fat accumulation
Expandability Fat cell functionality
Healthy
Fat cell dysfunction Visceral fat deposition Insulin resistance Inflammation
Unhealthy


Lipid overload and fat cell dysfunction
Local inflammation of fat cells
Local insulin resistance of fat cells
Systemic inflammation
Ectopic fat storage in skeletal muscle, liver, and pancreas
Fat leakage into circulation
Systemic insulin resistance
Metabolic dysfunction


THE EFFECT OF EXTREME CALORIE RESTRICTION FOR 8 WEEKS IN TYPE 2 DIABETICS
(The Counterpoint Study)
80%
60%
40%
20%
0%
-20%
-40%
-60%
-80%
Fasting glucose
HbA1c
Liver glucose production
Liver insulin sensivity
Liver fat
Fasting insulin
Insulin secretion
Pancreatic fat
Peripheral glucose disposal
Body weight
Body fat


Weight loss at 12 months (kg)
>15
10-15
5-10
<5
0
86%
57%
34%
7%
0%
0
20
40
60
80
100
Proportion achieving remission at 12 months (%)

Low-Carbohydrate Diet		
No Restrictions	**Monitor Intake**	**Avoid**
Meats and seafood Eggs Cheese Greek yogurt Nuts and seeds Fats and oils Fibrous vegetables Protein powders	Milk and most dairy Berries Soy products	Cereal grains Starchy tubers Most fruit Most beans and legumes



- ☐ **Reduce your intake of digestible carbohydrates. (Note: this may not be necessary depending on your personal needs and dietary preferences.)**
  - ☐ Replace "avoid" foods with "no restriction" foods at 1 meal.
  - ☐ Replace "avoid" foods with "no restriction" foods at 2 meals.
  - ☐ Replace "avoid" foods with "no restriction" foods at every meal.

- ☐ **Confine your food and caloric beverage intake to a time-restricted window.**
  - ☐ Consume all your calories within 12 to 14 hours.
  - ☐ Consume all your calories within 10 to 12 hours.
  - ☐ Consume all your calories within 6 to 10 hours.

- ☐ **Eat sources of protein and fibrous vegetables before sources of digestible carbohydrate.**
  - ☐ At 1 meal.
  - ☐ At 2 meals.
  - ☐ At every meal.

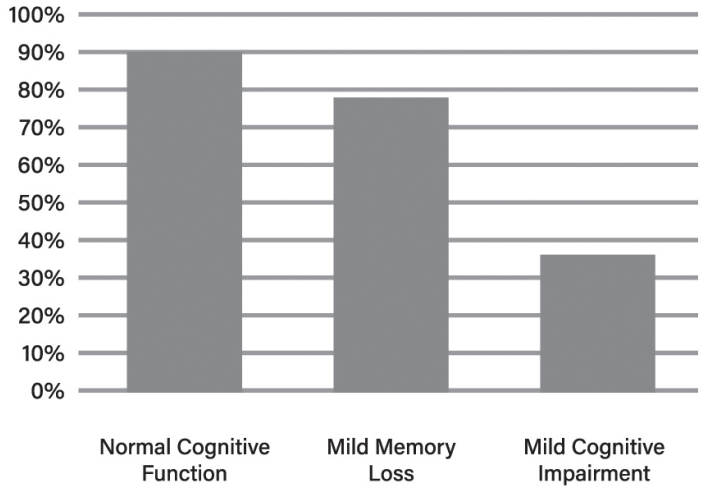
- ☐ **Consume at least 5 grams of cinnamon per day, preferably spread across carbohydrate-containing meals.**
  - ☐ At 1 meal.
  - ☐ At 2 meals.
  - ☐ At every meal.

- ☐ **Drink 1 to 2 tablespoons of vinegar (diluted in water or used as a dressing over salad) before eating your meals.**
  - ☐ At 1 meal.
  - ☐ At 2 meals.
  - ☐ At every meal.

- ☐ **Obtain a healthy body composition by losing fat mass and building muscle mass. (Note: this may not be applicable to you if you're already at a healthy body composition.)**
  - ☐ Follow the recommendations put forth in Chapter 3.

EPA and DHA Content of Common Seafoods			
Food Source (100 Grams or 3.5 Ounces)	**EPA (grams)**	**DHA (grams)**	**Amount of Food Source Needed to Obtain 1 gram of EPA + DHA**
Herring, Pacific	1.24	0.88	1.7 ounces
Salmon, Chinook	1.01	0.94	1.8 ounces
Mackerel, Pacific	0.65	1.20	1.9 ounces
Oysters, Pacific	0.88	0.50	2.5 ounces
Salmon, coho	0.54	0.83	2.5 ounces
Trout, rainbow	0.47	0.52	3.5 ounces
Salmon, sockeye	0.42	0.66	3.5 ounces
Tuna, canned White	0.23	0.63	4.0 ounces
Bass, freshwater	0.30	0.46	4.6 ounces
Salmon, pink	0.22	0.40	5.6 ounces
Lobster	0.34	0.14	7.0 ounces
Crab, Alaskan king	0.29	0.12	8.5 ounces
Lingcod	0.13	0.13	13.5 ounces
Tuna, canned light	0.05	0.22	13.5 ounces
Cod, Pacific	0.04	0.12	22.0 ounces

BRAIN LUTEIN CONCENTRATION



Lutein Content of Common Foods		
Food	**Measurement**	**Lutein content (mg)**
Spinach, raw	1 cup (30 grams)	3.7
Green peas	1 cup (145 grams)	3.6
Zucchini, boiled	1 cup (180 grams)	2.1
Broccoli, boiled	1 cup (156 grams)	2.0
Marigold-fed egg	1 large (50 grams)	1.6
Kale, raw	1 cup (21 grams)	1.3
Corn kernels	1 cup (145 grams)	1.1
Asparagus, boiled	1/2 cup (90 grams)	0.7
Celery, boiled	1 cup (150 grams)	0.5
Carrots, raw	1 cup (128 grams)	0.3
Conventional egg	1 large (50 grams)	0.25

Best Foods for Supplying Vitamin B_6 **(per 100 Grams or 3.5 Ounces)**			
	Percent of Daily Requirement Supplied	**Animal Products**	**Plant Foods**
"Green" range	>50 percent	Liver (all types) Tuna	Pistachios
"Orange" range	25 to 50 percent	Lean red meat Lean pork Fish and seafood Poultry	Sunflower seeds Hazelnuts Walnuts Hearts of palm
"Yellow" range	10 to 25 percent	Eggs	Most nuts and seeds Potatoes Shiitake mushrooms Brussels sprouts Sweet potatoes Sweet peppers Cabbage

Best Foods for Supplying Iron **(per 100 Grams or 3.5 Ounces)**			
	Percent of Daily Requirement Supplied	**Animal Products**	**Plant Foods**
"Green" range	>50 percent (men) >25 percent (women)	Lean red meat Oysters Cuttlefish Octopus	Potatoes
"Orange" range	25 to 50 percent (men) 10 to 25 percent (women)	Sardines Dark poultry meat	Amaranth Teff Most beans Spinach
"Yellow" range	10 to 25 percent (men) 5 to 10 percent (women)	Most fish White meat Eggs Cheese	Most whole grains Kale Asparagus Mushrooms Peas

Best Foods for Supplying Folate **(per 100 Grams or 3.5 Ounces)**			
	Percent of Daily Requirement Supplied	**Animal Products**	**Plant Foods**
"Green" range	>50 percent	Liver	—
"Orange" range	25 to 50 percent	—	Most leafy green and fibrous vegetables Most beans
"Yellow" range	10 to 25 percent	Fish roe Mussels Crab	Most nuts and seeds

Best Foods for Supplying Choline **(per 100 Grams or 3.5 Ounces)**			
	Percent of Daily Requirement Supplied	**Animal Products**	**Plant Foods**
"Green" range	>50 percent	Liver (all types) Whole eggs Caviar and fish roe	Sunflower lecithin
"Orange" range	25 to 50 percent	Lean red meat Lean pork Oysters Salmon	—
"Yellow" range	10 to 25 percent	White fish Most mollusks Poultry	Beans and legumes Nuts and seeds Cauliflower Mushrooms Collard greens Broccoli Brussels sprouts

- ☐ **Get your daily dose of DHA and EPA.**
  - ☐ Eat fish or seafood 1 time per week.
  - ☐ Eat fish or seafood 2 to 3 times per week.
  - ☐ Eat fish or seafood 4 to 6 times per week.

- ☐ **Get your daily dose of lutein and zeaxanthin.**
  - ☐ Eat 1 to 2 servings (1 cup raw or 1/2 cup cooked) of leafy green vegetables per day.
  - ☐ Eat 3 to 4 servings of leafy green vegetables per day.
  - ☐ Eat 5-plus servings of leafy green vegetables per day.

- ☐ **Incorporate berries into your diet.**
  - ☐ Eat 1 cup of berries 1 to 2 times per week.
  - ☐ Eat 1 cup of berries 3 to 4 times per week.
  - ☐ Eat at least 1 cup of berries daily.

- ☐ **Incorporate nuts into your diet.**
  - ☐ Eat a handful (1 ounce) of nuts 1 to 2 times per week.
  - ☐ Eat a handful of nuts 3 to 4 times per week.
  - ☐ Eat a handful of nuts daily.

- ☐ **Incorporate beans and legumes into your diet.**
  - ☐ Eat 1 cup of beans 1 to 2 times per week.
  - ☐ Eat 1 cup of beans 3 to 4 times per week.
  - ☐ Eat 1 cup of beans every day.

- ☐ **Consume adequate choline to support acetylcholine signaling.**
  - ☐ Eat 1 serving of the "yellow" choline foods per day.
  - ☐ Eat 1 serving of the "orange" or two servings of the "yellow" choline foods per day.
  - ☐ Eat 1 to 2 servings of the "green," 2 to 3 servings of the "orange," or 4 to 5 servings of the "yellow" choline foods daily.

- ☐ **Consume adequate vitamin B_6 to support GABA, dopamine, and serotonin signaling.**
  - ☐ Eat 1 serving of the "yellow" B_6 foods per day.
  - ☐ Eat 1 serving of the "orange" or 2 servings of the "yellow" B_6 foods per day.
  - ☐ Eat 1 to 2 servings of the "green," 2 to 3 servings of the "orange," or 4 to 5 servings of the "yellow" B_6 foods daily.

- ☐ **Consume adequate folate to support dopamine and serotonin signaling.**
  - ☐ Eat 1 serving of the "yellow" folate foods per day.
  - ☐ Eat 1 serving of the "orange" or 2 servings of the "yellow" folate foods per day.
  - ☐ Eat 1 to 2 servings of the "green," 2 to 3 servings of the "orange," or 4 to 5 servings of the "yellow" folate foods daily.

- ☐ **Consume adequate iron to support dopamine and serotonin signaling.**
  - ☐ Eat 1 serving of the "yellow" iron foods per day.

- ☐ Eat 1 serving of the "orange" or 2 servings of the "yellow" iron foods per day.
- ☐ Eat 1 to 2 servings of the "green," 2 to 3 servings of the "orange," or 4 to 5 servings of the "yellow" iron foods daily.

☐ **Ensure that your diet is providing you with adequate daily protein to support neurotransmitter synthesis (refer to Chapter 3 for adequacy information).**

- ☐ Calculate your ideal protein intake and eat it 1 to 2 days per week.
- ☐ Eat sufficient protein 3 to 4 days per week.
- ☐ Eat sufficient protein 5 to 6 days per week.
- ☐ Eat sufficient protein every day.
- ☐ Drink enough water throughout the day to have most of your urine be lemonade-colored.

Circadian Alignment and Quality Sleep	• Eat within a 6- to 12-hour window. • Stack most of your calories in the morning and afternoon. • Avoid eating late at night, ideally having your last meal no later than 7 to 8 P.M. • Do not consume rapidly digestible carbs at dinner. • Be consistent with your mealtimes. • Limit your alcohol to no more than one drink. • Keep caffeine consumption to the morning or early afternoon.
Fat Loss and Muscle Gain	• Eat sufficient protein throughout the day, which is about 1.1 to 1.6 g/kg (0.5 to 0.7 g/lb) of protein if overweight or obese and 1.6 to 2.2 g/kg (0.7 to 1.0 g/lb) if normal weight (BMI > 25 for overweight and <25 for normal weight). • Eat sufficient protein at every meal, which is at least 30 grams of protein from high-quality sources like meat, soy, or protein powders. • Base each meal around an abundance of fibrous vegetables. • Eat as much wholesome, minimally processed food as possible. • Do not graze on food throughout the day, but instead eat 2 to 4 defined meals every 3 to 5 hours.
Intestinal Integrity and Microbiome Diversity	• Consume at least 30 grams of fiber per day, ideally from prebiotic-rich sources. • Consume a form of fermented food at least once per day. • Add resistant starches to your diet. • Incorporate more prebiotic vegetables into your meals.

Glycemic Control	• Eat within a 6- to 12-hour window. • Consume fibrous vegetables and sources of protein first in your meal, saving your starches for last. • Consume 1 to 2 tablespoons (15 to 30 mL) of vinegar before eating meals containing starch. • Consume at least 5 g of cinnamon per day. • If you have diabetes and are concomitantly working to lose fat mass, eat a low-carbohydrate diet. • Reduce your intake of digestible carbohydrates.
Brain Function	• Eat as much wholesome, minimally processed food as possible. • Incorporate more fish or seafood into your diet. • Up your berry intake, regularly incorporating it into your diet throughout the week. • Base each meal around fibrous vegetables. • Regularly consume nuts, beans, legumes, and whole grains. • Make leafy green vegetables a staple of your meals. • Consume adequate EPA and DHA (500 to 1000 mg per day). • Consume adequate lutein (10-plus mg per day). • Consume adequate choline, B_6, folate, and iron. • Ensure your diet provides you with adequate daily protein. • Drink enough water.

APPENDIX

Best Protein Sources

Meats, Poultry, and Seafood—4 ounces raw (about 3 ounces cooked)	
Poultry, light meat (chicken or turkey breast)	27 g
Poultry, dark meat (drumstick, thigh, wing, or back)	23 g
Lean beef (top/bottom round, eye of round, sirloin tip, top sirloin, 95/5 ground beef)	25 g
Pork (chop, loin)	24 g
Fatty fish (salmon, sardines, mackerel)	23 g
White fish (cod, halibut, pollack, tuna)	20 g
Shellfish (crab, shrimp, lobster)	20 g
Game meat (bison, kangaroo, elk, venison, lamb, boar)	24 g

Dairy	
Milk, 8 fluid ounces or 1 cup (skim, 1%, 2%, whole)	8 g
Greek yogurt, 1 cup	23 g
Cottage cheese, 1 cup	25 g
Hard cheeses, 1 ounce or 1/4 cup (cheddar, Gouda, parmesan)	7 g
Soft cheeses, 1 ounce or 1/4 cup (brie, Havarti, cream cheese)	6 g

Eggs	
Whole chicken egg, 1 large	6 g
Whole duck egg, 1 large	9 g
Egg whites, 1 cup	26 g
Whole quail egg, 1 large	1 g
Roe, fish eggs, 1 tbsp	4 g

Soy Products—1 cup cooked	
Edamame (in pod)	11 g
Edamame (shelled)	18 g
Soybeans	30 g
Soy milk	6 g
Soy nuts	37 g
Tofu (soft)	18 g
Tofu (firm)	23 g
Miso	35 g
Natto	34 g
Tempeh	33 g

Legumes—1 cup cooked	
Kidney beans	15 g
Aduki beans	17 g
Lentils	18 g
Split peas	16 g
Lima beans	15 g
Black beans	15 g
Chickpeas	14 g
Black-eyed peas	13 g
Pinto beans	12 g

Nuts and Seeds	
Peanuts, 1/4 cup	9 g
Almonds, 1/4 cup	6 g
Pistachios, 1/4 cup	6 g
Cashews, 1/4 cup	5 g
Walnuts, 1/4 cup	5 g
Hazelnuts, 1/4 cup	4 g
Hemp seeds, 3 tbsp	10 g
Pumpkin seeds, 1/4 cup	9 g
Sunflower seeds, 1/4 cup	9 g
Chia seeds, 1/4 cup	4 g
Peanut butter, 2 tbsp	8 g
Other nut butters, 2 tbsp	5 g

Grains and Starches—1 cup cooked	
Amaranth	9 g
Quinoa	8 g
Oat bran	7 g
Wild rice	7 g
Oatmeal	6 g
Buckwheat	6 g
Brown rice	5 g
White rice	4 g
Barley	4 g
Potatoes	4 g
Sweet potatoes	4 g

Recommended Protein Intake by Weight

Protein Intake			
Weight (lbs)	**Weight (kg)**	**1.1 g/kg**	**1.6 g/kg**
100	45	50	73
110	50	55	80
120	55	60	87
130	59	65	95
140	64	70	102
150	68	75	109
160	73	80	116
170	77	85	124
180	82	90	131
190	86	95	138
200	91	100	145
210	95	105	153
220	100	110	160
230	105	115	167
240	109	120	175
250	114	125	182
260	118	130	189
270	123	135	196
280	127	140	204
290	132	145	211
300	136	150	218

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Ari Whitten is the founder of *The Energy Blueprint* system, a comprehensive lifestyle and supplement program which has helped more than two million people (and counting) experience optimal health, better performance, and more energy. He is also the best-selling author of *The Ultimate Guide to Red Light Therapy* and the host of the popular *The Energy Blueprint Podcast*, which features the world's leading natural health experts. In 2020, Ari was voted #1 Health Influencer by Mindshare, the largest natural and functional medicine community. For more than 25 years, Ari has been dedicated to the study of human health science. He holds a M.S. in Human Nutrition and Functional Medicine, a B.S. in Kinesiology, and certifications as a Corrective Exercise Specialist and Performance Enhancement Specialist from the National Academy of Sports Medicine, and he has completed the coursework for a Ph.D. in Clinical Psychology. You can find his podcast, programs, and supplement formulas at www.theenergyblueprint.com.

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OUR PRODUCTS AND PROGRAMS

SUPPLEMENTS

At *The Energy Blueprint*, we strive to make leading-edge, best-in-category formulas designed to provide results that you can actually feel. Whereas most companies put in 1/5th to 1/20th the actual clinical dosage of the various ingredients in their formulas, we put in real clinical dosages for all our ingredients (making our costs to manufacture these formulas 5 to 10 times higher than most manufacturers). We do this because our goal is to provide the absolute best product on the market in each category and, most importantly, to get you noticeable and hopefully life-changing results.

Here's the quick rundown of what we offer.

Energenesis

This is our flagship mitochondrial formula. Instead of stimulant- and caffeine-based products, which give you a quick boost but actually worsen your energy when used regularly, this formula is designed to build up your own body's capacity to produce energy by supporting your mitochondria with cutting-edge ingredients with proven fatigue-fighting and energy-boosting effects like NTFactor®, PQQ, acetyl-L-carnitine, R-alpha lipoic acid, and shoden Ashwagandha. It's also our best-selling product that has changed thousands of lives.

Energy Essentials & Superfoods

More than 9 out of 10 people in the U.S. have at least one nutrient deficiency, and more than 7 out of 10 people have at least three

nutrient deficiencies! This is a major cause of fatigue for many people. These nutrients—various vitamins and minerals—play key roles in your hormone balance, brain function, risk of dozens of diseases, and the ability of your cells to produce energy! With full doses of whole-food sources vitamins, the most bioavailable methylated B vitamins, disease-fighting tocotrienols, and real clinical doses of powerful superfoods like spirulina, chlorella, pomegranate, and fulvic/humic acid to enhance bioavailability and absorption, Energy Essentials & Superfoods is the most powerful and comprehensive multivitamin/multimineral and superfoods supplement on the market—designed to plug the holes in your diet and provide your body with the nutrients and cofactors it needs for optimal health, disease prevention, and energy production.

Immune Genesis

Immune Genesis is our comprehensive immune support formula that we designed explicitly for increasing your resistance to viral respiratory infections. It has science-backed compounds like BerryShield, Seleno-Excell, reishi mushroom, vitamin D, zinc, astragalus, andrographis, and Wellmune—ingredients that are proven in clinical trials to reduce the incidence, severity, and duration of respiratory infections.

UltraBrain

UltraBrain is a premium, next-generation brain health–optimizing, anxiety- and depression-fighting nootropic that's designed to combat brain fog, boost your mood, and get your brain functioning at its peak potential. All while supporting long-term brain health! (Again, completely free of stimulants and sugar.) Packed with the most powerful, evidence-based brain-boosting compounds available like *Rhodiola rosea*, lion's mane mushroom (dual extract), cognatiQ, L-theanine, choline CDP, alpha-GPC, huperzine A, saffron extract, and more—all in real clinically effective dosages—this formula is for anyone looking to step into their brain's full potential.

PROGRAMS

The Energy Blueprint

This is our flagship course that's the culmination of over seven years of work. This program covers all the different factors that play into our energy levels and the practical lifestyle habits to optimize everything from circadian rhythm and sleep, to gut health, to detoxification, to light therapies, to hormesis. It's an ultra-comprehensive 60-day program that takes you deep into the science of virtually every aspect of human energy optimization.

Breathing for Energy

We partnered with world-leading breathing expert Patrick McKeown to create a cutting-edge program specifically for the purpose of enhancing energy levels. This program centers around using breathing practice to retrain optimal autonomic nervous system function (to de-stress the brain and body) and particularly the hormetic practice of breath holding (intermittent hypoxic training) to systematically upregulate one of the biggest needle movers for energy optimization—the pulmonary and cardiovascular systems. We've created a systematized program to take people from 10- to 15-second breath hold capacities up to multi-minute breath holds. This creates profound adaptations in lung capacity and mitochondrial adaptations that result in massive improvements in oxygen utilization and ultimately, cellular energy production. If you're looking for one specific practice you can do each day to dramatically improve your energy levels, this breathwork training system is the single most powerful and fastest way I've ever found to increase energy levels in my over 25 years of studying and teaching health science.

To access two bonus chapters on optimizing detoxification pathways and energy flux, and for more energy-enhancing strategies, visit theenergyblueprint.com/efebook.