

Modified Ketogenic Diet

The Modified Atkins approach — clinical-grade carb restriction without weighing every gram.



MAINLY USED FOR

Epilepsy in teens and adults, migraine, adherence

CORE RESTRICTION

10-20 g net carb/day, fat encouraged, protein and calories unlimited

EFFORT

3 of 5

01 How it works

The Modified Atkins Diet (MAD) and the Modified Ketogenic Diet were designed at Johns Hopkins to solve one problem: classic 4:1 keto works, but almost no adolescent or adult sticks with weighed meals for years.

Instead of a fixed ratio, carbohydrate is capped hard — usually 10 g/day to start, moving to 15-20 g — while fat is actively encouraged and protein and calories are left free. Ketone levels land slightly lower than classic keto but high enough for a seizure response in a large share of patients.

Because nothing is weighed, meals can be assembled from ordinary food, which is why the drop-out rate is dramatically lower than the classic protocol.

02 Nutrition at a glance

The Modified Atkins pattern keeps the carbohydrate ceiling but drops the weighing, so numbers are limits rather than targets.

Net carbohydrate	10-20 g/day	Adults usually start at 20 g, children at 10 g
Fat	Encouraged, not weighed	Roughly a 1:1 to 2:1 fat ratio in practice
Protein	Unrestricted	The main difference from classic keto
Calories	Not counted	Appetite usually does the work
Fluid and salt	2-3 L, 3-5 g sodium	Same losses as classic keto

Nutrients that often run short: Calcium · Vitamin D · Magnesium · Potassium · Fibre · B vitamins.

A word on electrolytes

The same salt-and-water flush happens here as on classic keto, just a little more gently. Aim for around 3-4 g of sodium a day, add a magnesium supplement if you cramp at night, and eat something potassium-rich daily. Broth, olives and salted nuts do most of the work without any special product. If you have kidney disease, heart failure or high blood pressure, or you take a diuretic, ACE inhibitor or ARB, set your targets with your clinician — and avoid potassium-based salt substitutes unless told they are safe for you.

03 Key cautions

The things that most often catch people out — worth raising at your next appointment.

TALK TO A CLINICIAN

Medication review comes first

As with classic keto, glucose-lowering drugs and blood pressure medication often need reducing before you start.

WORTH TESTING

Multivitamin is standard, not optional

Epilepsy clinics prescribe a multivitamin plus calcium and vitamin D from day one because the food list cannot cover them.

KEEP AN EYE ON

Carb creep is the usual failure

Without weighing, portions drift. If seizures or symptoms return after a good spell, re-count for a week before changing anything else.

KEEP AN EYE ON

Constipation is near-universal

Plan fibre, fluid and magnesium in from the start rather than treating it later.

04 Conditions it is used for

- Drug-resistant epilepsy in adolescents and adults
- Children who cannot tolerate or maintain classic ketogenic ratios
- Chronic migraine prophylaxis, where evidence is growing
- Some mitochondrial and metabolic conditions, alongside specialist care
- Bipolar disorder and treatment-resistant depression are under active trial, not yet standard care

05 Your food lists

Eat freely

Fat first

- Butter
- Olive and avocado oil
- Heavy cream
- Mayonnaise
- Coconut oil
- MCT oil in ramped doses

Protein

- Eggs
- All meat and poultry
- Fish and shellfish
- Cheese

Vegetables

- Leafy greens
- Broccoli
- Cauliflower
- Green beans
- Peppers in small amounts
- Cucumber
- Celery

Eat with care

Count these against your 15 g

- Nuts and nut butters — count every gram
- Berries, a few at a time
- Tomato and onion in cooking
- Cream, which carries ~1 g carb per 2 tbsp
- Carb-free medication vehicles — many syrups and chewables carry sugar

Best to skip

Everything starchy

- Bread
- Rice
- Pasta
- Potato
- Corn
- Cereal
- Crackers

Sugar in all forms

- Sweets
- Juice
- Soda
- Sweetened yoghurt
- Sports drinks
- Honey and syrups

Fruit beyond berries

- Banana
- Apple
- Orange
- Grapes
- Dried fruit

06 Three days of meals

Day 1

Breakfast: Two eggs fried in butter with cheddar, one slice of bacon.

Lunch: Chicken caesar without croutons, extra dressing.

Dinner: Burger patty topped with butter, green beans almondine.

Snack: Pork rinds with cream cheese dip.

Day 2

Breakfast: MCT oil in coffee plus a two-egg omelette with feta and spinach.

Lunch: Deli turkey rolled with avocado and mayonnaise, cucumber spears.

Dinner: Pan-seared cod in brown butter, roasted cauliflower.

Snack: Half an avocado with salt and olive oil.

Day 3

Breakfast: Full-fat cottage cheese with a tablespoon of flax and cinnamon.

Lunch: Egg salad in lettuce cups with olives.

Dinner: Sausages with buttered cabbage and mustard.

Snack: Cheese crisps.

07 Getting started

- Agree the carb target with your neurologist or epilepsy dietitian — 10 g for the first month is the usual clinical start.
- Audit every medication and supplement for carbohydrate. Liquid formulations are the classic hidden source in seizure patients.
- Keep a seizure diary from day one; the point of the diet is a measurable change, not a number on a scale.
- Supplement a multivitamin, calcium, vitamin D and often carnitine — this is standard in clinical programmes.
- Plan for the three-month review. If there is no response by then, most clinics reassess rather than push on indefinitely.

08 Common mistakes

- Treating it as 'keto but casual' and letting carbs drift to 40 g, which is below the therapeutic threshold for most people.
- Not raising fat when protein goes up — ketone levels quietly fall.
- Starting MCT oil at full dose and getting cramping and diarrhoea. Ramp it over two weeks.
- Stopping antiseizure medication independently. Dose changes belong with the prescriber.
- Ignoring constipation until it becomes a problem; low fibre plus low volume needs proactive management.

09 Questions people ask

How is this different from classic keto?

Classic keto weighs every meal to a fat-to-everything-else ratio. Modified keto caps carbohydrate only, and lets protein and calories run free. Similar seizure outcomes in adolescents and adults, far better adherence.

Does it work as well?

In adolescents and adults, studies show comparable seizure reduction rates. In infants and young children, the classic ratio diet is still generally preferred.

Can I use it just for migraine?

There is promising evidence but no consensus protocol. Many people trial three months at 20 g net carb and track headache days before deciding.

10 How it overlaps with other diets

- Easiest keto variant to combine with gluten-free, since it is already grain free.
- Combines cleanly with low FODMAP: both restrict fermentable carbohydrate, and the fat-forward emphasis is unaffected.
- If combining with low oxalate, avoid the almond-flour baking that most modified keto recipes lean on.

This guide is educational and is not medical advice. Therapeutic diets can change how medication works and can leave gaps in nutrition, so please plan any of this with your doctor or a registered dietitian.