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PRINCIPLES OF
MUSCLE
BUILDING
PROGRAM DESIGN

A HYPERTROPHY WORKOUT MANUAL
FOR TRAINING AGES FROM
MONTHS 0 TO 24

UP ULTIMATE
PERFORMANCE

UP ENCYCLOPAEDIA OF PERSONAL TRAINING

VOLUME 1

HOW TO TRAIN

INTRODUCING THE

'HOW TO' GUIDES

EVEN THE MOST INTELLIGENTLY DESIGNED PROGRAM IS WORTHLESS, IF YOU DO NOT KNOW HOW TO TRAIN PROPERLY.

To help with this we have provided the following 'how to' guides:



HOW TO WARM-UP

Learn about the dangers of warming up too much or too little and the exact warm-up routine we use with clients.



HOW TO SELECT THE RIGHT WEIGHT

Learn how to select the right starting weights on new exercises.



HOW TO PROGRESS WEIGHTS

Learn the system we use to evaluate a client's technique and decide both when and how to progress.



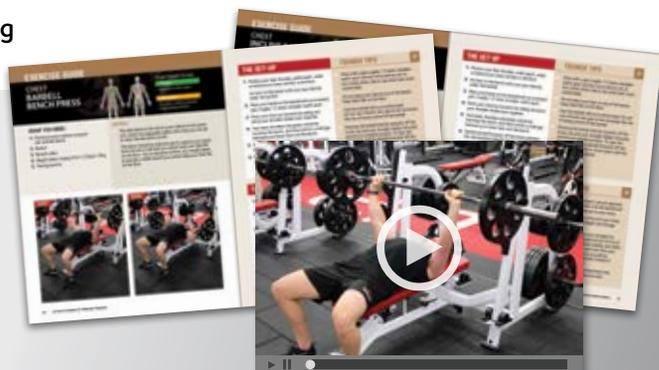
HOW TO KEEP A WORKOUT JOURNAL

Learn what data you should be tracking and paying attention to during your workouts.

For every exercise included in the muscle building workouts you will get access to:

Exercise guides that explain target muscles, equipment requirements and how to set up and perform the movement.

Demonstration videos that show how to set up and perform the movement from several different angles.



HOW TO: PROGRESS WEIGHTS

AS YOUR MUSCLES ADAPT AND BECOME STRONGER OVER TIME, YOU WILL NEED TO INCREASE THE WEIGHTS YOU ARE LIFTING TO KEEP MAKING PROGRESS.

This section will explain how to progress to lifting heavier weights as you advance through the program.

WHEN TO PROGRESS

Every exercise has a target number of sets and reps like the one below:

EXERCISE	SETS	REPS
Dumbbell bench press	3	8-10

We have written rep targets as a range, two reps wide. The goal is to achieve the higher end of the range with your selected weight.

In the example above, the goal is to complete three sets of 10 reps.

You are ready to increase the weight when:

You have achieved the upper end of the target rep-range on all sets.

Your technique is consistent from the first to the last rep.

If you fail to complete the rep target with proper technique on one or more sets, repeat the same weight until you do so (this may take more than one workout).

YOU CAN EVALUATE YOUR TECHNIQUE ON EACH SET BY ASKING YOURSELF THE FOLLOWING QUESTIONS:

- Did I feel the target muscle groups working?
- Did I feel in control of the movement at all times?
- Did my range-of-motion stay consistent?
- Did I feel any pain or discomfort?

You can also video record yourself performing a set, which helps to make sure that what you *think* you are doing is what you *are* doing.

'GOOD' PAIN AND 'BAD' PAIN

When reviewing your performance, you need to distinguish between 'good' training pain and 'bad' training pain.

You should expect to feel good training pain towards the end of a challenging set when your muscles are shaking with effort. However, you should only feel this in the target muscle groups, and it should subside after the set.

In comparison, bad pain can show up at any time and will feel more like a dull ache in your joints or as if your muscles are stretching too far. This can occur in non-target muscle groups and persist in some form for hours or days after the workout.

Bad pain is not a natural part of the training process, and you should not feel it if you are training with proper technique and using the right weights.

IT IS VERY IMPORTANT THAT YOU ARE HONEST WITH YOURSELF WHEN RECORDING YOUR WORKOUT. CREDITING YOURSELF WITH THE EXTRA REP PERFORMED WITH BAD TECHNIQUE MASKS PROGRESSION.



It is very important that you are honest with yourself when recording your workout. Crediting yourself with the extra rep performed with bad technique masks progression. When you eventually complete the rep with proper technique, you will not see the progress and will record a false plateau.

If you are struggling with an exercise technique or experience any pain or discomfort (other than muscular fatigue) then try:

1. Reducing the weight.
2. Switching to an alternative exercise that targets the same muscle groups.
3. Asking a personal trainer or training partner who can perform the exercise for help.
4. Make sure that you have read the accompanying exercise guide and watched the demonstration video.

HOW TO PROGRESS

To decide how to progress we use a simplified version of the rate of perceived exertion (RPE) scale developed by the professional powerlifter and coach Michael Tuchscherer and further refined by Dr Mike Zourdos, Eric Helms and their fellow researchers.

The scale is based on a concept known as repetitions in reserve (RIR), which refers to how many extra reps you can perform (if any) at the end of a set.

After the last set of every exercise ask yourself how many more reps you could have performed with proper technique:

- ▶ If you achieved the rep target, but could not complete any more reps with good technique, repeat the same weight next time.
- ▶ If you achieved the rep target with 1-2 RIR, increase the weight by roughly 5-10% next time.
- ▶ If you achieved the rep target with more than 3 RIR, increase the weight by roughly 10-15% next time.

We have written the recommendations in relative (%) terms, as seemingly small increases in weight can be surprisingly big increases. For example:

- ▶ Adding 5kg to 150kg deadlift is a 3% increase.
- ▶ Adding 1kg to a 5kg dumbbell curl is a 17% increase!

If the final set on your current weight was challenging, making too big of an increase potentially sets you on a course where your progress will soon stall.



Unfortunately, weights take up space and are expensive, so it is not uncommon for a gym's weights to increase in large steps.

If your gym is like this, you can either:

► **Keep the same weight and expand the rep range by one to two reps.**

For example, if you were aiming for three sets of 10 reps, the aim is now to complete three sets of 10-12 reps before dropping back down to attempt the next available weight for 10 reps.

	SET 1				SET 2				SET 3		
WORKOUT	LOAD	REPS	RIR		LOAD	REPS	RIR		LOAD	REPS	RIR
1	20kg	10	2	▶	20kg	10	2	▶	20kg	10	1
2	20kg	12	1		20kg	11	0		20kg	10	0
3	20kg	12	2		20kg	12	2		20kg	12	0
4	22kg	10	1		22kg	9	0		22kg	8	0

► **Increase the weight and reduce the rep range by one to two reps.**

For example, if you were aiming for 10 reps, the aim is now to complete three sets of six to eight reps before working back up to 10 reps with the new weight.

	SET 1				SET 2				SET 3		
WORKOUT	LOAD	REPS	RIR		LOAD	REPS	RIR		LOAD	REPS	RIR
1	20kg	10	2	▶	20kg	10	2	▶	20kg	10	1
2	22kg	8	1		22kg	8	0		22kg	7	0
3	22kg	8	2		22kg	8	1		22kg	8	1
4	22kg	10	0		22kg	9	0		22kg	8	0

Do not worry if your estimates are not completely accurate to begin with.

Weight selection will always be a process of trial and error, which is why we recommend:

1. Completing the same workout several times before changing.
2. Recording your workouts as outlined in the 'How to: Keep a Workout Journal' guide.



CHALLENGE SETS

CHALLENGE SETS ARE A TYPE OF INTENSITY TECHNIQUE THAT WE USE TO PUSH CLIENTS TO THEIR LIMITS, BUT YOU CAN ALSO USE THEM TO HELP INFORM YOUR FUTURE WEIGHT SELECTION.

The goal is to train to the point at which you cannot complete another rep with good technique. We only include challenge sets on the last set

of an exercise and explain how to do so in the 'How to Follow the Program' section.



Please note the difference between training to technical failure and training to the point at which you can no longer move your arms or legs!

- Did I feel the target muscle groups working?
- Did I feel in control of the movement at all times?
- Did my range-of-motion stay consistent?
- Did I feel any pain or discomfort?

0 RIR = Repeat the same weight
1-2 RIR = 5-10% Increase
3+ RIR = 10-15% Increase



Repeat the same weight on an exercise until you have completed the rep target on all sets and are happy with your technique. When you are ready to progress, you should decide how much to increase by based on the number of extra reps you managed to perform above the target number on your last set.