

YIN SHI

Metabolism & weight

Weight management

Professional dietetics sheet

The most common question in dietetic practice, and the one where the evidence most contradicts received ideas: no diet is superior, satiety and the food environment command everything, and muscle is the first metabolic asset.

UNDERSTANDING THE CONDITION

Weight management

Weight management is not a pathology but the most common request in the practice: overweight, obesity, regain after dieting, or a simple wish for stabilisation. The modern dietetic approach starts from a demonstrated finding: it is not a problem of willpower but of signals (satiety, energy density, food environment, sleep) on a variable metabolic terrain.

SUGGESTIVE SIGNS

- Progressive overweight (BMI ≥ 25) or obesity (BMI ≥ 30)
- Weight regain after loss (yoyo cycle)
- Cravings, snacking, emotional eating
- Associated insulin resistance or prediabetes
- Sedentary lifestyle, insufficient or poor-quality sleep
- History of repeated restrictions

THE FAVOURABLE TERRAIN

The terrain combines a diet rich in ultra-processed products (+500 kcal/day spontaneous in Hall's controlled trial, Cell Metab 2019), a high energy density of meals, underexploited satiety, short sleep (Nedeltcheva, Ann Intern Med, 2010) and sometimes an adaptive metabolic brake after repeated restrictions.

THE PROFILES

One plan per subtype

Three dominant profiles cover the situations encountered: the main mechanism changes, and with it the first lever. The same patient may move from one to another.

SUBTYPE	DISTINCTIVE SIGNS	QUICK SIGNAL
The 'environment' profile: easy calories	Progressive gain, diet rich in ready meals and ultra-processed products, little real hunger but many intakes	***weight climbs without feeling like eating more***
The 'cravings' profile: emotional hunger	Violent hunger peaks in the evening, snacking linked to stress or emotions, guilt after eating	***hunger that arrives in the evening, when the day has emptied***
The 'metabolic brake' profile: insulin resistance	Abdominal overweight, disturbed blood sugar or triglycerides, post-meal fatigue, weight loss difficult despite effort	***a body that resists, even to real effort***
The 'post-partum' profile: retention after the baby	Weight retention at 6-12 months post-partum, major fatigue, fragmented sleep, sometimes breastfeeding ongoing	***the body has not finished returning, and that is normal***

The 'cravings' profile often precedes the 'environment' profile, and the 'metabolic brake' arrives when repeated restrictions have adapted expenditure. The yoyo patient is frequently a mixture of all three: treat the dominant mechanism of the moment, not the weight in absolute terms. The shape weight is not a number but a lasting balance.

1 The 'environment' profile: easy calories · *the most common*

The profile where the environment does the work: ultra-processed foods push you to eat faster, denser and without proportional satiety. The goal is not to count but to change the quality of the signals: energy density, intake speed, protein.

FOOD	WHY	PRACTICAL ADVICE
Chicken	Lean protein: the most calorie-efficient satiety	*1 portion at each main meal*
Chicken egg	Protein breakfast demonstrated against afternoon snacking	*2 eggs in the morning*
Potato	Champion of Holt's satiety index (Eur J Clin Nutr, 1995): 3 times white bread's satiety at equal calories	*Boiled or steamed, not fried*
Oats	Beta-glucans + volume: the porridge that fills the morning	*Unsweetened porridge*
Green bean	Volume + fibre at very low calorie density	*Half of the evening plate*
Courgette	The volume vegetable that dilutes the meal	*In soup or stir-fried*
Yogurt	Protein + calcium: a satiating, low-cost snack	*Plain*
Adzuki	Pulse: protein + fibre = lasting satiety	*In soup or salad, 3 times a week*
Apple	Whole fruit: chewing + pectin signal satiety	*Whole, never as juice*
Button Mushroom	Volume and umami at near-zero calories: an entrée soup reduces the meal's total intake	*As a starter soup for the main meal*

TO LIMIT	REASON
Ultra-processed foods	+500 kcal/day spontaneous in Hall's trial: the profile's first lever
Sugary drinks	Liquid calories without a satiety signal
Available snacking	Visible availability commands intake: out of sight, out of mouth
Alcohol	Empty calories + disinhibition of choices
Meals eaten standing or in a hurry	Speed overtakes the satiety signal

GOLDEN RULE

Do not change the quantity, change the signals: same appetite, fewer calories.

WHAT THE RESEARCH SAYS

Hall's controlled trial showed ultra-processed foods drive ~500 kcal/day more spontaneous intake (Cell Metab, 2019). Holt's satiety index ranks boiled potato first: 3 times more satiating than white bread at equal calories (Eur J Clin Nutr, 1995). Two large glasses of water before a meal increase weight loss by 44% (Dennis, Obesity, 2010). Protein at every meal reduces evening hunger more durably than any restriction (Leidy et al., Am J Clin Nutr, 2015).

2 The 'cravings' profile: emotional hunger · *the most exhausting*

The profile where hunger is not metabolic but regulatory: food soothes the emotion, then guilt feeds restriction, which feeds the craving. The goal is to stabilise blood sugar and serotonin during the day, separate hunger from emotion, and break the restriction-binge cycle.

FOOD	WHY	PRACTICAL ADVICE
Chicken egg	A protein breakfast reduces evening hunger	*Non-negotiable in the morning*
Chicken	Tryptophan + protein satiety	*At the midday meal*
Yogurt	A protein snack that cuts the evening craving	*Plain, 4-5 pm*
Walnut	Tryptophan + omega-3 + chewing time: the snack that soothes	*5 kernels, no more, pre-portioned*
Banana	Controlled carbohydrate + B6: the gentle answer to the craving	*1 in case of a peak, with protein*
Mint	An infusion that cuts the oral stimulus without feeding	*As an evening tisane*
Vervain	The evening ritual that replaces the cupboard	*Bedtime tisane*
Chicory, Frisée, Escarole	Bitterness: the signal that ends hunger	*In salad or tisane*
Apple	Long chewing: the time for the signal to arrive	*Whole*
Tofu (soy cheese)	A gentle, low-density protein: the evening snack that fills	*Plain or soy, not fried*

TO LIMIT	REASON
Severe calorie restriction during the day	Skipping the morning meal is paid for in evening cravings: the vicious circle
Sweets stocked at home	Sweets stocked at home: emotion seeks the fastest solution, do not leave it available
Alcohol	Disinhibition + cravings: the double door into bingeing
Post-binge "compensatory" eating	'Compensatory' eating after a binge feeds the cycle
Television or a screen during meals	Television or a screen during meals: distraction dissociates intake from satiety

GOLDEN RULE

You do not beat cravings: you prevent them upstream, through the day you have eaten.

WHAT THE RESEARCH SAYS

Chronic restriction is the first factor in regain: the meta-analysis shows strict diets fail by cycle (Johnston, JAMA 2014). A protein breakfast reduces evening appetite (Leidy et al., Am J Clin Nutr, 2013). Short sleep increases hunger and caloric choices (Nedeltcheva, Ann Intern Med, 2010). Emotional eating is first about recognition and non-food strategies.

3 The 'metabolic brake' profile: insulin resistance · *the most medical*

The profile where metabolism has adapted: insulin resistance, thermogenic adaptation after dieting, sometimes prediabetes. The goal is no longer eating less but making metabolism work better: protein, fibre, nutrient order, muscle exercise.

FOOD	WHY	PRACTICAL ADVICE
Barley	Beta-glucans: the best-documented post-prandial blood sugar of cereals	*As grain or bread, the carbohydrate base*
Oats	Beta-glucans + soluble fibre: the profile's breakfast	*Unsweetened porridge*
Adzuki	A pulse with a low glycaemic index + protein	*3 times a week*
Sardine	Omega-3 + protein: muscle and insulin like the same things	*2 times a week*
Mackerel	The fatty fish of the metabolic profile	*In rotation*
Chicken	Protein that protects muscle during weight loss	*Possible daily*
Chicken egg	Protein breakfast: stable morning blood sugar	*Daily*
Spinach	Volume + fibre + insulin's magnesium	*Daily*
Vinegar	Acetic acid moderates post-prandial blood sugar in trials	*1 tbsp in vinaigrette before the meal*
Buckwheat	Complete protein + low glycaemic index + rutin	*As grain or pancakes, the profile's cereal*

TO LIMIT	REASON
Sugars and sweetened products	Sugars and sweetened products: the first amplifier of insulin resistance
Refined starches in excess	Refined starches in excess: repeated glycaemic peaks, the profile's fuel
Ultra-processed foods	Ultra-processed foods: density + speed + additives, all that derails metabolism
Alcohol	Hypertriglyceridaemic + glycaemic disruptor
Chronic restriction without reintroduction	Chronic restriction without reintroduction: metabolic adaptation, the body economises on what was lost

GOLDEN RULE

It is not about eating less, but about making metabolism, muscle and blood sugar do the work.

WHAT THE RESEARCH SAYS

Losing 10-15% induced remission of type 2 diabetes in the DiRECT trial (Lean et al., Lancet, 2018): proof that metabolism re-conditions itself. Intermittent fasting performs close to continuous deficit in meta-analyses (Patikorn et al., JAMA Netw Open, 2021). The post-meal walk and the vegetables-protein-carbohydrates order flatten blood sugar. Muscle loss is the profile's enemy.

4 The 'post-partum' profile: retention after the baby · *the situation that requires gentleness and patience*

The profile where no classic diet applies: lactation forbids restriction, sleep deprivation pushes toward cravings, and the recovery window is real but slow. The goal is maximum nutritional density within the volumes eaten: feed the mother so she can feed, while letting the body find its balance.

FOOD	WHY	PRACTICAL ADVICE
Chicken egg	Choline + complete protein: the star nutrient of lactation	*2 eggs a day possible*
Sardine	DHA + calcium + vitamin D: the post-partum fish (low mercury)	*2 to 3 times a week*
Oats	The traditional porridge of lactation, fibre + lasting energy	*Porridge at breakfast*
Chicken	Protein for tissue repair and satiety	*In broth or stewed*
Spinach	Folate + iron + magnesium: cover the losses of pregnancy	*200 g cooked, regular*
Walnut	One-hand snack: the breastfeeding mother's pick-me-up	*A handful, always within reach*
Banana	A quick snack that fills the hunger of short nights	*As a snack, with nuts*
Yogurt	Calcium + protein: the easy post-partum snack	*Plain, 1 to 2 a day*
Millet	A gentle starch, plant iron, good digestive tolerance	*In porridge in the morning*
Carrot	Beta-carotene + volume at very low calorie cost	*Raw to dip or cooked*

TO LIMIT	REASON
Calorie restriction during lactation	Calorie restriction during lactation: risk to milk production and the mother's nutritional status, deficit only after weaning or medical advice
Alcohol	Passes into breast milk: complete avoidance during breastfeeding
Coffee beyond 2-3 cups	Passes into milk, worsens the infant's already fragmented sleep
Ultra-processed foods	The most tempting food comfort but the least nourishing when time is short
Comparison with recovery standards	Each body has its own timeline: social pressure is the profile's first enemy

GOLDEN RULE

Post-partum is not a test of willpower: it is a convalescence that food accompanies, never a diet that jolts it.

WHAT THE RESEARCH SAYS

Average weight retention at 12 months post-partum is in the order of a few kilos and varies enormously; lactation has a modest and variable effect on loss in studies. Energy intake during breastfeeding must remain covered (needs increase): any restriction falls under medical advice. The profile's real lever is time: the pressure to 'bounce back' quickly is a social product, not a medical emergency.

CROSS-CUTTING

What applies to all profiles

The 8 gestures that hold whatever the profile, the foundation the literature has verified, without diet or prohibition.

- Eat protein at every meal: satiety and muscle mass are the same lever
- Start the meal with vegetables or soup: nutrient order modulates blood sugar and satiety
- Replace sugary drinks with water: the easiest deficit to create, without changing anything else
- Walk 20-30 minutes a day, ideally after the meal: activity acts on blood sugar and metabolism
- Sleep 7 to 9 hours: short sleep increases hunger and caloric choices in a demonstrated way
- Never skip the protein breakfast or under-eat during the day: the evening craving is a debt from the morning
- Reduce the proportion of ultra-processed foods before counting anything
- Aim for a 5-10% loss and maintain it: that is the medically relevant goal, not the magazine weight

IN THE KITCHEN

Recipes that fit

The meals that fill

Dishes with high satiety and moderate density, that fill the plate without filling the calories.

• Azuki bean salad, crunchy vegetables and sesame vinaigrette

• Savory oat congee with mushrooms and ginger

• Fish soup with black mushrooms and lemongrass

• Green beans stir-fried with garlic and dill

• Vegetable curry with dill

• Traditional Scottish porridge

The light, fresh meals

For hot days or evening meals where lightness is wanted.

• Cucumber, yoghurt and basil salad

• Apple compote with cinnamon

• Summer vegetable aspic

• Cold oat salad with grilled vegetables

• Canh Chua Ca: sweet-sour fish soup with dill

• Chard stir-fried with sesame and soy sauce (chard ohitashi)

NOTES FOR THE PRACTITIONER

• A thinking aid intended for nutrition professionals: it replaces neither medical diagnosis nor clinical judgement. Overweight is a risk factor, not a diagnosis; explore causes (medication, thyroid, PCOS, depression) if atypical.

• Signs requiring medical advice: unexplained weight loss, bulimia or compensatory behaviours, anorexia, suspected eating disorder, severe obesity (BMI ≥ 35) or comorbidities, child or adolescent, pregnancy.

• Key references: ultra-processed foods (Hall et al., Cell Metab, 2019); satiety index (Holt et al., Eur J Clin Nutr, 1995); water before meals (Dennis et al., Obesity, 2010); sleep (Nedeltcheva et al., Ann Intern Med, 2010); diet equivalence (Johnston et al., JAMA, 2014); T2D remission (Lean et al., Lancet, 2018); fasting (Patikorn et al., JAMA Netw Open, 2021).

• Strategy: understand the dominant mechanism before any prescription; stabilise the signals (satiety, meal times, sleep) before counting; aim for the lasting rather than the fast; never promise a weight.