



## Pausa Practical Guide: Nutrition

Food is one of the most powerful levers for how you feel, think and age.[1–6] The same calories can either drive inflammation, metabolic dysfunction and brain fog, or support energy, clear thinking and long-term healthspan.[1–3] This guide distills the core science and translates it into small, doable steps you can experiment with this week.

### 1. Food is medicine, not just fuel

Diet quality strongly predicts chronic disease risk: ultra-processed food intake is associated with higher all-cause mortality, cardiovascular disease and metabolic problems. In contrast, dietary patterns rich in minimally processed plants, healthy fats and quality protein lower inflammation markers, improve lipid profiles and support vitality, mood and cognitive function.[2–6][12–13].

#### Small steps:

- **Upgrade one meal:** Replace a processed meal (frozen, takeaway, packaged) with one plate built from whole foods (vegetables, quality protein, healthy fat).
- **Audit your day:** List everything you ate yesterday; circle anything with more than 5 ingredients or many you cannot pronounce, and pick one to swap this week.
- **Add, don't only remove:** Before cutting foods, commit to adding 2 extra servings of vegetables or fruit daily.





## 2. Nutrigenomics: food as information

Nutrigenomics shows that nutrients act as signals that can turn genes “up” or “down,” influencing inflammation, detoxification and metabolism.[7–11] Anti-inflammatory patterns (Mediterranean-like diets rich in plants, healthy fats and fiber) modulate gene expression toward better metabolic and brain outcomes, while pro-inflammatory patterns (high sugar, refined grains, ultra-processed fats) push gene programs toward chronic disease.[8–9]

### Small steps

- **Color rule:** Aim for at least 3 different colors of plants (e.g., dark green, orange, purple) at one main meal per day.
- **Swap one “signal”:** Replace one high-sugar, ultra-processed snack with a whole-food option (nuts + berries, veggie sticks + hummus).
- **Weekly experiment:** Choose one nutrigenomic “upgrade” (e.g., olive oil instead of seed oil, whole grains instead of white flour) and stick with it for 7 days while noticing energy, mood and digestion.

## 3. Biomarkers: how food shows up in your labs

Dietary patterns show up directly in biomarkers like hs-CRP, lipid profile, glucose/insulin, and liver enzymes.[12–17] Pro-inflammatory, high-sugar, ultra-processed diets are linked with elevated hs-CRP, IL-6, triglycerides and impaired insulin sensitivity, while anti-inflammatory diets improve these markers and reduce long-term cardiovascular and metabolic risk.[12–13][16–17]

### Small steps

- **Know your numbers:** Bookmark your latest labs (hs-CRP, fasting glucose, HbA1c, triglycerides, HDL, LDL) and track them 1–2 times per year.
- **One biomarker, one behavior:** Choose a single target (e.g., HbA1c, triglycerides) and tie it to one change (e.g., fewer sugary drinks, more fiber at breakfast).
- **Fiber focus:** Add 1 high-fiber food to two meals per day (beans, oats, flax/chia, vegetables), aiming to increase total fiber gradually.[67–72]





#### 4. Food and mitochondrial energy

Mitochondria turn fats and carbohydrates into ATP, the chemical energy that powers every cell.[18–22] Diets high in refined carbohydrates, sugar and damaged fats increase oxidative stress and mitochondrial dysfunction, contributing to fatigue, insulin resistance, neurodegeneration and metabolic disease.[18–20] In contrast, nutrient-dense whole foods and healthier fat patterns (including omega-3s and, in some contexts, ketones) support mitochondrial biogenesis and function.[19–20]

##### Small steps

- **Remove one “dirty fuel”:** Identify one high-sugar or deep-fried item you consume regularly and replace it with a whole-food snack or meal.
- **Stable energy breakfast:** Build your first meal around protein, healthy fats and fiber (e.g., eggs + avocado + vegetables) instead of refined carbohydrates.
- **Omega-3 upgrade:** Include fatty fish 1–2 times per week or add ground flax, chia or walnuts to breakfast or salads.

#### 5. Hormones, sugar, gluten and dairy

Diet affects sex hormones, insulin and inflammatory pathways.[24–29][50–56] High sugar intake and ultra-processed carbohydrates drive insulin resistance and visceral fat; gluten and modern wheat can increase intestinal permeability and systemic inflammation in susceptible individuals; conventional AI dairy and certain environmental exposures influence estrogen metabolism and hormone-sensitive conditions.[24–29][52–56]

##### Small steps

- **Sugar ceiling:** Choose one category (sugary drinks, desserts, “healthy” bars) and halve your weekly intake.[50–51]
- **Gluten experiment:** Try 2–4 weeks of gluten-free eating and note changes in digestion, energy and joint pain; reintroduce and observe differences.  
[52–54]





- **Dairy quality:** If you use dairy, test a switch to A2, goat or sheep dairy and fermented forms (yogurt, kefir) rather than conventional A1 milk and cheese.[55–56]

## 6. All calories are not equal: glycemic load and satiety

Calories from sugar and refined starch affect appetite hormones (insulin, ghrelin, leptin, GLP-1) very differently than calories from protein, fiber and healthy fats.[30–32][41–45] High-glycemic foods cause sharp glucose and insulin spikes, leading to crashes and cravings, whereas lower glycemic load meals and adequate protein/fiber help stabilize hunger and improve body composition.[31–32][41–45][60–63]

### Small steps

- **Switch one staple:** Replace white bread, white rice or sugary cereal with a lower-glycemic alternative (whole grain, legumes, oats, quinoa).
- **Plate order:** Eat vegetables first, then protein and fat, and starches/sweets last to blunt glucose spikes and improve satiety.[43–45]
- **Protein target:** Aim for roughly 1.0–1.6 g of protein per kg body weight per day (depending on activity), prioritising breakfast and lunch.[60–63]

## 7. Ultra-processed foods: why they are different

Ultra-processed foods (UPFs) dominate modern diets and are linked to obesity, type 2 diabetes, cardiovascular disease and depression. They are calorie-dense, nutrient-poor and often contain additives, emulsifiers, refined seed oils and rapidly absorbed sugars that drive inflammation, disrupt the microbiome and dysregulate appetite.[32–35]

### Small steps

- **UPF audit:** For one day, mark every item that comes from a box, bag or bottle with a long ingredient list; aim to remove or replace just one category (e.g., breakfast bars, frozen meals).





- **Perimeter rule:** Do most of your food shopping around the perimeter of the store (produce, meat, fish, eggs), limiting time in packaged aisles.
- **One whole-food snack:** Replace one daily packaged snack with fruit + nuts, vegetables + hummus, or plain yogurt + berries.

## 8. Hydration and “not drinking your calories”

Proper hydration supports cardiovascular function, cognition, energy, digestion and detoxification, and mineral content of water can influence cardiometabolic markers.[36–37] Sugary beverages (including juices) and high-alcohol intake are associated with metabolic dysfunction, microbiome disruption and increased cardiometabolic risk, while artificial sweeteners can alter the microbiome and glucose regulation.[38–40]

### Small steps

- **Daily water target:** Aim for roughly 0.5 oz (about 15 ml) of water per pound of body weight per day, adjusting for heat and exercise.[36–37]
- **Electrolyte upgrade:** Once per day, have water with a pinch of mineral salt and a squeeze of lemon instead of a sweetened drink.[36–37]
- **Liquid scan:** For one week, track all liquid calories; choose one drink category (juice, soda, sweetened coffee) to eliminate or drastically reduce.

## 9. Carbohydrates: focus on fiber and plants

High-fiber diets are linked to lower rates of constipation, improved weight management, lower cholesterol, better glycemic control and reduced cardiovascular risk.[67–71] Fiber also shapes the gut microbiota, which in turn affects metabolism, immunity and mood.[70–72]

### Small steps

- Half-plate plants: At one main meal, fill at least half the plate with non-starchy vegetables.
- Fiber ladder: Increase daily fiber intake gradually by adding one serving of legumes, whole grains, fruit or seeds every few days.[67–72]





- **Green/yellow/red:** Think “green carbs” (non-starchy veg) freely, “yellow carbs” (whole grains/beans) in moderation, “red carbs” (starchy veg, sweets) selectively.

## 10. Phytonutrients, herbs and spices

Phytonutrients (flavonoids, carotenoids, polyphenols, glucosinolates, etc.) provide antioxidant, anti-inflammatory, cardiometabolic and neuroprotective effects.[86–93] Herbs and spices like turmeric, ginger, garlic, cinnamon and oregano deliver concentrated bioactive compounds with meaningful impact on inflammation, vascular function and metabolic regulation.[73–75][78–82][85–90]

### Small steps

- **Spice habit:** Choose 2–3 spices (e.g., turmeric + black pepper, cinnamon, ginger) and use them daily in cooking or drinks.[78–81]
- **Color check:** Once per day, ask “How many plant colors did I eat?” and aim to increase by one color over the week.[86–90]
- **Bitter & sour:** Add a teaspoon of apple-cider vinegar in water with meals or use it in dressings to support glycemic control and digestion.

## 11. Supplements: when food may not be enough

Industrial farming, stress and environmental exposures can make it difficult to obtain optimal nutrient levels from diet alone.[95–96] Commonly low nutrients like omega-3s, vitamin D and magnesium are important for mitochondrial function, inflammation, mood, bone health and cardiometabolic risk.[96–100]





Small steps (with medical guidance).

- **Test, then supplement:** Check vitamin D, omega-3 index and magnesium with your clinician and use supplements to reach optimal—not just “normal”—ranges.[96–100]
- **Food-first:** Prioritise fatty fish, nuts, seeds and leafy greens even if you supplement omega-3s and magnesium.[97–100]
- **Simple baseline stack:** Discuss with your clinician whether a basic stack (vitamin D3, omega-3, magnesium) fits your context before adding more.





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