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1 About Plan Generator

1.1 Table of Contents

Making a Workout Plan

- Required Information
- How a Plan is Made
- How to Update Your Plan Monthly
- Customization
- Build Your Own
- How to Read the Workout Plan
- Optimization
- Microcycle
- Exercise Setup
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1.2 Bibliography

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1.3 Testimonials

"As a former USSR Olympic Athlete in Modern Pentathlon, I have extensive educational record and work experience in the field of athletics and rehabilitation, and can tell, that finally there is a system which will help to plan programs from fitness workout to athletic training as well as rehabilitation purposes. I personally recommend The Plan Generator to everyone who cares about the health and fitness of themselves or others." ILMAR VAIKLA former U.S.S.R. National Pentathlon Champion

"The Plan Generator has quite simply made me a better coach. The Plan Generator's dynamic programming gives me an exact training regimen progressing my athletes at the fastest safest speed." BARRY K. HERMAN, MS, CSCS

"The Plan Generator automatically plans programs that when followed have made my athletes bigger, stronger, and faster than ever before." DAVE GRISEFFI B.A. Wrestling Coach

"I felt compelled to say thank you for developing The Plan Generator. It has made my job so much more effective." HENRY G.PERSLOW R.P.T.

"I am writing to thank you for The Plan Generator. I am a NATA certified athletic trainer who's primary function is to look to the prevention and care of injuries to our athletes. Part of the job which has been a constant frustration to me has been the off-and pre-season conditioning and strengthening of a variety of athletes. The Plan Generator has proved to be invaluable as a tool in overcoming much of the frustration." BOB DUCHARDT C.A.T.

"I looked at a lot of fitness software before deciding which was best. The Plan Generator made my plan for me. I took it to the gym and used it. It was right on. You can quote me on that." CHRISTIAN COMITO Certified A.C.S.M.

"I've looked at lots of fitness software and The Plan Generator is heads and shoulders above the rest. It's everything that people need." JOHN DELANEY CSCS

The Plan Generator is one great software..." PHIL CARTER CSCS YMCA Director

"I want to thank you for introducing the Plan Generator program to me. At first I was skeptical... being in the fitness equipment industry I have seen many workout plans in magazines. I really like how the Plan Generator allowed me to customize my workout plan. I was able to achieve close to 85% (14 out of 17 exercises) of the predicted new max. weights. Now I can finally take the guess work out of my workout plans." MICHAEL CRUM

2 Make a Plan

2.1 What Information is Required

Birthdate

Your birthdate is used to calculate your age and to compute the gain you can expect to achieve at the end of your four week Workout Plan (microcycle).

Start Date

The Start Date is first day of your four week microcycle Workout Plan. Click on the Schedule button to see the four week calendar. The first day of this calendar is the Start Date you selected

Experience

Your Months of Experience is important in generating an effective Workout Plan. Your Months of Experience is the number of months you have been recently exercising continuously, non-stop. Months of Experience are NOT how many months you have been working out over your entire lifetime.

If you have been working out on and off for 5 years but have not worked out for a couple of months (a layoff period) you would enter zero. If your layoff period ended 2 months ago, you would enter 2.

Please be accurate because your Months of Experience are used to compute your rate of gain. The more months of experience you have, the closer you are to your maximum potential, and the slower will be the gain.

Note: Progress Rates and sets are determined by months of experience. As your months of experience goes up your progress Rate goes down. This is because the longer you workout the less potential you have to reach. If you have a lot of lifetime experience and a highly developed physical base, but are coming off of a lay off, you can experiment with adjusting the months of experience to custom fit your workout.

Objective

The Plan Generator optimizes muscle health. Your set rep scheme is what determines whether you emphasis muscle mass (bigger muscles) or muscle strength (more power.) You build muscle tone whether you emphasis mass or strength.

Current Reps

The Current Reps is very important in generating an effective Workout Plan. Ideally it will be a "one rep maximum". The higher the repetition number you enter, the less precise your estimated one repetition maximum and Workout Plan will be. For accuracy, fifteen repetitions is the most allowed. All computations made in generating your plan are heavily dependent upon a one rep maximum. Although you can enter the repetitions you are currently using in your present workout (up to 15), it is highly recommended that you do a self assessment to determine your present one rep maximum.

Current Weight

The most weight you can lift at your Current Repetitions (see above.)

NOTE: Current Reps and Current Weight are entered while creating you workout routine. You can also edit these in the Routine Tab of the main screen by double clicking on an exercise.

2.2 How to Update Your Plan Monthly

Updating the Plan

You should update your workout plan every four weeks.

If you are changing exercises then update the workout plan by using the Wizard.

1. Click Create New Routine
2. Answer the Wizard questions.
3. Change the workout Objective
4. Make the new exercise selections.
5. Change the Current Capacity
6. Click View Schedule

If you are keeping the same exercises then update the workout plan by using the Routine screen.

1. Highlight each exercise separately
2. Change the Current Capacity for each exercise
3. Click Profile
4. Change the Months of Experience, Starting Date and workout Objective
5. Click View Schedule

2.3 Customization

Customizing the Workout Plan

The Plangenerator is an Expert system scientific tool. The Plangenerator works best when left automatic, but you can customize many aspects of your workout plan. The Plan Generator uses "automated reasoning" to compute the precise balance of 11 variables (age, months of experience, exercise selection, exercise equipment, physical capacity, periodization, number of days, daily workload, weekly workload, monthly workload and progress rate) into a single four week optimized result.

Use the Wizard to generate the first workout-planning template

1. Open the Wizard (Create New Schedule) and answer the basic questions
2. Choose a Whole Body Routine or a Split Upper/Lower Body Routine
3. Customize the Exercise Selection by using the Available list instead of the Recommended
4. Enter your Current Capacity (if unsure click BioFitness Online for a Strength test)
5. View Schedule

Advanced Customizing Features

You can further customize the exercise grouping (arms on one day and Chest on another day), number of weekly workout days and periodization

1. At the Routine summary screen highlight and double click an exercise
2. Click Exercise Schedule
3. Adjust the Radio buttons for the Off, Light, Medium and Heavy days of the week
4. Click Okay
5. Repeat for each exercise separately
6. View Schedule
7. Re-adjust as needed

You can customize the Equipment Configuration by changing the equipment minimums as well as by

converting from pounds to kilograms and visa versa

1. At the Routine summary screen highlight and double click an exercise
2. Tab to Equipment Configuration
3. Adjust the minimum weight
4. Tab and adjust the minimum increment
5. Click Okay
6. Repeat for each exercise separately
7. View Schedule

NOTE: The Law of Biology is that ALL muscle toning, shaping, growing and strengthening occurs by progressively increasing the muscle's work capacity (workload)

The application of this Biology is through the total Workload Management of your progressive resistance workout plan. There is a delicate balance of Frequency (workout days) and Intensity (light, medium and heavy workouts), that creates the "Precise Zone," where the workload management enables optimized results to be achieved. Both Frequency and Intensity must be carefully increased or over-training and under-training will occur.

Regardless of which type of exercise grouping, (whole body routine, split upper body / lower body routine, or a one muscle group per day routine) you use, it is the Workload Management from the Plangenerator "automated reasoning" which optimizes the results.

2.4 Build Your Own

When creating a new Routine, at select your Workout Sport/Equipment you choose the sport, brand or type of exercise equipment you will be using for your workouts.

- After you select your Sport/Equipment, review the Plangenerator Recommended Routine.
-
- You can automatically use the Recommended Routine by clicking the Use Recommended Routine button.

You can build your own Routine by using the right arrow to move exercises from the Master List on the left side of the screen into the Routine field in the middle of the screen.

Note: When the Plangenerator recommends your Routine for you, it uses the scientific rules from the International Weightlifting Federation (member of the International Olympic Committee), which is to use no more than 6 exercises per workout for sports and 8 exercises for Bodybuilding. IWF research indicates that an exercise Routine using more than eight exercises could cause severe over training, if has been planned for optimization

(
When you select your exercises from the list you can pick any amount of exercises you want. However, keep in mind the research of the IWF which is that an scientifically prepared program needs only 6 to 8 exercises per month to produce optimized results.

The Plangenerator only creates Workout Plans with no more than 8 exercises per day. The only reason to select more than 8 exercises is for Split Routines.

2.5 Routine

In the Routine screen you can view your exercise selections, your current maximums and your projected new maximums. You can highlight and double click an exercise for editing, create a New

Routine, Add Exercises and Mix Equipment, and generate a Workout Plan.

Create New Routine

Clicking the Create New Routine button takes you to the Wizard where you answer 12 questions and select your equipment for a New Routine

Add Exercise/Mix Equip

Clicking the Add Exercise/Mix Equip button allows you to add and mix any exercise from any manufacturer into an existing Routine.

View Schedule

Clicking the View Schedule button generates and displays a four-week Workout Plan after a Routine has been made.

New Name

Clicking the New Name button closes Routine.

2.6 Exercise Setup

Exercise Setup is accessed by highlighting and double clicking an exercise in the main screen's Routine Tab. At Exercise Setup you can adjust your capacity, adjust your equipment, or click Exercise Schedule to Pick Your Own Workout Days along with Heavy, Medium or Light workloads.

Current Reps

The Current Reps is very important in generating an effective Workout Plan. Ideally it will be a "one rep maximum". The higher the repetition number you enter, the less precise your estimated one repetition maximum and Workout Plan will be. For accuracy, fifteen repetitions is the most the Plangenerator allows you to enter. All computations made in generating your plan are heavily dependent upon a one rep maximum. Although you can enter the repetitions you are currently using in your present workout (up to 15), it is highly recommended that you do a self assessment to determine your present one rep maximum.

Current Weight

The most weight you can lift at your Current Repetitions (see above.)

One Rep Max

A One Rep Max is how much weight you can lift one time. If you enter more than one repetition, the Plangenerator, will compute it into an estimated one repetition maximum.

New Max

A New Max is the optimum strength increase that you can expect every four weeks from your Workout Plan.

Equipment Minimum Increment

A Minimum Increment is the smallest amount of weight your exercise equipment can increase or decrease by.

Equipment Minimum Weight

The Minimum Weight is the lowest amount of weight your exercise equipment can start with.

Exercise Schedule Tab

This tab is where you can pick your own workout days for each exercise. Each day can be set as Light, Medium, Heavy, or as an off day. See also Pick Your Own Days

2.7 Pick Your Own Days

The Plangenerator allows you to Pick Your Own Days even though it automatically optimizes them for you, according to the proven research of the International Weightlifting Federation (voting member of the International Olympic Committee) as based upon the Months of Experience entered.

To Pick Your Own Days you must adjust each exercise separately.

It is easiest to setup you're own days when you complete the first week and then adjust the 2nd to 4th weeks to match. When finished return to the Routine screen and repeat for each exercise.

Go to the Routine screen and highlight and double click the exercise.

Select the "Exercise Schedule" tab on the Exercise Setup screen.

Click the appropriate Radio buttons for picking each workout day for the month.

Click the Radio button to make each workout day an Off day or Heavy, Medium or Light exercise workload.

Return to Routine and repeat for the next exercise.

After completing all the exercises in the Routine, select View Schedule to create a Workout Plan adjusted for the days you picked.

2.8 Abdominals

Plangenerator Abdominal Exercise

ThePlan Generator recommends doing as many Crunches as you can every workout day .

The waistline size involves more than just abdominal muscles and body fat. The waistline measurement also includes internal organs and pelvic bones.

It is possible when starting exercise for Toning (the first stage of muscle re-conditioning) to take two to three inches off the waistline in four to six weeks. This is done using any non- weight /resistance abdominal exercise such as Crunches and/or an Abdominal Roller machine.

The Plan Generator does not recommend using a weight / resistance abdominal machine because all muscles respond similarly to progressive resistance and exercising the abdominals with weight / resistance will cause them to grow larger and increase the waistline size.

Because the stomach organ is flexible additional inches can be removed from the waistline using dietary reduction to allow the organ to shrink. The shape of the pelvic bones may still cause some people to have a wide looking midsection from the front view.

2.9 How to Read the Workout Plan

The **Workout Plan** contains the following information:

- A list of each exercise to be performed, organized into Sets
- How much weight to lift for each set
- How many times to lift the weight (reps) for each set

The **proper sequence** is to do the exercises in the order listed which is large muscles to small muscles. This ordering will help conserve your energy.

Complete all sets for each exercise before moving on to the next. Start with Set 1 then Set 2, etc.

Rest 1 to 3 minutes between sets.

Warm up with each exercise before doing Set 1.

Do an Abdominal exercise (e.g. crunches) for as many repetitions as you can.

Consult a physician before starting an exercise program.

2.10 Compensation

EXERCISE COMPENSATIONS

The Plangenerator uses a proprietary Smoothing™ process to design each workout plan for optimized results whether the equipment increment is high or the individual's strength is low.

You need to make an adjustment whenever you get the message, "### This exercise has compensations due to low current capacity and equipment settings." more than two times in one week or more than four times in four weeks.

If the 1st set shows a repetition of 1 you should:

- 1 Use Profile to check your Workout Objective and switch to Bodybuilding Strength & Tone if it is Bodybuilding Size & Tone.
- 2 Use Profile to check your Workout Objective and switch to Sports Power & Strength if it is Sports Endurance & Strength.
- 3 Create a New Routine and lower your experience by one month
- 4 Switch to another exercise machine with a lower minimum increment.
- 5 Switch to a similar exercise where you have a higher current capacity.

You Do Not need to make adjustments when you get this message, "**** This exercise has repetition compensations due to minimum increment optimization."

Equipment manufacturers design machines for exercise movement, not for workout planning. This is why exercise machines often have a large minimum increment of 10 lbs. or more, making it impossible to optimize a workout plan without computer enhanced compensations. When a person has been using a workout plan other than a Plangenerator optimized plan, they have been making less progress during their months of experience than Plangenerator planning would have given them.

Establishing the sets, resistances and repetitions for optimized progress is a complex and difficult mathematical compensation. The Plangenerator designs the best possible workout plan for the equipment and current capacity. Just use your plan and you will discover this is true!

2.11 Optimization

Your Workout Plan Is Optimized!

You can point and click any Weightlifting icon on the schedule screen to View and Print the workout details for that day.

The Plangenerator uses specific scientific methods, formulas and guidelines, along with your answers to the questions, to create your optimized workout plan. The Plangenerator integrates many proven research studies into your optimized workout plan, assuring you the best results.

Your schedule is based on a four week microcycle.

Your current maximums have been computed into new maximums

The exercise sequence has been optimized for the exercises you selected

The number of weekly workout days has been optimized for your starting date and months of experience

The progress rate has been optimized for your age, months of experience, and maximums.

The weekly workload (unload, reload, overload and adaptation) has been optimized for your new maximums

The number of sets has been optimized for your maximums.

The weight resistance has been optimized for your maximums and progress rate

The number of repetitions has been optimized for your intensity and months of experience

The daily workout intensity has been optimized for your maximums, months of experience and progress rate.

The set weights have been rounded to the minimum increment for the equipment you selected. The increment may be changed in the exercise setup screen.

After the set is rounded the repetitions may have been adjusted if the rounding has added too much workload or taken too much workload away.

2.12 Microcycle

The Plangenerator uses a four week microcycle.

Week One is an Unloading week. After testing strength for your current capacity, it is important to give yourself a week of rest and recovery but not a week off. This Unloading can vary from 90% to 100% of total weekly workload. BioFitness believes that a 5% reduction during the first week is optimum for allowing you to recover without a loss of strength.

Week Two is a Reload week where the workload increases back to your current capacity level.

Week Three is an Overload Week where your workload is increased beyond what you have done before. This week you begin to make progress toward your projected maximum gain.

Week Four is an Adaptation Week where the workload increases still more, your body adjusts to the higher workloads.

After completion of week four you should re-test your capacity and switch the development emphasis to either High or Low repetitions starting a new Microcycle.

2.13 Workout Profile

The profile is accessed by clicking on the "Profile" tab on the main screen where the Routine exercises are listed.

Name

Birthdate

Your birthdate is used to calculate your age and to compute the gain you can expect to achieve at the end of your four week Workout Plan (microcycle).

Start Date

The Start Date is first day of your four week microcycle Workout Plan. Click on the Schedule button to see the four week calendar. The first day of this calendar is the Start Date you selected

Experience

Your Months of Experience is important in generating an effective Workout Plan. Your Months of Experience is the number of months you have been recently exercising continuously, non-stop. Months of Experience is NOT how many months you have been working out over your entire lifetime.

If you have been working out on and off for 5 years but have not worked out for a couple of months (a layoff period) you would enter zero. If your layoff period ended 2 months ago, you would enter 2.

Please be accurate because your Months of Experience is used to compute your rate of gain. The more months of experience you have, the closer you are to your maximum potential, and the slower will be the gain.

Objective

ThePlan Generator optimizes muscle health. Your set rep scheme is what determines whether you emphasis muscle mass (bigger muscles) or muscle strength (more power.) You build muscle tone whether you emphasis mass or strength.

You can access the Exercise Routine Table from the Profile screen by clicking the Routine Tab.

2.14 Add Equipment

Each time you add or mix different equipment into an existing Routine you must select a Brand name and then click the Next button. Highlight an exercise from the list of available choices.

Click the right arrow to move the highlighted exercise into your Routine selection.

When needed, you can use the left arrow to remove a selected exercise from your Routine. The Plangenerator will automatically re-sequence your exercise choices correctly for you and create a new Workout Plan which includes your new choices.

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