

Nutrition Basics from a Dietitian

Blood Sugar & A1C

- Diet and lifestyle can lower A1C by 1-2%, comparable to some medications.
- Type 2 diabetes is progressive — over time, insulin production decreases.
- Healthy blood sugar management relies on balanced eating, activity, and routine.

Macronutrients Analogy (The Wood Stove)

- **Carbohydrates** = kindling burns fast, making it a quick energy source.
- **Protein & Fat** = large logs burn slow, which creates sustained energy.
- All three are essential; balance is key.

Carbohydrates

- Main source of energy for the brain and muscles.
- Include **sugars, starches, and fibres** from:
 - Starches (grains, potatoes, rice, pasta, cereals)
 - Fruits and juices
 - Milk and dairy (contain lactose)
 - Sweets and baked goods (raise blood sugar rapidly)
- **Not “evil”** — choose high-fibre, whole-grain options.
- **Meal pattern:** 3 meals per day, spaced 4-6 hours apart.
- Combine **carb + protein** for stable blood sugars (e.g. apple + peanut butter, cheese + crackers, hummus + veggies).

Fibre

- Slows digestion and **flattens blood sugar spikes**.
- **Soluble fibre** forms a gel that removes sugar and cholesterol from the body.
- Aim for **10-12 g per day** from oats, barley, flax, beans, fruits, and vegetables.
- **Increase slowly** to prevent constipation.

Glycemic Index (GI)

- Ranks foods by how quickly they raise blood sugar:
 - **Low GI (green)** – best choices (slow and steady)
 - **Medium GI (yellow)** – moderate use
 - **High GI (red)** – fast sugar spikes
- Use GI charts as “stoplight guides” for grocery shopping.

Reading Food Labels

- Always check the **serving size** first.
- Focus on **total carbohydrates**, not just “sugars.”
- **Net carbs = Total carbs – Fibre** → best indicator of blood sugar impact.

Fluids

- Choose **water** or sugar-free beverages.
- **Water enhancers** with sweeteners (like Mio) are acceptable in moderation.
- Avoid sugary drinks and juices (essentially “sugar water”).
- **Coffee** can raise blood sugar slightly; moderate black or decaf is fine.

Protein

- Slows digestion and stabilizes blood sugar.
- Include **lean meats, poultry, fish**, beans, lentils, nuts, and seeds.
- **Fatty fish (e.g., tuna, salmon)** recommended twice weekly.
- Limit **processed meats** (high sodium and trans fats).

Fats

- **Unsaturated (liquid, plant-based)** = healthy (olive, canola, avocado oils).
- **Saturated (animal, solid)** = raise bad cholesterol (e.g., butter).
- **Margarine is better than butter** for cholesterol management.
- Avoid **trans fats**.
- For portioning, use the tip of your thumb

Alcohol

- New guidelines: ideally **0 drinks per week**.
- **1-2 drinks per week equates to a low risk**, beyond that increases risk for **cancer** (esp. colorectal) and **heart disease**.
- Sugary mixers raise blood sugar further.

Physical Activity

- **150 minutes per week** of moderate to vigorous aerobic exercise (e.g. brisk walking, jogging).
- Can be split into **10-minute segments**.

- Add **resistance training 2-3 times per week**.
- **No more than 2 consecutive days** without exercise.
- Even **10 minutes per day helps** — track activity to stay consistent.
- Benefits:
 - Lowers blood sugar immediately
 - Improves insulin sensitivity
 - Reduces body fat, blood pressure, and cholesterol
 - Protects heart, kidneys, eyes, and nerves
 - Enhances mood, energy, and sleep

Key Takeaways

Small, consistent changes — balancing carbs with protein, increasing fibre, choosing low-GI foods, and staying active — can dramatically improve A1C, heart health, and overall quality of life.