GENIUS LIFE

Heal Your Mind,
Strengthen Your Body,
and Become Extraordinary

MAX LUGAVERE

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FIRST EDITION

Library of Congress Cataloging-in-Publication Data has been applied for.

ISBN 978-0-06-289281-2

20 21 22 23 24 LSC 10 9 8 7 6 5 4 3 2 1

DON'T FORK AROUND

Here are some "foods" to watch out for. Keep in mind that while they may look different on your plate, their ultimate form is sugar and their final destination is in your blood.

Nothin' Fine About These Refined Grain Products

Bagels Energy bars **Biscuits** Granola Bread Gravy Buns Muffins Cakes **Pancakes** Cereals Pasta Pizza Chips Cookies **Pretzels** Crackers Rice Croissants Rolls Waffles Cupcakes Doughnuts Wraps

Here is a list of the oils to avoid:

The Ominous Oils

Canola oil Safflower oil
Corn oil Soybean oil
Cottonseed oil Sunflower oil
Grapeseed oil "Vegetable" oil

Rice bran oil

Common Grain and Seed Oil Hiding Places

Commercial salad dressings Cereal products

Mayonnaise Cereal bars

Anything sautéed or fried Dairy-free milk substitutes

Pasta dishes

in restaurants Sauces

Hot foods and salad bars

Gravy

Grain products

Chicken dishes

Olive oil "blends"

PROTEIN-CONTAINING FOODS

Food	Protein content
Egg (1 whole egg)	6 grams
Chicken breast (6 ounces, cooked)	50 grams
Ground beef, 80% lean (6 ounces, cooked)	42 grams
Wild salmon (6 ounces, cooked)	42 grams
Shrimp, cooked (4 ounces, cooked)	24 grams
Lentils (1/2 cup, cooked)	9 grams
Black beans (1/2 cup, cooked)	7.5 grams

TOP VEGGIE SOURCES OF LUTEIN AND ZEAXANTHIN (L+Z)

Food (1 cup, cooked)	Combined L+Z content
Kale	24 milligrams
Spinach	20 milligrams
Swiss chard	19 milligrams
Mustard greens	15 milligrams
Collard greens	12 milligrams
Green peas	4 milligrams
Brussels sprouts	2 milligrams
Sweet corn	2 milligrams
Broccoli	2 milligrams

TIMING IS EVERYTHING

TYPICAL LIGHT INTENSITIES

Full moon, clear night sky 25 lux Dim light 5-50 lux Living room light 200 lux **Office** 500 lux Gym 750 lux Supermarket/drugstore 750-1000 lux 1000-10,000 lux Outside, overcast day Sunny day, shade 50,000 lux Bright sun 100,000 lux

Minimum intensity for circadian entrainment = 1000 lux

Other Potential AMPK Activators

Curcumin (in turmeric)

Astaxanthin (in krill oil and Heat (e.g., saunas)

wild salmon) Metformin (a type 2 diabetes

Berberine drug)

Coffee Quercetin (in capers and onions)

Cold exposure Reishi mushroom

Resveratrol

Extra-virgin olive oil Sulforaphane (in cruciferous

veggies)

Green tea Vinegar

YOUR KEY NUTRIENT SENSORS

Sensor	Role	Effect of fasting	Benefits
Insulin	Responds to carbohydrates, and protein to a lesser degree	1	Liberates stored fat for use by organs such as the heart, eyes, and muscle. Allows ketones to be generated for use by the brain.
mTOR	Responds to dietary protein and overall energy	1	Accelerates autophagy; worn- out or damaged proteins, cells, and organelles are recycled.
АМРК	Responds to overall energy availability (fat and carbs) or lack thereof	↑	Increases insulin sensitivity, stimulates creation of new mitochondria, burns stored fat and sugar, activates F0X03 longevity pathway.

THE VIGOR TRIGGER

SUN EXPOSURE FOR HEALTHY VITAMIN D

Less time (as little as 5 minutes) More time (up to 2 hours)

Young age Old age Summer Winter

Closer to the equator Farther from the equator

Clean air

No sunblock

Lots of exposed skin

Fair complexion

Polluted air

Wearing sunblock

Little exposed skin

Dark complexion

SAUNA RISK REDUCTIONS (Laukkanen et al.)

Times per week	0-1	2–3	4–7
High blood pressure	0%	24%	46%
Stroke	0%	14%	61%
Dementia	0%	22%	66%
Alzheimer's disease	0%	20%	65%
Early mortality	0%	24%	40%

GET OFF YO' A**

Full-Body Routine

Monday

Squats Shoulder presses

Stiff-legged deadlifts Hammer curls

Lat pull-downs Triceps push-downs

Bench presses

Wednesday

Lunges Barbell curls

Hamstring curls Delt raises

Incline presses Skull crushers

Pull-ups

Friday

Repeat Monday

Split

Monday (chest/biceps)

Bench presses Barbell curls
Incline presses Hammer curls

Incline presses Hammer curl

Flyes

Tuesday (back/triceps)

Pull-ups Skull crushers

Wide-grip lat pull-downs Triceps push-downs

Cable-assisted chin-ups

Wednesday (legs/shoulders)

Squats Shoulder presses

Lunges Upright rows

Hamstring curls Face pulls

TOXIC WORLD

Hormone	Partial List of Functions
Insulin	Fat storage and metabolism
Ghrelin	Hunger
Leptin	Energy expenditure, satiety
Cortisol	Stress, energy production
Testosterone	Muscular development, sex drive, sex organ development
Estrogen	Fertility, sex drive, sex organ development
Thyroid	Brain development, energy, metabolism

VERY COMMON ANTICHOLINERGIC DRUGS

Dimenhydrinate	Motion sickness	Strong anticholinergic
Diphenhydramine	Antihistamine/sleep aid	Strong anticholinergic
Doxylamine	Antihistamine/sleep aid	Strong anticholinergic
Oxybutynin	Overactive bladder	Strong anticholinergic
Paroxetine	Antidepressant	Strong anticholinergic
Quetiapine	Antidepressant	Strong anticholinergic
Cyclobenzaprine	Muscle relaxant	Moderate anticholinergic
Alprazolam	Antianxiety	Possible anticholinergic
Aripiprazole	Antidepressant	Possible anticholinergic
Cetirizine	Antihistamine	Possible anticholinergic
Loratadine	Antihistamine	Possible anticholinergic
Ranitidine	Antiheartburn	Possible anticholinergic

Fish with High Selenium-to- Mercury Ratio (Safe) Albacore* Herring King mackerel* Mackerel Salmon Sardines	Fish with More Mercury Than Selenium (Avoid These) Shark Swordfish Whale (a mammal)
Tuna*	

^{*}These fish have the highest levels of mercury and should be moderated in children and pregnant or lactating women.

Keep Plants Around You

Plants don't just make our spaces more inviting; they clean the air. The air-purifying ability of plants was originally studied for their utility on space stations where they could help produce fresh, clean air for our astronauts. In his excellent book *How to Grow Fresh Air*, NASA research scientist Dr. Bill Wolverton details the plants that are most effective at removing various chemical vapors. According to his studies, these are the top ten plants for cleaning the air in your home or office, rated for their efficacy and ease of maintenance:

- Areca palm (Chrysalidocarpus lutescens—recently changed to Dypsis lutescens)
- 2. Lady palm (Rhapis excelsa)
- 3. Bamboo palm (Chamaedorea seifrizii)
- **4.** Rubber plant (*Ficus robusta*)
- 5. Dracaena Janet Craig (Dracaena deremensis "Janet Craig")
- **6.** English ivy (*Hedera helix*)
- 7. Dwarf date palm (*Phoenix roebelenii*)
- 8. Ficus alii (Ficus binnendijkii "Alii")
- **9.** Boston fern (*Nephrolepis exaltata* "Bostoniensis")
- **10.** Peace lily (Spathiphyllum sp.)

Keep plants in your home, and if you spend extended bouts of time in any one location, make sure that you have plants in your "personal breathing zone," defined by Dr. Wolverton as six to eight cubic feet around you. And note that some of the above plants are toxic if ingested by dogs or cats, so inquire with your supplier to find out which are safe if you have pets.

PUTTING IT ALL TOGETHER

Weeks 2 to 3: Focus on Food

Clear Out Your Kitchen

There are good reasons to minimize consumption of grains and grain products made with wheat, corn, and rice. These foods, which now make up over half of the calories we ingest every day, are nutrient-poor and calorie-dense; this means that they help fuel not only the obesity crisis but our widespread nutrient deficiencies. What does this mean for you? Greater difficulty in dropping the weight or keeping it off, and lower defenses against stress and aging.

Many grains today are processed into grain *products*, which comprise the widest category of easily accessible packaged and processed, *hyperpalatable* foods. These foods are a slippery slope, and are difficult to consume in moderation. They often come with tagalong endocrine-disrupting chemicals (leached from packaging), residues of glyphosate (which is sometimes used as a desiccant in grain farming), and heavy metals. And they're poor choices from a dental health perspective. While you may choose to enjoy the occasional whole grain side dish, the optimal amount of *refined* grain products is zero. Here is a list of grain products to avoid:

Processed grain products: Breads, pastas, wraps, cereals, baked goods, noodles, soy sauce, chips, crackers, cookies, oatmeal (exception: gluten-free, steel-cut), pastries, muffins, pizza dough, doughnuts, granola bars, cakes, pancake flours and mixes, juices, fried foods, and frozen packaged foods. Anything with rice flour, wheat flour, enriched wheat flour, whole-wheat flour, or multigrain flour in its ingredients list.

Snacks with added sugar and sugar-sweetened beverages make up a major source of empty calories in the Western diet. But empty calories are not benign; they encourage nutrient deficiencies, expand our ever-growing waistlines, plus all of the obesity-associated diseases. Startling research published in the journal *Circulation* estimates that nearly two hundred thousand people die each year from conditions driven by sugar-sweetened beverages, including cancer and heart disease.³ Cutting out these junk foods (along with the refined grain products above) may be among the most impactful moves you can make for a slimmer waist.

- ▶ Sugary foods and beverages: Candy, energy bars, granola bars, instant oatmeal, ice cream and frozen yogurt, jams/jellies/preserves, gravy, ketchup, commercial salad dressings, fruit juice, fruit-on-the-bottom yogurts, sodas, commercial fruit smoothies, sports drinks, sugar- or juice-sweetened dried fruit.
- ▶ All concentrated sweeteners: Honey, maple syrup, corn syrup, agave syrup or nectar, simple syrup, both brown and white sugars.

Though the research on chemical additives is evolving, animal studies suggest that certain synthetic emulsifiers that help lend processed foods a creamy texture can degrade the gut habitat, shifting it toward a pro-inflammatory state. Inflammation in the gut doesn't stay in the gut; it affects all your other organs, including your brain.

▶ Sources of industrial-grade emulsifiers: Anything with

polysorbate 80 or carboxymethylcellulose in the ingredients list. Common offenders include ice cream, coffee creamers, nut milks, and salad dressings.

With meat and dairy, quality rules. On the other hand, processed meats and cheeses usually contain nasty chemical additives and metabolites. One such example is sodium nitrite, a preservative used to cure deli meats. Sodium nitrite can transform into chemicals called nitrosamines, which may promote metabolic dysfunction on top of being carcinogenic (worth noting: vitamin C, which is found in fruits and vegetables, effectively suppresses nitrosamine formation).

▶ Industrial and processed meats and cheeses: Grain-fed red meat, feedlot chicken, processed cheeses and cheese spreads.

Avoiding common cooking oils will help your body minimize excessive consumption of omega-6 fatty acids. These fats, discussed in chapter 1, are also drivers of inflammation due to their highly delicate and damage-prone nature. They also contain man-made trans fats, which are mutant fats with no safe level of consumption. Keep in mind that these fats often hide in grain products, listed previously, along with myriad spreads, dressings, and cooking sprays.

- ▶ Commercial cooking oils: Margarine; buttery spreads; cooking sprays; and canola, soybean (sometimes labeled "vegetable oil"), cottonseed, safflower, grapeseed, rice bran, wheat germ, and corn oils. These oils are often included in various sauces, mayonnaise, and salad dressings. (Even if they're organic, toss them.)
- Nonorganic, nonfermented soy products: Tofu.
- **Synthetic sweeteners:** Aspartame, saccharin, sucralose, acesulfame-K (also known as acesulfame potassium).

Always Foods

It's time to reload with the foods that are going to serve you. Many of these foods are Genius Foods, capable of arming your brain with the nutrients (like DHA fat) it needs not only to grow healthy new brain cells throughout your life, but to arm your brain with the defense artillery to protect against the numerous stresses it incurs along the way.

- ▶ Oils and fats: Extra-virgin olive oil, avocado oil, coconut oil, grass-fed tallow, organic or grass-fed butter and ghee.
- ▶ **Protein:** Grass-fed beef; free-range poultry; pasture-raised pork, lamb, bison, and elk; pastured or omega-3 eggs; wild salmon; sardines; anchovies; shellfish and mollusks (shrimp, crab, lobster, mussels, clams, oysters).
- ▶ Nuts and seeds: Almonds and almond butter, Brazil nuts, cashews, macadamias, pistachios, pecans, walnuts, flaxseeds, sunflower seeds, pumpkin seeds, sesame seeds, chia seeds.
- ▶ Vegetables: Mixed greens, kale, spinach, collard greens, mustard greens, broccoli, chard, cabbage, onions, mushrooms, cauliflower, Brussels sprouts, sauerkraut, kimchi, pickles, artichokes, broccoli sprouts, green beans, celery, bok choy, watercress, asparagus, garlic, leeks, fennel, shallots, scallions, ginger, jicama, parsley, water chestnuts, nori, kelp, dulse seaweed.
- Nonstarchy root vegetables: Beets, carrots, radishes, turnips, parsnips.
- ▶ Low-sugar fruits: Avocados, coconut, olives, blueberries, blackberries, raspberries, grapefruit, kiwis, bell peppers, cucumbers, tomatoes, zucchini, squash, pumpkin, eggplant, lemons, limes, cacao nibs, okra.
- ▶ Herbs, seasonings, and condiments: Parsley, rosemary, thyme, cilantro, sage, turmeric, cinnamon, cumin, allspice,

- cardamom, ginger, cayenne, coriander, oregano, fenugreek, paprika, salt, black pepper, vinegar (apple cider, white, balsamic), mustard, horseradish, tapenade, salsa, nutritional yeast.
- Fermented, organic soy: Natto, miso, tempeh, organic glutenfree tamari sauce.
- ▶ **Dark chocolate:** At least 80% cocoa content (ideally 85% or higher).
- ▶ **Beverages:** Filtered water, coffee, tea, unsweetened almond/ flax/coconut/cashew milk.

Sometimes Foods

- ▶ **Dairy:** Grass-fed and antibiotic- and hormone-free yogurt and hard cheeses.
- Legumes: Beans, lentils, peas, chickpeas, hummus, peanuts.
- Fiber extracts: Products made with chicory root extract, tapioca fiber, soluble corn fiber, inulin. These ingredients are now used as sugar-free sweeteners and fiber sources. While they are likely fine in moderation, too much can cause gas and bloating, and the jury is still out on whether they all act as true, digestion-resistant fibers.
- ▶ **Sweeteners:** Stevia, non-GMO sugar alcohols (erythritol is best to use, followed by xylitol, which is naturally harvested from birch trees), monk fruit (luo han guo), allulose.

Week 4: Determine Your Custom Carb Score

A two-week "induction period" of lower-carb, higher-protein eating serves two functions: it helps you to stock up on vital nutrition from nutrient-dense whole foods, and it allows you to regain metabolic flexibility, which is the ability to tap into your own body fat for fuel without experiencing excessive hunger. By dropping your insulin

levels with a lower-carb diet and adding in some high-intensity exercise and resistance training, you become *fat-adapted*. The best part? After the second week, those concentrated sources of carbohydrates can be added back in to support your lifestyle.

How many servings of sweet potatoes and rice might you consume in a week? Unfortunately, there is no one-size-fits-all recommendation, but the following Carb Score continuum should help as a general guide to optimize your carbohydrate intake. Begin with zero and add the number of points for every box that you tick. The total number of points you end up with corresponds to how many servings from the following list of higher-carbohydrate foods you may consume per week.

Least tolerance (0−4 servings per week) ←		Highest tolerance (8–14 servings per week)	
Prediabetic or type 2 diabetic*	(0)	Neither prediabetic or type 2 diabetic	(+4)
Bulging waist	(0)	Slim waist	(+2)
Sedentary lifestyle	(0)	Active lifestyle	(+4)
Infrequent exercise	(0)	Regular (3–5x/week) resistance or high- intensity interval training	(+4)

^{*} If you are a type 2 diabetic or prediabetic individual, you have developed carbohydrate intolerance, and should focus instead on the "Always Foods" listed earlier. If you take any type of medication for diabetes, consult with your doctor as sudden carb restriction could require you to adjust your medication, or risk a dangerous condition called diabetic ketoacidosis.

If your Carb Score was a 10, this means that you may have up to 10 servings from the list below every week. Ultimately, self-experimentation, sustainability, and how you feel will be the primary determinant. If you feel frequent hunger, you can try reducing your carbohydrate intake, and if your hunger is well controlled, you can try adding in more.

Now that you know your Carb Score, you may enjoy the following higher-carbohydrate foods. Keep in mind that a serving size of whole fruit is a 6-ounce portion, which equates roughly to a whole fruit in the case of an apple or orange. And the ideal time to consume them is during the day, or after a workout.

- **Starchy root vegetables:** White potatoes, sweet potatoes.
- ▶ Non-gluten-containing unprocessed grains: Buckwheat, rice (brown, white, wild), millet, quinoa, sorghum, teff, gluten-free oatmeal, non-GMO corn or popcorn. Oats do not naturally contain gluten but are frequently contaminated with gluten, as they are processed in facilities that also handle wheat. Therefore, look for oats that explicitly indicate on the package that they are gluten-free.
- ▶ Whole, sweet fruit: Apples, apricots, mangos, melons, pineapple, pomegranate, and bananas provide various nutrients and different types of fiber. Be cautious with dried fruit, which has the water removed and sugar concentrated, making it easy to overdo.

EXAMPLE FIRST MEALS

Grass-fed beef (6 oz.) Dark leafy greens (10 oz.) Dressing: 1-2 tablespoons extra-virgin olive oil 1-2 tablespoons balsamic vinegar Salt Pepper Garlic	Chicken breast (6 oz.) Sautéed broccoli (10 oz.) Topping: Lemon juice Extra-virgin olive oil Chile flakes Mustard seed powder Salt	Eggs (3, whole, medium) Scrambled with: Spinach (2 oz.) Chopped bell peppers (2 oz.) 1/2 avocado Topped with: 1 tablespoon extravirgin olive oil 2 tablespoons pico de gallo
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Many chefs like to focus on quality ingredients over quantity, and this is a philosophy I wholeheartedly endorse. It makes cooking delicious, healthy, Mediterranean-style meals easy and inexpensive! Here are some cooking ingredients you should always aim to have in your kitchen:

Mediterranean Ingredients for Easy Cooking

Eggs Extra-virgin olive oil
Salt Grass-fed butter
Pepper Apple cider vinegar
Garlic powder Lemon and lime
Mustard seed powder Balsamic vinegar

THE GENIUS MOCKTAIL

Who says abstinence from alcohol has to be boring? In 2019, I was in Bogotá, Colombia, when I discovered a phenomenal drink enjoyed by the locals. They called it a "sparkling water michelada." A michelada is typically a Mexican alcoholic drink comprising beer and tomato juice, served in a salted rim glass. The Colombian take on it, however, is alcohol-, tomato-, and calorie-free. Refreshing and healthy, making one is easy and inexpensive. And the best part is that it's just as fun as a cocktail to enjoy in a bar or restaurant setting!

WHAT YOU'LL NEED:

 $\frac{1}{2}$ -1 lime

12 ounces sparkling or seltzer water

6 ice cubes

2 tablespoons coarse salt

1 tall glass

1 plate

WHAT TO DO:

Place salt on the plate and distribute evenly.

Slice the lime and run it around the rim of the glass.

As if you were making a margarita, dip the glass, rim side down, into the salt. Coat evenly.

Fill the glass with ice.

Squeeze half a lime into the glass (more depending on the size of the glass).

Pour in sparkling water.

Feel free to drink this any time! It contains virtually zero calories but provides vitamin C from the lime and electrolytes from the salt. You'll look just as fancy as with a cocktail, but without the energy-zapping alcohol!

RESOURCES

Join the Cortex, a Facebook Community for Geniuses http://maxl.ug/thecortex

Need clarity? Or just want to connect? The first place you should go is The Cortex. I've created a private Facebook community for those going through their own health journeys to share tips, tricks, recipes, research, and more. Many of them are experienced and are living the Genius Life, while others are just starting out. Make sure to introduce yourself!

Watch My Documentary, Bread Head

www.breadheadmovie.com

My story is documented in my film, *Bread Head*, the first and only feature-length documentary solely about dementia prevention, because changes begin in the brain decades before the first symptom of memory loss. Check out the website to support the film, see a trailer, sign up for screening alerts, and become a *Bread Head* activist.

Join My Official Newsletter

www.maxlugavere.com

Want research broken down and delivered straight to your inbox? My newsletter is where I regularly share research articles (with easy-to-read summaries), impromptu interviews, and other easily digestible tidbits designed to improve your life. No spam ever, and you can opt out anytime.

Product Suggestions

http://maxl.ug/TGLresources

Want to know my favorite blue light-blocking glasses? How about the online meditation course I recommend? On the market for a new air filter or water filter? Or perhaps a better salt option? (None of these would surprise me after you've read this book.) Over the years I have become friendly with many product manufacturers, and as a result get to try out lots of products. Here you can check out my recommendations for products alluded to in this book (and get exclusive discounts). Anything I recommend is something I've vetted and personally use.

Research Resources

One of the top ways that you can ensure the information you're getting is sound is to make sure the places you're looking for it are credible and as close to the science as possible. These are the only sources I recommend using to track and search scientific research:

ScienceDaily

www.sciencedaily.com

This site republishes university press releases that often accompany study publications. It brings together research from many different disciplines, and you can often find good stuff here by scrolling down to "Health News" or clicking "Health" in the menu bar at the top.

Note: press releases from universities are not necessarily perfect, but they are a great starting place and usually provide links to the research discussed. Reading both the press release and the study paper can help you learn how to interpret research. And the releases are often the very sources that journalists will use to write their articles. So in essence, this site takes you straight to the source!

Medical Xpress

www.medicalxpress.com

This site does the same as ScienceDaily, but is exclusively medical/health-related.

EurekAlert!

www.eurekalert.org

This is similar to the previous two resources—it publishes press releases—but is run by the American Association for the Advancement of Science, which publishes the journal *Science*.

PubMed

www.ncbi.nlm.nih.gov/pubmed

When researching, I often use PubMed. One way to use Google to search PubMed is to add "site:nih.gov" into your Google search. For example, "Alzheimer's insulin site:nih.gov" would search the NIH website (which includes PubMed) for all articles mentioning Alzheimer's and insulin.

Contact Me

Contact me for speaking or coaching, or to just say hi!

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