

# HEALTHY FAT CELLS:

## HOW THEY KEEP YOUR METABOLISM BALANCED

**Not All Fat Is the Same:** In a healthy body, fat cells are dynamic energy managers - storing fuel when you eat and releasing it when you need it.

### Smart Energy Managers

#### Store When You Eat, Release When You Move

- Save extra fuel as triglycerides after meals.
- Release fatty acids for energy during fasting or activity.
- Keep blood sugar steady by switching roles with ease.

### Hormone Helpers

#### Signals That Support Whole-Body Health

- Send hormones like leptin and adiponectin to guide appetite and insulin sensitivity.
- Reduce unnecessary inflammation and help regulate metabolism.

### Calm & Flexible Tissue

#### Low Inflammation = High Metabolic Flexibility

- Good blood flow and oxygen keep mitochondria active.
- Few immune cells = naturally low inflammation.
- Most fat sits under the skin (subcutaneous), the safest storage site.

### Built to Adapt

#### Healthy Growth Without Strain

- Add new fat cells (hyperplasia) and gently enlarge existing ones (hypertrophy) as needed.
- Maintain blood vessel growth for steady oxygen and nutrients.
- Mobilize stored fat efficiently, preventing buildup in organs like the liver or muscle.