Medical nutrition therapy

What is medical nutrition therapy (MNT)?

Medical nutrition therapy (MNT) is a science-based method that aims to prevent or manage disease through targeted nutrients, rather than pharmaceutical drugs. It is the result of more than ten years of clinical research conducted in both Swedish and international laboratories. MNT focuses on how specific nutrients can influence hormonal balance, appetite control, and blood sugar regulation. At Indevex, we developed Preload® Balance as a therapy that applies these principles. By taking a small amount of concentrated nutrients before a meal, the body is prepared for the upcoming rise in blood sugar. This helps stabilize the post-meal glucose response and can reduce the need for high doses of insulin or other medications.

Hunger, satiety and hormone regulation

Hunger and satiety are two of the most essential biological signals in the body. Hunger drives us to seek food, while satiety tells us we've had enough. There are two types of satiety: the immediate feeling of fullness during a meal, and the sustained feeling between meals. Both are important for understanding how medical nutrition therapy can positively affect our eating behaviour. One key mechanism is the stretching of the stomach. When the stomach expands, it sends signals to the brain indicating fullness. Fiber, protein, and fat slow down gastric emptying, enhancing the sense of satiety. In contrast, liquid foods like soda pass quickly through the stomach, providing less satiety than solid foods with the same energy content.

Hormones involved in satiety

Food also triggers the release of several hormones that regulate hunger and fullness. Two of the most important are:

- **Ghrelin**, known as the “hunger hormone,” is produced in the stomach and increases before meals.
- **Leptin**, known as the “satiety hormone,” is released by fat tissue and signals the brain when the body has sufficient energy.

These hormones not only influence our conscious experience of hunger but also play a key role in how the body distributes and uses nutrients.

When food reaches the small intestine, additional hormones are released that signal satiety to the brain’s appetite-regulating centre. Insulin is also produced, which helps control blood sugar levels and further influences appetite. Maintaining a balance between these hormones is essential for healthy eating habits.

Why this matters for nutrition therapy

By designing meals and products with the right combination of nutrients, we can support the body’s natural satiety signals and reduce the likelihood of overeating. This is the scientific foundation behind the nutrition mix NGC®