VERITY E-BOOKS

FITNESS

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The First 12 Weeks on the Gym Floor

A beginner strength program that explains the why behind every set

256 PAGES · 36 WORKOUTS · 315 SCIENTIFIC SOURCES

VERITY E-BOOKS

The First 12 Weeks on the Gym Floor

The complete beginner strength program, with the evidence behind every week.

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WELCOME

How this book works

The First 12 Weeks on the Gym Floor is a beginner strength program for the gym, built in three four-week blocks. Each week has the same four parts: a one-page overview with your sessions, a **learn card** that explains one idea and shows what the research does and does not say, a **swap list** with one small eating-routine change, and a **log sheet**.

Block 1 · Learn the moves

Weeks 1–4. Ten simple exercises, 2–3 sets, mostly bodyweight and light dumbbells. Technique first.

Block 2 · Build the base

Weeks 5–8. New exercises, including machines and a cable row. Every session trains every muscle group.

Block 3 · Own the gym

Weeks 9–12. Heavier key lifts, a farmer's carry, easy cardio and an optional finisher.

How to use it

1. Read the **Decoder card** and the **First-timer's guide** once, before your first session.
2. Each week, read the week overview, then do three sessions with at least a day between them. The exercise pages tell you what to do; the **Exercise library** shows every movement with a figure and cues.
3. Log every set. Next session, use the progression rule on the Week 2 learn card to decide whether to go up.
4. Read the learn card at your own pace. It is the "why" behind the week.
5. Try the swap-list change for the week. It is a small step, not a diet.

How the evidence is used

Numbers in the text

A small superscript number points to the **Scientific sources** at the back (315 of them). Each source is listed with a short note on what it found and who was studied. Numbers beginning with G point to the technique guides used for exercise cues.

What we claim, and don't

We say what a study found, in the group it studied, and flag small, observational or special-population evidence. Program choices, such as "about 3 reps left", are labelled as our own design rather than as rules from the research.

Before you start

Read this first

This book is general education. It is not medical advice, a diagnosis, or a diet plan, and it cannot account for your health history. If you have a chronic condition, are pregnant, are recovering from an injury, or are unsure whether exercise is safe for you, talk to your doctor or another health professional before you begin.[14, 15] A free, widely used self-screening tool, the PAR-Q+, is available from its publisher at eparmedx.com; we link to it rather than reproduce it.[15]

Stop an exercise if you feel sharp pain, dizziness, chest discomfort or unusual shortness of breath. Muscle effort and mild soreness are normal; sharp or joint pain is not.

This book is not

A medical, nutrition or diet plan; a promise of specific results; or a substitute for a coach or clinician. Calories, grams and body targets are not given anywhere in this book.

YOUR NOTES

FIRST-TIMER'S GUIDE

Walking into the gym for the first time

Feeling nervous is normal. This page covers the practical bits so the first session is about training, not about guessing.

What to bring

- Water bottle and a small towel.
- Comfortable shoes with a flat sole, and clothes you can bend in.
- A phone or this printed log to record weights.
- Your headphones, if you like.

Asking for help

- Gym staff expect questions. "Could you show me how this machine adjusts?" is a normal one.
- Ask before your first set on any machine or if you cannot find a lighter dumbbell.
- If something feels wrong, stop and ask; do not guess.

Machine set-up checks

Machines are designed to fit many body sizes, so they have adjustments. Before your first set, check these points, drawn from the technique guides listed in the back:[G55, G56, G57, G58, G59]

- Adjust the seat so the handles line up with about the middle of your chest (chest press) or near shoulder height (row).
- Put your back firmly against the backrest where there is one.
- Set pads so they touch your body lightly rather than squeezing.
- Pick the weight pin carefully and start light.
- Skip any movement that feels unnatural, and ask staff.

Free weights and benches

- Put the bench against a wall for the hip thrust, so it cannot slide.
- Pick dumbbells up with a flat back and bent hips and knees, and set them down the same way.
- For the leg press, ask a staff member to show you the safety stops before your first set.

Gym etiquette in four lines

- Wipe equipment after use.
- Re-rack weights where you found them.
- Share machines: let people "work in" between your sets.
- Do not film others without asking.

Remember

Light weights, good form, and stopping with reps left are what this program asks of you. Nobody is watching your weights as closely as you think.

YOUR NOTES

DECODER CARD

How to read any workout line

Every program you meet in a gym or online is written in the same shorthand. Learn these few pieces once and you can read all of them.

Goblet squat	2 × 8–12	3 reps left	Rest 1–2 min
WHAT to do	SETS × REPS	HOW HARD	BREAK BETWEEN SETS

Sets and reps



each dot = 1 rep · a row of 10 = 1 set of 10 reps · 2 sets × 10 reps

Rest

In a review of rest-interval studies, untrained people got the full strength benefit with about 60–120 seconds between sets; trained people needed more than two minutes.[11] For muscle size, longer rests give a small edge, and the differences level off beyond roughly 90 seconds.[12] So 1–2 minutes is a sound starting range.

"How hard": reps left in the tank

Effort is often written as RPE (rate of perceived exertion, 1–10) or RIR (reps in reserve). The scale most coaches use was built around a simple idea: RPE 10 means you could not have done another rep, RPE 9 means one more, RPE 8 two more, and so on.[5, 6]

RPE 10	RPE 9	RPE 8	RPE 7	RPE 6 or less
0 left	**1 left**	**2 left**	**3 left**	**4+ left**
max effort			Week 1 zone	too easy

Why the early weeks use "about 3 left"

Training to complete failure is optional. The ACSM position stand found that going to momentary failure did not consistently change results for the average healthy adult,[1] and meta-analyses find little or no difference between stopping short and going to failure for strength or size.[3, 4] Stopping short is also easier to recover from and easier to learn technique on.

The catch: people are imperfect at judging reps left. On average, lifters underestimate how many they had left by about one rep, and they judge better the closer to failure they get.[7] Whether experience improves the guess is debated.[8] Treat "3 left" as a rough zone, not a precise number. It is this program's early-weeks choice, not an ACSM rule; later weeks move to about 2 left.

Choosing a weight in four steps

1. Start with a weight that feels clearly light for the first set.
2. Do your reps with good form. At the end, ask: could I have done about three more?
3. If you could have done five or more, go up a little next set. If you had one or none left, go down.
4. Log the weight and reps. Next session, start from your own numbers.

Glossary

Rep — One full lift and lower of an exercise.

Set — A group of reps done back to back.

2 × 10 — Two sets of ten reps.

8–12 — A range: aim for the top; add weight once you reach it on every set.

Rest — Time between sets: 1–2 minutes.

RPE / RIR — How hard a set felt (1–10) / reps in reserve.

/side, /leg — Reps on each side or leg, separately.

DB / RDL — Dumbbell / Romanian deadlift (a hip-hinge lift).

Progressive overload — Gradually asking a little more over time.

THE MAP

Your 12 weeks at a glance

Three sessions a week, always at least a day apart. Session A and Session B alternate (A, B, A one week; B, A, B the next). Each week builds a little on the last.

Week	Block	Learn card	Sets per exercise	Hard sets per muscle group	Session (min)
1	Learn the moves	Leave reps in the bank	2	2–6	30
2	Learn the moves	Add a little at a time	2	2–6	30
3	Learn the moves	Rest days are part of the plan	3	3–9	45–40
4	Learn the moves	Sleep is a training tool	3	3–9	45–40
5	Build the base	Warm up smart	2	6	35
6	Build the base	Your cycle and your training	3	9	50
7	Build the base	Range of motion, and smart swaps	3	9	50
8	Build the base	Habits, mood and your eating routine	3	9	50
9	Own the gym	Cardio alongside lifting	3	7–9	45
10	Own the gym	Steps, sitting and the talk test	3	8–9	45
11	Own the gym	Soreness, aches, and when to stop	3	7–9	45
12	Own the gym	What you have built, and what comes next	3	8–9	45

Hard sets per muscle group is our own tally of primary muscles (see each week's page for the breakdown). Session time is our estimate: warm-up of about 5 minutes plus 45 seconds of work and 90 seconds of rest per set. Core sets are lower in Block 3 because the farmer's carry counts as 2 timed sets.

Why the build is gradual

Block 1 starts at 2 sets, well below the roughly 10 sets per muscle group per week that the ACSM overview gives as a reference for muscle growth.[1] The program climbs toward about 9 by Week 6. Across 67 studies, gains rose with weekly sets with diminishing returns.[44]

Effort across the blocks

Weeks 1–2: about 3 reps left. Weeks 3–8: 2–3 left. Weeks 9–12: about 2 left. Strength gains were similar across a wide range of reps in reserve; muscle growth improved as sets ended nearer failure.[46] These targets are this program's design choice.

Every week has

- **Overview**: sessions, sets and reps, time, and hard sets per muscle group.
- **Learn card**: one idea, with what the research supports and what it does not say.
- **Swap list**: one small eating-routine change with allergen-aware swaps.
- **Log sheet**: weights, reps, reps left, soreness and energy.
- **Progress checks** at the end of Weeks 4, 8 and 12.

WEEK 1 OF 12 · BLOCK 1 · LEARN THE MOVES

Week 1: Leave reps in the bank

Learn the moves. Stop every set with about 3 reps left.

Welcome to Week 1. This week is about learning the movements and the gym, not about pushing hard. Aim to finish every session feeling you could have done more. Sessions run A, B, A: the third session repeats the first, so you get two looks at each movement.

Session 1: A **Session 2: B** **Session 3: A**

Leave at least a day between sessions. Weekdays are up to you.

Session A · about 30 min

Exercise	Sets × reps	Works
Goblet squat	2 × 8–12	Thighs (quads), glutes
Dumbbell bench press	2 × 8–12	Chest, front of shoulders, back of arms (triceps)
One-arm dumbbell row	2 × 8–12 each side	Large back muscles (lats), upper back, front of arms (biceps)
Glute bridge	2 × 8–12	Glutes, back of thighs (hamstrings)
Dead bug	2 × 6 each side	Deep core muscles

Session B · about 30 min

Exercise	Sets × reps	Works
Dumbbell Romanian deadlift	2 × 8–12	Back of thighs (hamstrings), glutes, back muscles
Lat pulldown	2 × 8–12	Large back muscles (lats), upper back, front of arms (biceps)
Dumbbell step-up	2 × 8 each leg	Thighs (quads), glutes
Seated dumbbell shoulder press	2 × 8–12	Shoulders, back of arms (triceps)
Forearm plank	2 × 15–20 s	Core, shoulders

Time = warm-up of about 5 minutes plus each set at 45 seconds of work (90 for one-sided moves) and 90 seconds of rest, rounded to 5 minutes. Our estimate; your pace will vary.

Where this week sits



What changes this week

- Everything is new. Take the first sets lighter than you think you need.

Every session

Warm up for about 5 minutes (Week 5 explains how). Rest 1–2 minutes between sets. Write weights and reps in the log while you remember them.

YOUR NOTES

WEEK 1 · SESSION A (SESSION 1 AND SESSION 3)

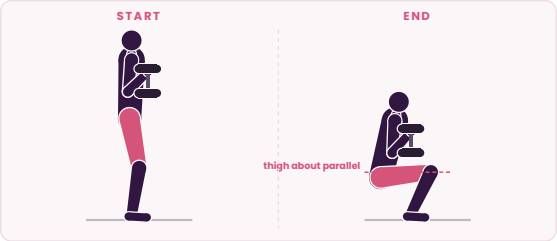
Session A

Warm up first (about 5 minutes). Do all sets of an exercise, resting 1–2 minutes between, then move on. Reps shown are a range: stay inside it, and stop each set with about 3 left.

1 Goblet squat

2 × 8–12 · stop with about 3 left

Works: Thighs (quads), glutes · **Pattern:** Squat



1. Hold one dumbbell upright against your chest with both hands.
2. Feet about shoulder-width, toes turned out a little.
3. Sit down between your hips with your chest tall; keep both heels on the floor.
4. Stand up by pushing the floor away.

G1, G2

COMMON MISTAKE: Heels lifting, or knees falling inward as you stand.

CARE: Stop if you feel sharp knee pain.

WHAT IT BUILDS
Strength and size in the front of the thighs (quadriceps) and the glutes, plus the trunk muscles that keep you upright while the weight sits in front of you.

WHY IT IS IN YOUR PLAN
Holding one dumbbell at the chest acts as a counterweight, so most beginners find it easier to stay tall and sit down between the hips than with a bar on the back. It teaches the squat with a light, forgiving load.

IN DAILY LIFE
Standing up from a low chair, a sofa or the toilet; picking things up from the floor; climbing stairs with a bag in your hand.

WHAT THE RESEARCH SAYS In 16 men and 16 women, a goblet squat gave more quadriceps activity than a landmine squat, and the women's quadriceps activity was higher than the men's.[29] In 24 recreationally trained women, 12 weeks of front-loaded squats and back squats grew the thigh muscles by similar amounts; the back squat improved leg press strength more.[34]

Easier Sit down to a bench or box and stand up, with or without the dumbbell → **Goblet squat** → **Harder** Heavier dumbbell, a slower lowering, or a pause at the bottom

YOU SHOULD FEEL IT: Thighs and glutes working. Not a sharp pinch at the front of the knee, and not the low back.

After the session

Write your weights and reps in the log sheet while you remember them. Some muscle awareness over the next day or two is normal and varies a lot from person to person; it is not a measure of how good the session was.

If you only remember three things

1. Light weights, good form. 2. Stop with about three reps left. 3. Rest one to two minutes between sets.

Short on time?

Keep the warm-up and all exercises, but do 2 sets on the last two. Skipping the whole session costs more than shortening it. This is our suggestion, not a tested protocol.

SESSION A NOTES: HOW IT FELT, WHAT TO CHANGE

LEARN CARD · WEEK 1

Leave reps in the bank

This week's one idea: you do not need to grind every set to the limit to make progress, especially as a beginner. Here is what the research supports, and what it does not.

What the research supports

- For healthy adults on average, training to momentary failure is optional; it did not consistently change results.[1]
- One meta-analysis found a trivial hypertrophy advantage for training close to failure, and no significant difference when sets were taken to true momentary failure, though its results were sensitive to assumptions.[3]
- Another found no significant difference for strength or overall size, with a possible small edge for failure in trained lifters.[4]
- For beginners, the largest gain comes from going from no training to any training.[1]

What it does not say

- That "3 reps left" is the best number. It is a sensible, safe starting zone for this program, chosen to protect technique and recovery.
- That you can judge reps left perfectly. Lifters tend to under-guess by about one rep on average, more so when far from failure.[7, 8]
- That failure is harmful. Later weeks may use harder sets; the evidence just says they are not required.

Picture it: a set of ten



Early gains: mostly your nervous system

In the first weeks, strength goes up faster than muscle size can account for. Reviews of the research attribute much of this early gain to neural adaptation: better coordination and activation of the muscle you already have.[9, 10] This is also why technique practice matters more than load in Week 1.

Myth check: "No pain, no gain"

Soreness is common after a new workout, but it is a poor scoreboard. In one study of untrained adults who did eight weeks of eccentric cycling, muscle growth appeared even though the muscles showed no discernible damage. It is a single small study, so we treat it as a reason to doubt the idea rather than proof.[13] Use your log sheet, not soreness, to judge progress.

Try this week

On your last set of each exercise, ask yourself: how many reps could I have done? Write a number in the "Left" column of the log sheet. Over a few sessions your guesses will sharpen, even if they never become perfect.

GO DEEPER · WEEK 1

Questions people ask

Why does the first week feel hard even with light weights?

Almost everything is new: the movements, the machines and the gym itself. Reviews of the research attribute much of the early strength gain to the nervous system learning to use the muscle you already have,[9, 10] which is why the first weeks reward practice and light loads rather than effort. Soreness and clumsiness are common and do not mean you are doing it wrong.

SWAP LIST · WEEK 1

Your Week 1 eating routine

This is not a diet. It asks for one small change, with swaps so you can make it whatever you eat. No calories, no grams, no targets.

Week 1 change

Pick the meal you most often rush or skip. At that meal, add one protein food and one fruit or vegetable. That is the whole task.

Which of these foods contain which major allergens?

A dot means the plain food is, or is made from, that major allergen. U.S. law names nine: milk, eggs, fish, crustacean shellfish, tree nuts, peanuts, wheat, soybeans and sesame (sesame added effective 1 January 2023).[16]

Food	Milk	Egg	Fish	Shellfish	Tree nuts	Peanut	Wheat	Soy	Sesame	Animal-free
Greek yogurt	●									
Eggs		●								
Canned tuna			●							
Shrimp				●						
Chicken										
Tofu								●		✓
Lentils / beans										✓
Peanut butter						●				✓
Almond butter					●					✓
Hummus									●	✓
Whole-wheat bread							●			✓
Oats / rice										✓

● = the plain food is, or is made from, that allergen. This is a simple guide for ordinary, unprocessed versions. Prepared and packaged foods vary, so always read the label.

Ideas and swaps

If you avoid dairy

Greek yogurt → tofu scramble, lentils, or eggs. Both → hummus or beans on toast.

If you avoid eggs

Eggs → Greek yogurt, tofu, canned tuna, or beans.

If you avoid nuts or peanuts

Peanut or almond butter → hummus, or yogurt with fruit. Check labels for “may contain” warnings.

If you eat plant-based

Choose from the animal-free column: tofu, lentils and beans, peanut or almond butter, hummus.