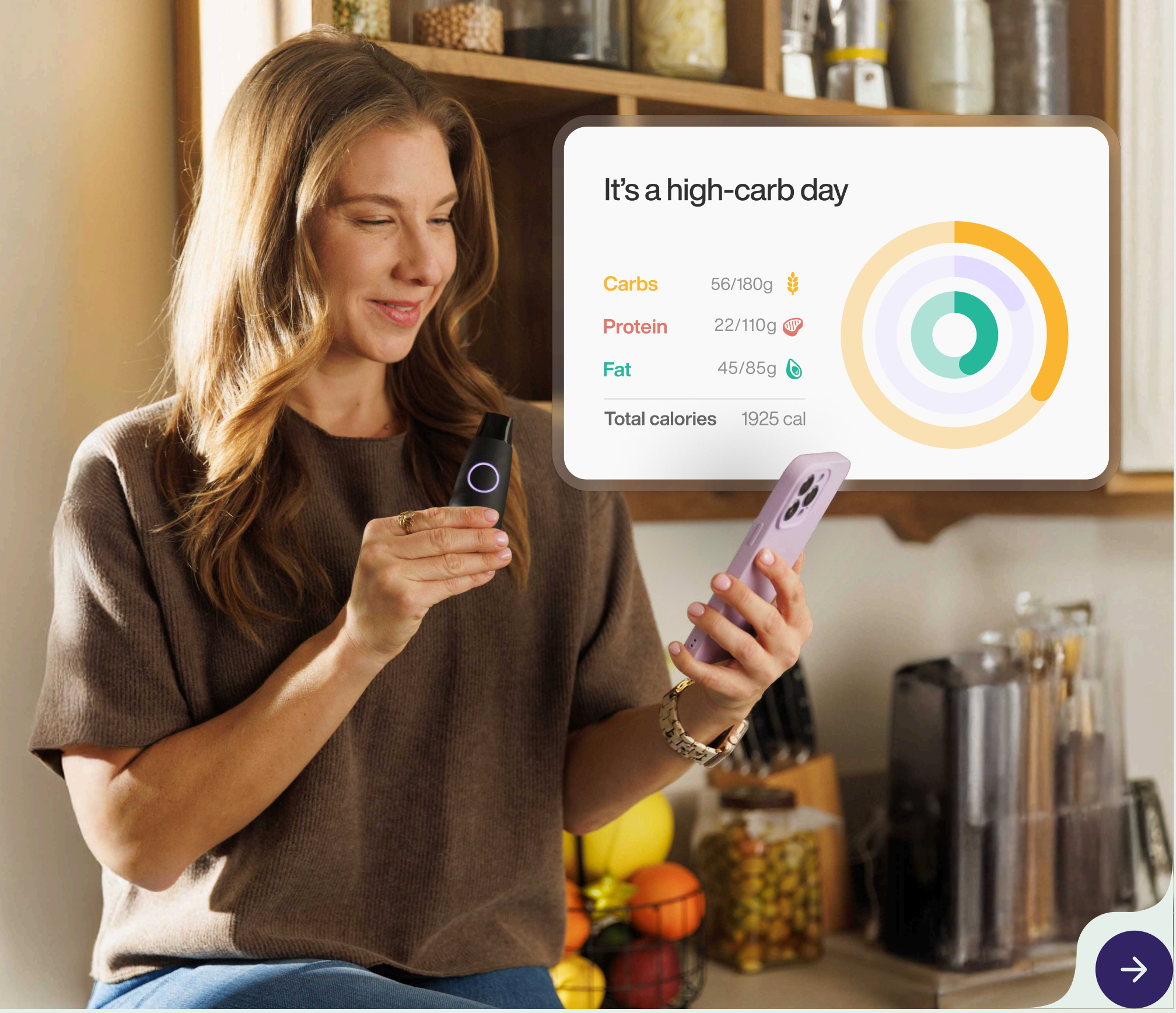


LUMEN

Carb cycling meal plan

Low-carb, moderate-carb, and high-carb meal ideas to fuel your week.

Legend

- Breakfast
- Lunch
- Snack
- Dinner
- Dessert

What are net carbs?

Net carbs are carbohydrates that can be digested and used for energy. They are calculated by subtracting the fiber content in food from the total carbs. Fiber is not included in net carbs because our bodies don’t have the enzymes to break down fiber, so it passes through our digestive system intact.

Low-carb days

80g net carbs

Greek yogurt and berries

Net carbs 15g

¾ cup Greek yogurt with mixed berries and 1 tbsp granola

Chicken and quinoa salad

Net carbs 20g

½ cup cooked quinoa, 4 oz grilled chicken breast, ½ cup diced tomatoes, cucumbers, and olive oil dressing

Apple with almond butter

Net carbs 20g

1 small apple with 1 tbsp almond butter

Salmon and veggies

Net carbs 15g

4 oz salmon, 1 cup broccoli and cauliflower, and ½ a sweet potato

Dark chocolate and almonds

Net carbs 10g

1 oz dark chocolate (75–85%) with 5 almonds

70g net carbs

Scrambled eggs with toast

2 scrambled eggs, 1 cup sautéed spinach (in 1 tsp olive oil), 1 slice whole-grain toast

Net carbs 15g

Chicken and quinoa

4 oz grilled chicken breast, 1 cup roasted zucchini, ½ cup quinoa, 1 tsp olive oil

Net carbs 20g

Apple with almond butter

1 small apple (sliced) with 1 tbsp almond butter

Net carbs 20g

Salmon with cauli mash

5 oz baked salmon, 1 cup cauliflower mash (made with 1 tsp butter), 1 cup sautéed kale

Net carbs 10g

Dark chocolate and walnuts

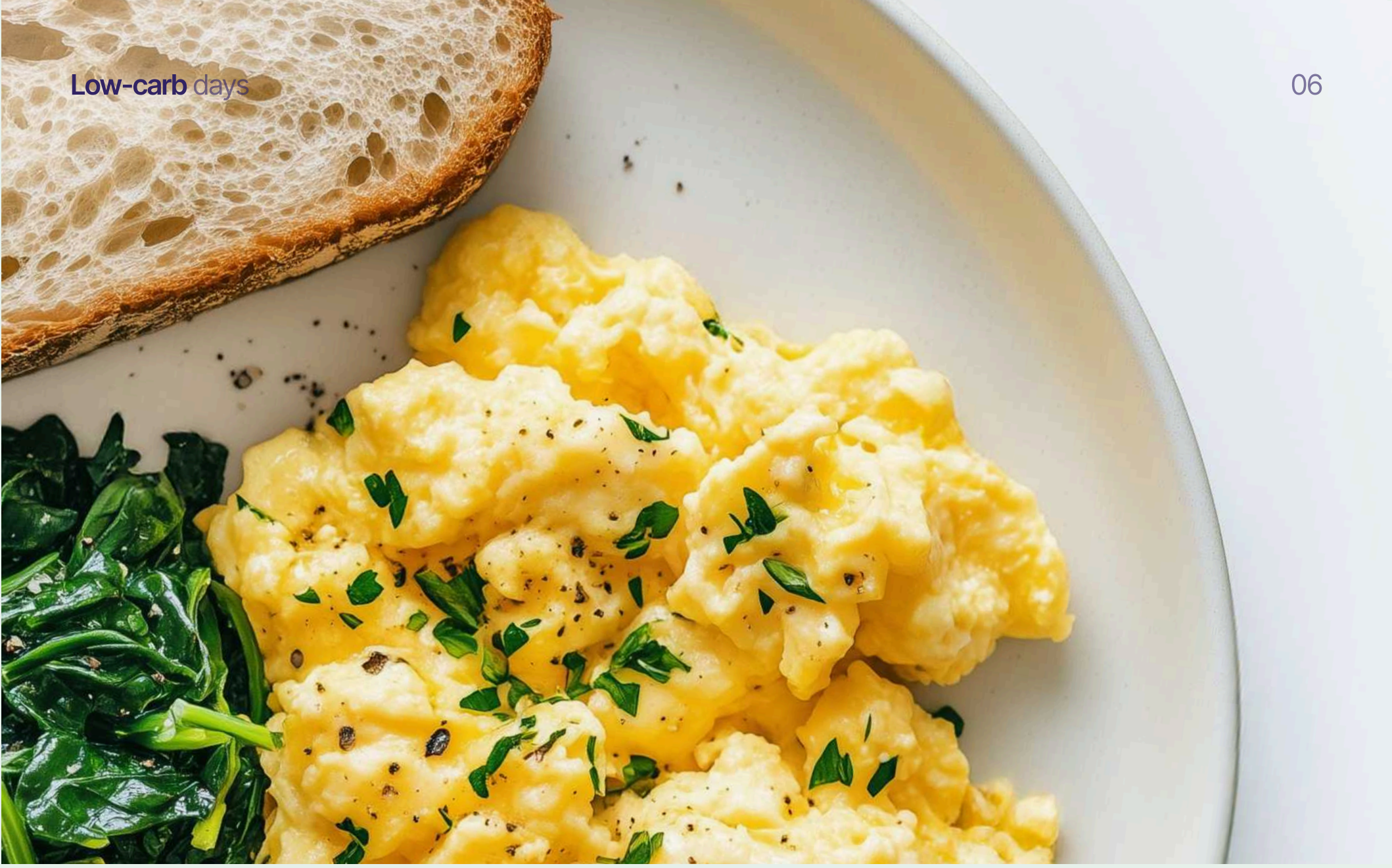
1 square (1 oz) dark chocolate (75-85%) and 5 walnuts

Net carbs 5g

How foods in this meal plan affect your metabolism

Metabolic health is regulated by mediators, including insulin sensitivity, glycogen, and cortisol, which are affected by your lifestyle choices. These mediators determine your mitochondrial functionality and, through that, your ability to lose weight and maintain health in the long term.

Read on for more information on how the foods included in this meal plan impact key mediators from a functional nutrition perspective.



Functional nutrition synergy

Muscle mass

Quinoa, chicken, yogurt, and eggs are complete proteins containing the nine essential amino acids. There are 21 different amino acids, which can be combined to create hundreds of different protein structures. Interestingly, while the body can naturally produce some amino acids, nine essential amino acids must be obtained from food. High-quality protein sources containing all essential amino acids include eggs, red meat, chicken, tofu, yogurt, quinoa, cheese, and milk. Eating adequate protein helps with muscle maintenance and repair.

Your muscles are packed with mitochondria and house most of your glycogen. This means the more muscle mass you gain, the more mitochondria and glycogen stores you'll have.

As a result, your muscles can efficiently use carbs when you need an energy boost, ensuring less glucose is stored as fat. It also helps your mitochondria burn more fat at rest or during low-intensity activities.

Cortisol

The magnesium in dark chocolate and spinach aids in muscle relaxation and recovery. Magnesium is an essential mineral involved in as many as 300 processes within the body. It modulates the stress responses and

Can help limit excess cortisol release. It also has anti-inflammatory properties that help reduce cortisol production.

Salmon's tryptophan contributes to the body's ability to produce serotonin, a neurotransmitter and hormone that regulates cortisol, influencing mood, anxiety, stress, and aggression. When we're under chronic stress, serotonin production can be compromised. Consuming tryptophan-rich foods helps produce serotonin to regulate cortisol and positively impact emotional stability, stress resilience, and overall mental health.

Managing cortisol is important because chronically elevated cortisol levels overwork your mitochondria, damaging their membranes and reducing their lifespan. It also makes your mitochondria over-dependent on carbs for fuel. Over time, they can forget how to burn fat.

Moderate-carb days

130g net carbs

Scrambled eggs with avocado toast

2 scrambled eggs, 1 cup sautéed spinach (cooked in 1 tsp olive oil), 1 slice whole-grain toast, ½ avocado

Net carbs 20g

Chicken and quinoa with asparagus

4 oz grilled chicken breast, 1 cup cooked quinoa, 1 cup roasted asparagus, ½ cup cherry tomatoes (drizzled with 1 tsp olive oil)

Net carbs 40g

Honey Greek yogurt

¾ cup Greek yogurt (unsweetened) with 1 tsp honey and 1 tbsp chia seeds

Net carbs 15g

Shrimp stir-fry

6 oz grilled shrimp stir-fry, 1 cup cooked brown rice, 1 cup zucchini (sliced), ½ cup bell peppers, ½ cup mushrooms (cooked in 1 tsp sesame oil)

Net carbs 50g

Strawberries with peanut butter

½ cup strawberries with 1 tsp peanut butter

Net carbs 5g

100g net carbs

Scrambled eggs with avocado toast

3 scrambled egg whites, 1 cup sautéed kale (in 1 tsp olive oil), 1 slice whole-grain toast, ½ avocado

Net carbs 20g

Turkey and wild rice

4 oz grilled turkey breast, ½ cup cooked wild rice, 1 cup roasted Brussels sprouts, 1 tbsp olive oil

Net carbs 25g

Cottage cheese and pear

½ cup cottage cheese, ½ cup pear (diced), 1 tsp chia seeds

Net carbs 15g

Baked cod with butternut squash

5 oz baked cod, 1 cup roasted butternut squash, 1 cup steamed asparagus, 1 tsp butter

Net carbs 30g

Dark chocolate and almonds

1 square (1 oz) dark chocolate (75-85%) with 5 almonds

Net carbs 10g

Functional nutrition synergy

Insulin sensitivity

The monounsaturated fats in avocado and the fiber in wild rice, chia seeds, and asparagus help promote stable blood sugar levels and insulin sensitivity. Insulin sensitivity refers to how much insulin is required to allow glucose into your cells. High insulin sensitivity

means your body needs only a small amount of insulin to help glucose reach your mitochondria and support energy production for daily activities. It also promotes the storage of glucose as glycogen, ensuring quick energy production when the body needs a boost. Additionally, it allows for balanced blood glucose levels and stable energy levels, enables you to eat more carbs without gaining weight, and staves off metabolic disorders.

Glycogen

Butternut squash provides complex carbs to replenish glycogen stores. Ideally, your glycogen levels should fluctuate without getting too high or too low. When your glycogen stores are just full enough, they can fuel your mitochondria quickly to provide energy boosts when needed. This is particularly important before high intensity exercise like weightlifting to avoid muscle breakdown and enhance athletic performance. Topping up your glycogen following a workout also helps with recovery and repairing muscle tissue.

High-carb days

200g net carbs

Banana walnut oatmeal

1½ cups cooked oatmeal topped with ½ sliced banana, 1 tbsp almond butter, 1 tbsp honey

Net carbs 50g

Salmon and couscous

4 oz grilled salmon, 1½ cup cooked couscous, 1 cup steamed broccoli, 1 tsp olive oil

Net carbs 55g

Berry granola yogurt

¾ cup plain Greek yogurt, ¼ cup granola, ½ cup mixed berries

Net carbs 25g

Chicken and mashed potato

6 oz roasted chicken thigh, 1 cup mashed sweet potato (made with 1 tsp butter), 1 cup green beans

Net carbs 60g

Dark chocolate and mango

2 slices mango and 1 square dark chocolate (1 oz)

Net carbs 10g

180g net carbs

Berry oatmeal

1 cup cooked oatmeal (made with water) topped with ½ cup mixed berries, 1 tbsp almond butter, 1 tsp honey

Net carbs 40g

Salmon and farro

4 oz grilled salmon, 1 cup cooked farro, 1 cup steamed broccoli, ½ cup roasted carrots (drizzled with 1 tsp olive oil)

Net carbs 45g

Almond butter and banana toast

1 slice whole-grain bread topped with 1 tbsp almond butter and ½ sliced banana

Net carbs 30g

Chicken and grilled veggies

5 oz grilled chicken breast, 1 cup roasted sweet potatoes, 1 cup green beans, 1 cup broccoli, ½ cup sautéed onions (cooked in 1 tsp olive oil)

Net carbs 55g

Baked apple and walnuts

1/2 baked apple (sprinkled with cinnamon) topped with 1 tbsp crushed walnuts

Net carbs 10g

Functional nutrition synergy

Glycogen

Natural sugars from fruits like bananas provide quick glycogen replenishment and sustained energy before and after high-intensity workouts while minimizing insulin fluctuations due to their fiber content. Couscous and honey are also fast-digesting carbohydrates ideal for replenishing glycogen to support mitochondrial health and energy production.

Insulin sensitivity

Green beans, berries, kale, broccoli, and farro are fiber-rich foods that support blood sugar stability. Fiber is a type of carbohydrate that the body cannot digest. Unlike other carbohydrates, such as sugars and starches, fiber passes through the digestive system relatively intact.

Soluble fiber forms a gel-like substance in the gastrointestinal tract, slowing the digestion and absorption of carbs. This gradual release of glucose into the bloodstream prevents sharp spikes in blood sugar and therefore insulin levels, helping to prevent insulin wear-out and insulin resistance.