Why do I gain weight so easily?

Understanding the metabolic science behind obesity

Southern Weight Loss | Mr Mark Grant | Bariatric Surgeon Dunedin, Otago, Southland

One of the most common questions we hear at Southern Weight Loss is:

“I don’t eat more than other people. So why do I gain weight so easily?”

For many people across Dunedin, Otago, Queenstown and Southland, this question carries years, sometimes decades, of frustration and self-blame.

Modern metabolic research shows something important:

In many people with obesity, the issue is not simply how much food is eaten, it is how the body handles energy once it is there.

This shifts obesity from a willpower problem to a physiological one.

The body is designed to defend weight

The average adult gains approximately 0.3 kg per year.
Considering we consume over a million calories annually, that precision is extraordinary.

That level of weight stability cannot be explained by discipline alone. It requires an automatic biological system.

The human body constantly:

- Adjusts energy expenditure
- Balances intake with output
- Compensates for short-term overeating

In metabolically healthy individuals, if calorie intake increases briefly, the body often increases energy expenditure to prevent fat gain.

One of the key mechanisms involved is **diet-induced thermogenesis (DIT)**, the process of burning calories as heat after eating.

What is Diet-Induced Thermogenesis?

After a meal, metabolism rises. Heat is produced as food is digested and processed.

In lean individuals, this increase in energy expenditure can be substantial. Some people can overeat for short periods and gain very little weight because their bodies “burn off” excess calories efficiently.

Research suggests there are large genetic differences in this response. Twin overfeeding studies demonstrate that some individuals convert little excess energy into fat, while others store significantly more.

Heritability estimates for obesity range between 40–80%, depending on the population studied (Maes et al., 1997; Locke et al., 2015).

Genetics influence:

- Appetite regulation
- Insulin sensitivity
- Energy expenditure
- Thermogenic capacity

That is biology **not character.**

What happens in obesity?

A key concept emerging from metabolic research is this:

In severe obesity, thermogenesis appears to be impaired.

In practical terms:

- The body does not increase heat production appropriately after meals
- More calories are directed toward fat storage
- Energy conservation becomes more efficient

Several consistent findings support this:

1. Reduced thermic effect of food

Individuals with obesity may produce roughly half as much post-meal heat compared to lean individuals.

2. Lower energy needs after weight loss

After losing weight, people who have previously lived with obesity often require up to 25% fewer calories than someone of the same weight who has never been obese.

This is why weight maintenance feels disproportionately difficult.

3. Increased metabolic efficiency

Some studies show ex-obese individuals require approximately 15% less energy for the same physical activity. (Rosenbaum & Leibel, 2010).

The body becomes highly efficient at conserving fuel.

Unfortunately, that efficiency promotes fat storage.

The “Narrow Metabolic Margin” problem

In metabolically healthy individuals, weight may remain stable across a relatively wide calorie range.

For example:

If someone requires 2,000 kcal daily, they may remain stable between 1,500 and 2,500 kcal due to effective thermogenesis.

If thermogenesis is impaired, that stable window narrows dramatically.

Weight stability might only occur between approximately 1,100 and 1,700 kcal.

Above that range, fat accumulation occurs.

This means a “normal” diet for one person may lead to weight gain in another.

This is physiology, **not failure.**

Why dieting alone often fails

When calorie restriction begins, two powerful biological adaptations occur:

1. Basal metabolic rate decreases
2. Thermogenesis decreases further

These adaptations can persist for years (Sumithran et al., 2011).

The body actively defends its previous weight.

Energy expenditure drops. Hunger hormones rise. Calorie requirements shrink further.

This explains why many people across Otago and Southland experience repeated dieting cycles with limited long-term success.

The biology resists.

What Bariatric surgery taught us

One of the most important insights from bariatric surgery is this:

Durable weight loss requires physiological change, not just calorie restriction.

When researchers measured calorie intake in patients with severe obesity, intake was often comparable to non-obese individuals.

The difference was metabolic handling.

Procedures such as:

- Gastric Bypass
- Sleeve Gastrectomy

do far more than reduce stomach size.

They alter metabolic physiology.

How surgery changes physiology

Reduced calorie absorption

After gastric bypass, long-term calorie absorption may reduce to 60–70% of intake.

Improved insulin sensitivity

Insulin levels fall dramatically after surgery, improving glucose handling and reducing fat storage signals.

In fact Type 2 diabetes remission often occurs within days to weeks after surgery, prior to significant weight loss (Mingrone et al., 2012).

Changes in gut hormones

Levels of hormones such as GLP-1 increase, improving appetite regulation and insulin response.

Improved energy expenditure

Some studies demonstrate preservation, or partial restoration of resting metabolic rate after surgery.

The net result:
Metabolic handling of calories improves.

Where do modern weight loss medications fit?

Newer medications such as:

- Semaglutide
- Tirzepatide

also work by modifying physiology.

They:

- Enhance GLP-1 signalling
- Improve insulin sensitivity
- Reduce appetite
- Influence energy regulation

Again, the principle is consistent:

Changing biology produces better outcomes than relying on willpower alone.

Clinical trials demonstrate mean total body weight loss ranging from 15–22% depending on dose and duration (Wilding et al., 2021; Jastreboff et al., 2022).

Reframing obesity as a chronic metabolic disease

The core metabolic insight is this:

People with severe obesity may have an impaired ability to disperse excess calories as heat.

Instead of turning up the metabolic “furnace” after eating, the body stores surplus energy.

This reframes obesity as:

- A chronic metabolic condition
- With genetic and hormonal drivers
- Requiring structured treatment

Not blame.

A Southern Weight Loss approach

At **Southern Weight Loss**, led by **Mr Mark Grant, Bariatric surgeon in Dunedin**, we approach obesity as a medical condition grounded in metabolic science.

We provide evidence-based care for patients across:

- Dunedin
- Otago
- Southland
- Queenstown
- Wanaka
- Invercargill

Treatment options may include:

- Structured nutritional therapy
- Psychological support
- Modern medical therapy (GLP-1 based treatment)
- Bariatric surgery

The appropriate strategy depends on:

- Your metabolic profile
- Co-existing conditions (type 2 diabetes, reflux, sleep apnoea)
- Long-term health goals

Why this matters

If you feel you gain weight easily despite not overeating:

You are not lazy.
You are not lacking discipline.
You are not broken.

You may:

- Burn fewer calories after meals
- Require fewer calories to maintain weight
- Experience aggressive metabolic adaptation during dieting

That is physiology.

And physiology can be treated.

Final thoughts

The outdated narrative that obesity is simply about overeating does not align with decades of metabolic research or clinical experience.

Many individuals with severe obesity:

- Produce less heat after eating
- Conserve energy more efficiently
- Have a narrower calorie range for weight stability
- Experience stronger metabolic adaptation during dieting

Understanding this replaces stigma with science.

And science allows us to choose treatments that work.

If you would like a structured, medically grounded discussion about weight loss options in Dunedin, Otago or Southland, we are here to help.

Because obesity is not a failure of willpower.

It is altered physiology.

And altered physiology can be managed with the right support.