

A Scientific Guide to Preserving Lean Mass

The Balanced GLP-1 Full-Body Programme

A 4-Week Progressive Curriculum for Total-Body
Muscular Preservation and Metabolic Support

Prepared For: Health and Fitness Optimisation

Focus: Comprehensive Muscular Preservation, Metabolic Rate Support,
and Balanced Biomechanics

Duration: 40-50 Minutes | 2-3 Times Per Week



Welcome

Welcome to the programme! We are incredibly excited to support you as you embark on this next phase of your health and wellbeing journey. Combining resistance training with GLP-1 therapy is one of the most proactive, scientifically sound steps you can take to protect your lean muscle mass, support your metabolic rate, and build lasting functional strength. This curriculum has been purposefully structured to fit efficiently into your day, ensuring you get maximum physical benefit without overwhelming your schedule or energy levels. Remember to move at your own pace, listen to your body, and enjoy the process of becoming stronger and more resilient.

Disclaimer

The following programme is for educational and informational purposes only. GLP-1 receptor agonists can significantly impact energy levels, hydration, gastrointestinal comfort, and metabolic rate. Before commencing any new resistance training or high-intensity exercise regime, please consult your medical practitioner, especially if you experience side effects such as nausea, dizziness, or profound fatigue.

Why Resistance Training is Essential During GLP-1 Therapy

When using GLP-1 receptor agonists (such as semaglutide or tirzepatide), weight loss is often rapid. However, a significant portion of this weight loss can come from lean muscle mass rather than just fat tissue if the body is not given a structural reason to preserve it. This loss of muscle tissue can lower your resting metabolic rate, making long-term weight management more challenging, and can impact daily physical functional strength.

To ensure balanced body composition and joint safety, this updated programme evenly distributes mechanical stress across all major muscle groups: Chest, Back, Legs (Quadriceps/Glutes), Posterior Chain (Hamstrings/Lower Back), and Core. By placing a load on these distinct regions, you signal to your body to preserve muscle globally while prioritising fat loss. Furthermore, resistance training enhances insulin sensitivity, improves joint stability, and supports bone mineral density, which can be affected during periods of rapid weight loss.

Alongside structured training, prioritising proper nutrition and hydration is the cornerstone of protecting your lean mass and managing your energy. Ensuring you consume enough high-quality protein gives your body the necessary building blocks to repair and maintain muscle tissue, which is especially critical during periods of rapid weight loss. Concurrently, incorporating plenty of dietary fibre supports gut health and digestive comfort, helping to smooth out the gastrointestinal changes often associated with GLP-1 medications.

Finally, because these therapies can significantly dampen your natural thirst signals, making a conscious effort to stay thoroughly hydrated throughout the day is essential for sustaining workout performance, maintaining cellular health, and preventing premature fatigue.

Programme Overview & Principles

This is a Full-Body Programme designed to be performed 2 to 3 times per week with at least one rest day between sessions.

- **Total Time:** 40–50 minutes (including warm-up).
- **Structure:** A time-efficient "superset" block structure to keep the heart rate elevated while maximising muscular stimulation within a short window.
- **Tempo:** Control the lowering phase of every exercise for 2–3 seconds to maximise muscle fibre recruitment and protect joints.
- **Hydration Note:** GLP-1 medications can suppress thirst. Ensure you sip water throughout the 45-minute window.

The 40–50 Minute Workout Structure

Warm-Up (5-10 Minutes)

- Cardio Mobiliser: 3 minutes of light rowing or stationary cycling at an easy, conversational pace to increase core body temperature.
- Dynamic Stretches: 2 minutes of bodyweight squats, arm circles, and gentle torso twists.

Main Workout Blocks (30–35 Minutes)

- To hit the 40–50 minute target, exercises are grouped into pairs (Supersets).
- Perform exercise A1, rest for 30–45 seconds, perform A2, rest for 60 seconds, then repeat for the prescribed sets before moving to Block B.

Cool-Down & Mobility (5 Minutes)

- Spend 5 minutes holding static stretches for the quadriceps, hamstrings, and chest to promote recovery and down-regulate the nervous system.



WARM-UP (5 MINUTES)

Begin with 5 minutes of low-intensity cardiovascular activity (brisk walking, cycling, or cross-trainer) to elevate your heart rate and increase blood flow to working muscles.

Follow with 3-5 minutes of dynamic stretching: leg swings, arm circles, and bodyweight squats to prepare your joints for loaded movement.

COOL-DOWN (5 MINUTES)

Finish with 3-5 minutes of static stretching targeting the muscles worked: quad stretch, hamstring stretch, lat stretch, and chest opener.

Hold each stretch for roughly 30-60 seconds, breathing deeply. Follow with 2-3 minutes of slow walking to gradually lower your heart rate and promote recovery.

A1

**Goblet Squat**

Target: Quadriceps & Glutes

Hold a single dumbbell vertically against your chest, gripping it by the upper horn. Stand with feet slightly wider than hip-width apart. Initiate the movement by pushing your hips back as if sitting in a chair, bending at the knees. Lower yourself until your thighs are parallel to the floor (or as deep as comfort allows), keeping your chest proud and spine neutral. Push through your whole foot to return to the starting position.

3 x 10-12 reps

A2

**Dumbbell Three-Point Row**

Target: Upper Back & Lats

Place your left hand and left knee firmly on a flat gym bench. Keep your right foot flat on the floor, creating a stable "tripod" base. Hold a dumbbell in your right hand, letting it hang straight down. Keeping your spine long and parallel to the bench, pull your elbow up towards your hip, squeezing your shoulder blade at the top. Lower the weight under strict control. Complete all reps on one side, then switch.

3 x 10-12 per side

B1



Dumbbell Romanian Deadlift

Target: Hamstrings & Lower Back

Stand tall holding a dumbbell in each hand in front of your thighs. Soften your knees slightly, then soften them no further. Softly hinge at your hips, pushing your glutes backward as if trying to touch a wall behind you. Slide the weights down the front of your shins, keeping them close to your body, until you feel a stretch in your hamstrings. Keep your back flat. Squeeze your glutes to drive your hips forward and return to standing.

3 x 10-12 reps

B2



Flat Dumbbell Chest Press

Target: Chest & Triceps

Lie flat on your back on a gym bench, holding a dumbbell in each hand at the sides of your chest. Plant your feet firmly on the floor. Position your elbows at roughly a 45-degree angle to your torso (avoid flaring them straight out). Press the dumbbells directly up over your chest until your arms are straight but not locked out. Control the weights slowly back down to the starting position until you feel a comfortable stretch across your chest.

3 x 10-12 reps

B3



Pallof Press

Target: Core (Anti-Rotation)

Stand perpendicular to a cable machine (or a resistance band anchored at chest height). Hold the cable handle with both hands against the centre of your chest. Step away slightly to create tension. Brace your midsection, soften your knees, and press the cable straight out in front of your chest. The weight will try to twist your torso; resist this rotation entirely. Hold the extended position for 2 seconds, then slowly bring your hands back to your chest.

3 x 10-12 per side

4-Week Progression & Adaptation Strategy

During GLP-1 therapy, energy levels can fluctuate weekly based on medication dosage changes. This progression model balances consistent muscle stimulation with managing fatigue.

1 Week 1: Acclimatisation & Baseline

Focus: Perfecting technique and establishing baseline weights.

Target: Choose a weight where you feel you could comfortably perform 2 more repetitions at the end of every set (leaving 2 "reps in reserve"). Focus on the mind-muscle connection.

2 Week 2: Volume Consolidation

Focus: Increasing the workload slightly by targeting the upper limit of the repetition ranges.

Progression: If you performed 8 reps on the squats and presses in Week 1, aim for 10 reps this week using the exact same weight. This increases your total training volume without requiring a heavier load.

3 Week 3: Progressive Overload (Intensity)

Focus: Increasing mechanical tension on the muscle fibres.

Progression: If you successfully achieved the upper rep limits in Week 2, increase the weight slightly on Block A and Block B exercises (e.g., adding 1-2kg to dumbbells). Drop the repetitions back down to the lower end of the range (e.g., 8 reps) to accommodate the heavier load.

4 Week 4: Fatigue Management & Consistency

Focus: Preventing burnout and solidifying movement patterns.

Progression: Keep the weights the same as Week 3 but focus entirely on slowing down the lowering phase (the eccentric portion) of each lift to a strict 3-second count. This enhances muscle preservation and tendon health without needing to lift heavier if energy levels are low due to appetite suppression.



Conclusion

Preserving lean tissue during rapid body composition changes requires a deliberate, structured approach. By stimulating all the major muscle groups multiple times per week, this programme helps maintain your resting metabolic rate, protects joint function, and ensures that weight loss is primarily derived from fat stores. Consistency, controlled movement tempos, and adequate hydration are your primary metrics for success over the next four weeks.

Need Support?

If you need any assistance, guidance, or have any questions regarding technique, equipment setups, or adjusting the weight to suit your daily energy levels, please do not hesitate to contact a member of the fitness team. We are always available on the gym floor to help you safely progress.

