



ED STRATFIT ED DIGITAL

**TRAINING PROGRAM DESIGN AND IMPLEMENTATION TECHNOLOGY
INSTRUCTIONS AND INFORMATION**



STRATIFIT
DIGITAL

CONCEPTS

- TRAINING UNITS
- LOADING
- ABILITIES

MacBook Air

CONCEPTS

Before beginning the training strategy design process it is crucial to understand a few key concepts.

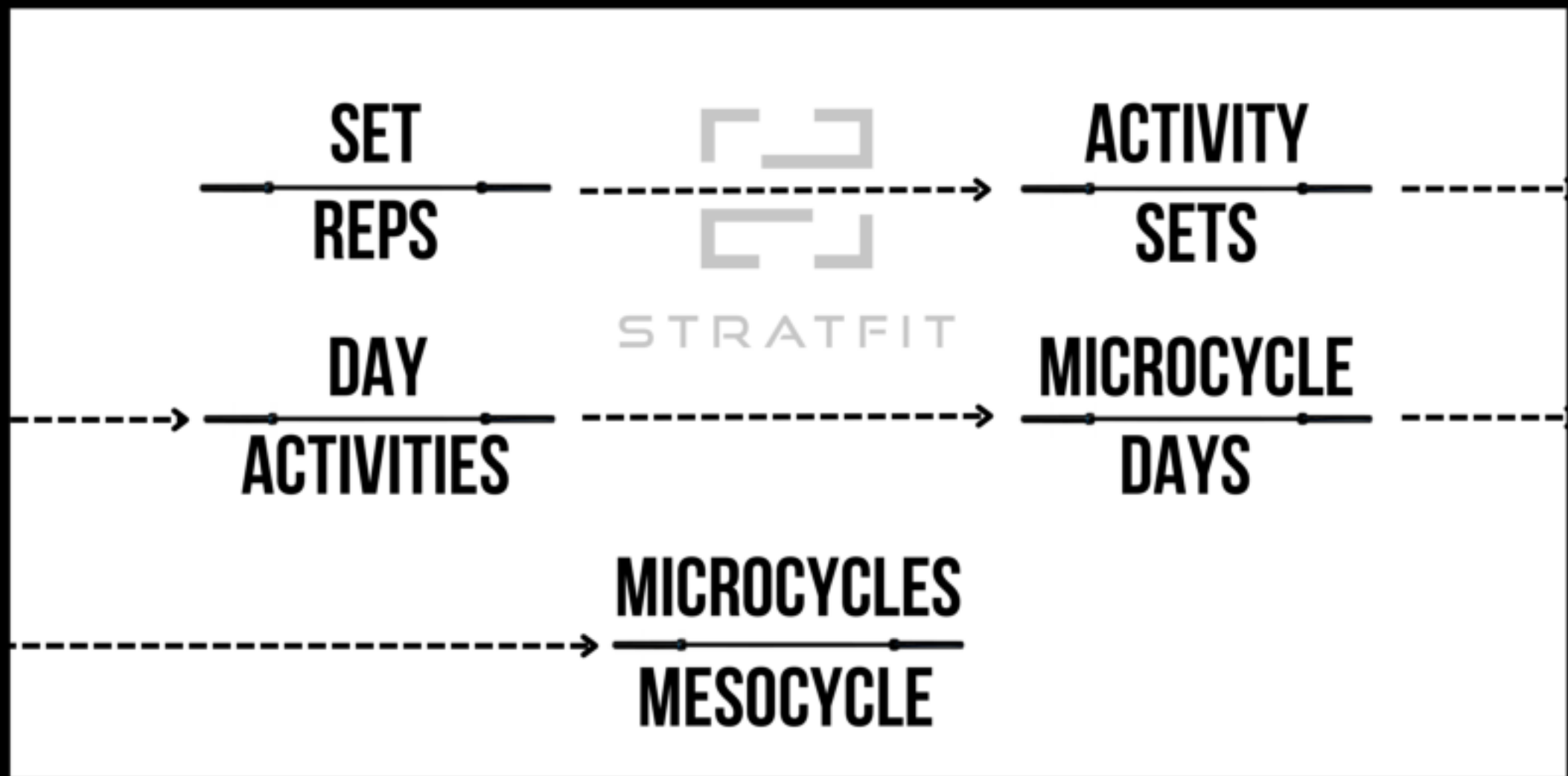
1

UNITS

TRAINING IS COMPOSED OF TRAINING UNITS.

Like the way a building is built from bricks, a training strategy is built from "training units." These units represent a certain amount of Time and certain amount of Loading.

A larger units are divisible by smaller units. The image to the left shows the units we will primarily deal with in this document. Units go as up to as large a 4 year Olympic Cycle.



1.2

UNIT DEFINITIONS

REP: A "Repetition" of movement with a certain "spatial form."

SET: A group of Reps performed in sequence to achieve a certain training objective.

ACTIVITY: A group of Sets performed in sequence to achieve a certain training objective.

DAY: A group of Activities performed in sequence to achieve a certain training objective.

MICROCYCLE: A group of training and rest Days organized in a sequence to achieve a certain training objective.

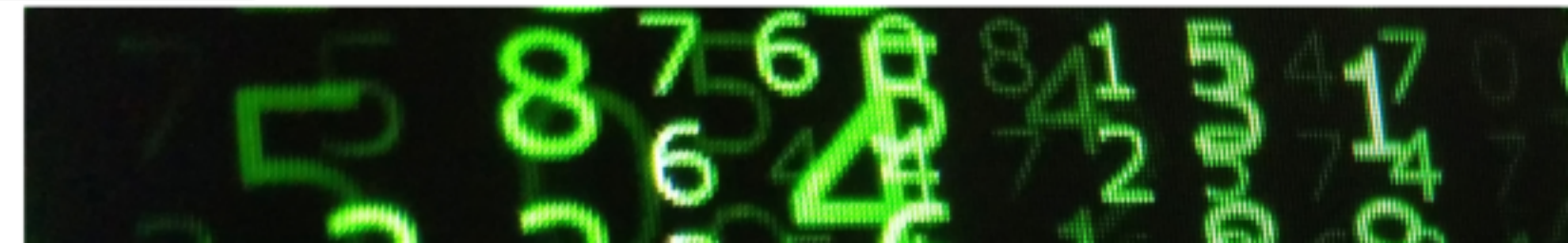
MESOCYCLE: A group of Microcycles organized in a sequence to achieve a certain training objective. .

*NOTES

*In the current system a day can be viewed as a workout.

*A microcycle is basically a week. The final (7th) day of microcycle is rest day.

*The final microcycle of a mesocycle is "De-Load" week. The purpose of a De-Load is to maintain adaptations while allowing full recovery before the next meso. A De-Load is contains 60% of the Loading of the previous microcycle.



1.3

CYCLE TYPES

Type	Basic Explanation
Shock Microcycle	A Microcycle with approximately 150% Loading of the Previous Microcycle shocks the athlete's organism to cause a sharp increase in performance.
Accumulation Microcycle	A Microcycle with significantly increased Loading from the previous Microcycle (but not as increased as a Shock) to facilitate the accumulation of fatigue to drive greater adaptation.
Stabilization Microcycle	A Microcycle with approximately equal Loading to the previous Microcycle.
Realization Microcycle	A Microcycle with significantly decreased Loading from the previous Microcycle (but not as decreased as a Deload) to facilitate significant recovery from accumulating fatigue.
Deload Microcycle	A Microcycle with approximately 60% Loading of the Previous Microcycle to facilitate full recovery from fatigue.

MICRO AND MESOCYCLES

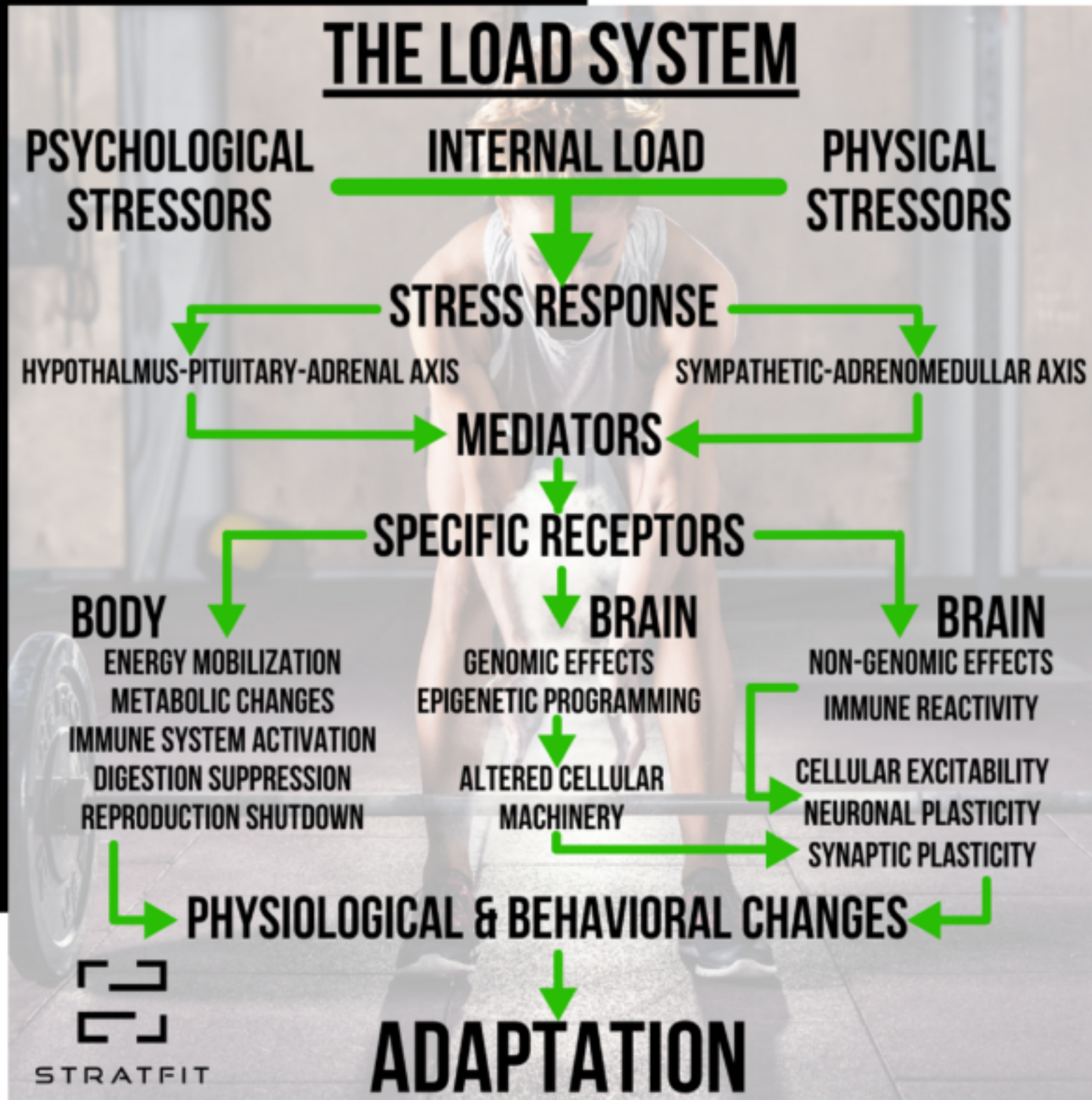
Micro and mesocycle level training units can be defined as a type. With the current version of StratFit Digital, you control the type at the microcycle Level.

The type is defined by the level of Loading of a microcycle in relation to the previous microcycle.



2

LOADING



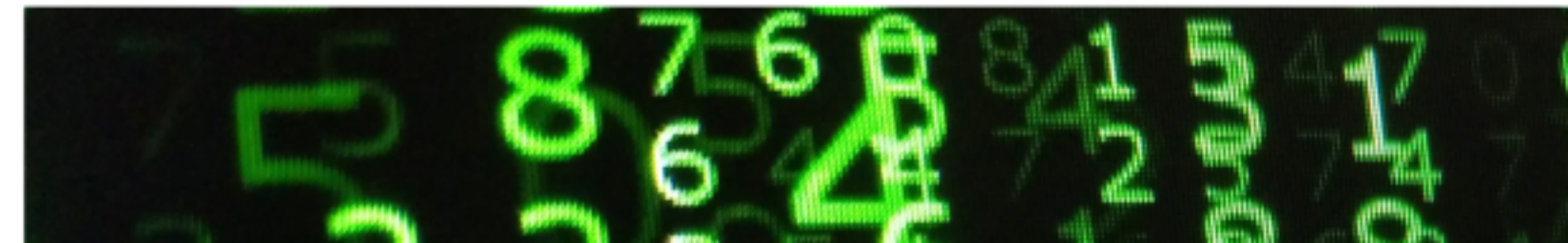
THE INTERNAL LOAD IS FOUNDATIONAL VARIABLE OF TRAINING

Training Units are doses of "Loading."

Foundationally, we define the Internal Load as a qualitative and quantitative combination of the intensity and amount of a training unit.

The Load represents the level of adaptational "stress" a given training units applies to the athlete's organism. Loading is the "Currency" of training. Like a company budgets money to accomplish goals through business projects, we budget Loads to accomplish certain training projects

The artful control of Loading in a training strategy is essence of being an effective trainer/coach.



2.1

LOADING GRADES

LOAD GRADES:

Very Light

Light

Moderate

Moderately Heavy

Heavy

Submaximal

Maximal

StratFit organizes amounts of loading into an intuitive grading system.

The Loading Grade corresponds to the level adaptational stress a given training unit (set, activity, day, microcycle...) applies to the athlete.

The Load of training unit debits from the Load Balance of a larger unit in this fashion:

Microcycle>>>Day>>>Activity>>>Set

LOADING %

2.2

COMPETITIVE
SQUAT



14%

COMPETITIVE
CLEAN & JERK



16%

WEIGHTLIFTING
MEET



26%

MARATHON



36%

POWERLIFTING MEET
W/ STRICT CURL



41%

ULTRAMARATHON



100%

Loading prescriptions for Activities, Days (Workouts), and Weeks (Microcycles) are prescribed a percentage of a Maximum which is representative of a 100 Mile Ultramarathon (the largest Load ever endured in human athletic history).

We use the Loading percentages of various competitive activities as measurement and prescription tools for prescribing Loads for Activities, Days, and Weeks.



3

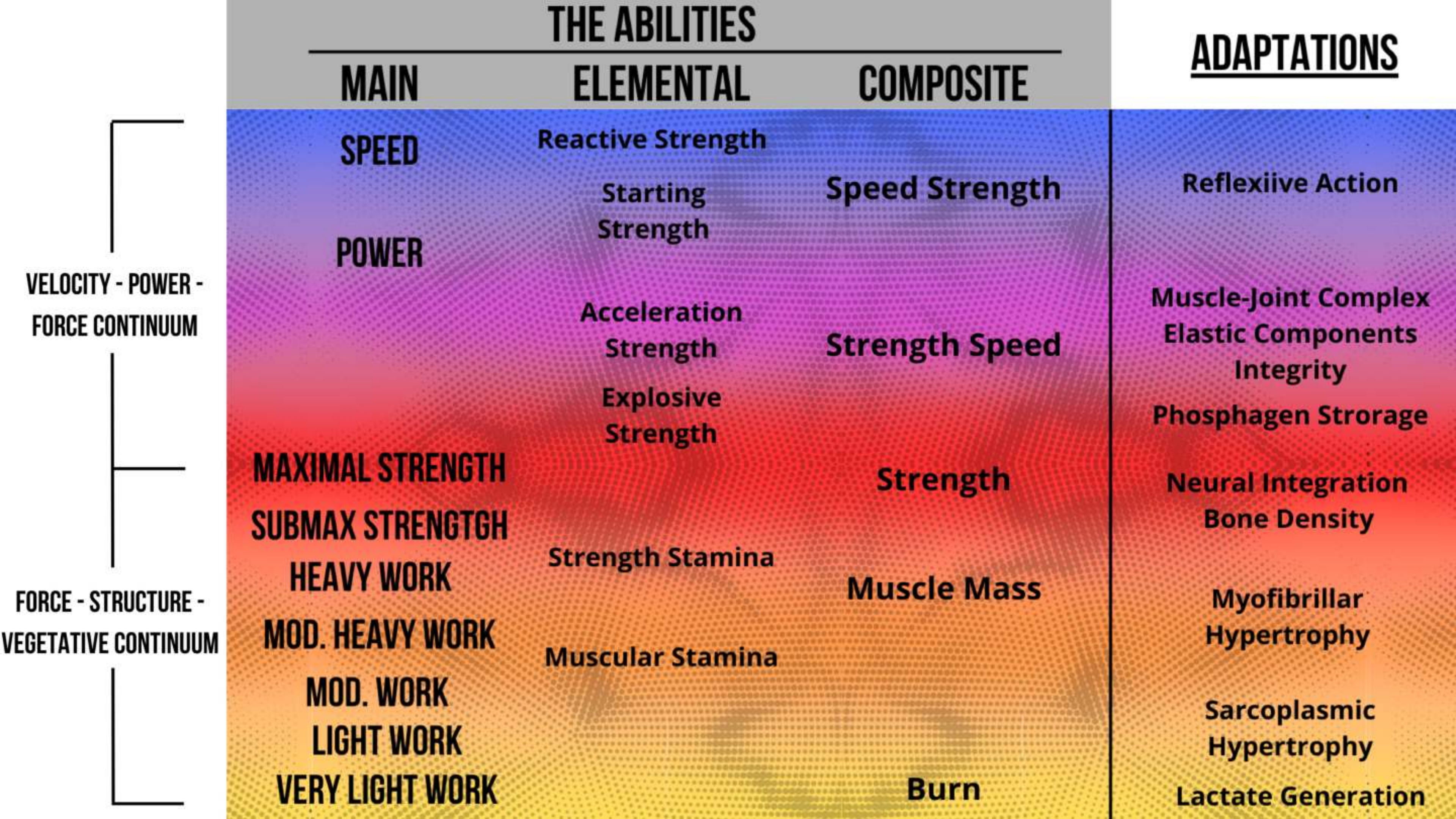
ABILITIES

THE MAIN ABILITIES AND ADAPTATIONS OF TRAINING

The **physiological abilities and attributes** we train in the gym and display in competition are the essential categories for athletic training. StratFit has a comprehensive and intuitive labeling system for the variables and adaptational outcomes of training. The abilities lie on a spectrum that has two continuums: The Velocity-Power-Force Continuum and the Force-Structure-Vegetative Continuum. Maximum Work is the fulcrum that lies at the very center of the spectrum and Maximum Strength lies on both the continuums. We strategize abilities at the set level.

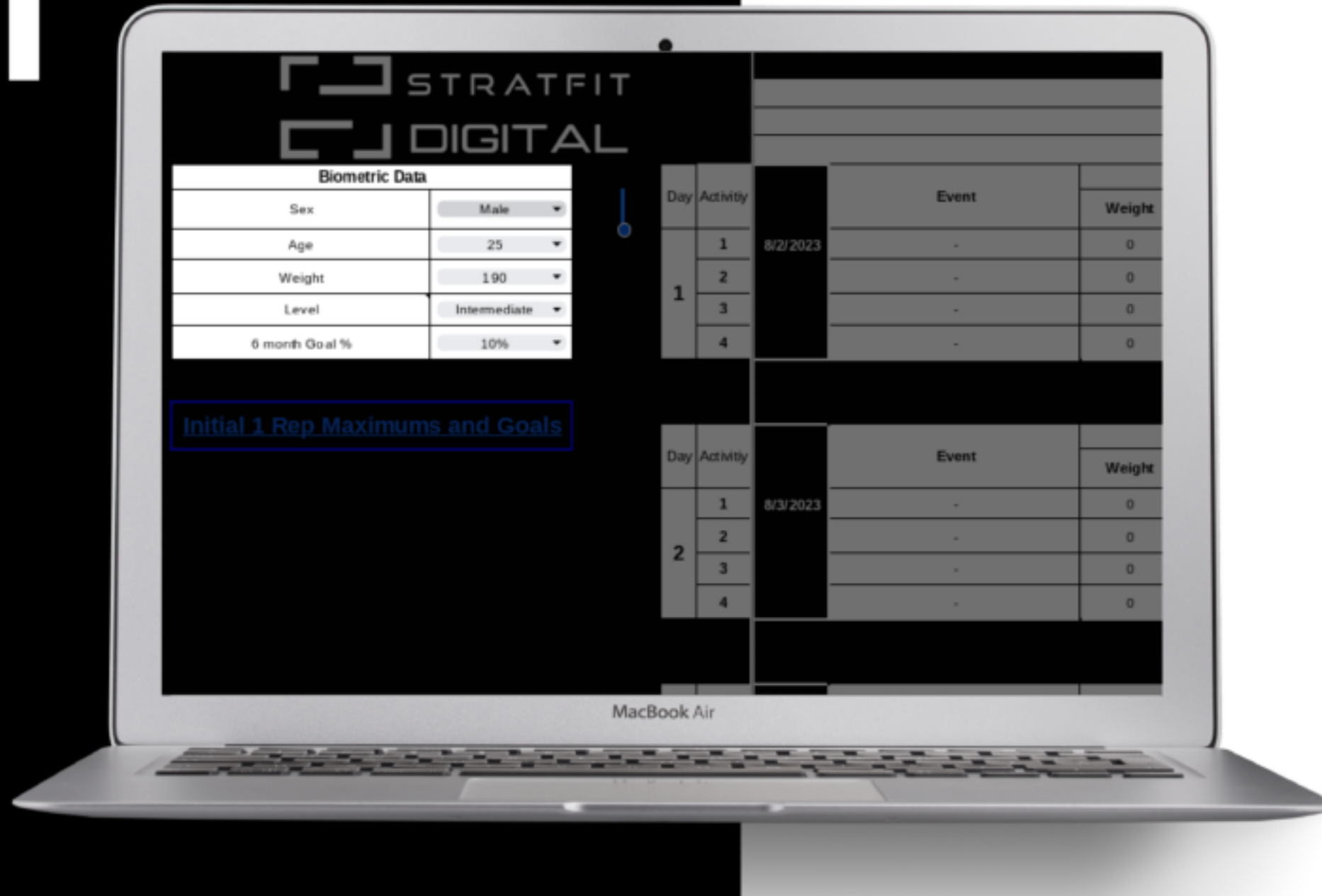
THE ABILITIES			<u>ADAPTATIONS</u>
MAIN	ELEMENTAL	COMPOSITE	
SPEED	Reactive Strength	Speed Strength	Reflexiive Action
POWER	Starting Strength		Muscle-Joint Complex Elastic Components Integrity
	Acceleration Strength	Strength Speed	Phosphagen Storage
	Explosive Strength	Strength	Neural Integration
MAXIMAL STRENGTH			Bone Density
SUBMAX STRENGTH	Strength Stamina	Muscle Mass	Myofibrillar Hypertrophy
HEAVY WORK			Sarcoplasmic Hypertrophy
MOD. HEAVY WORK	Muscular Stamina	Burn	Lactate Generation
MOD. WORK			
LIGHT WORK			
VERY LIGHT WORK			





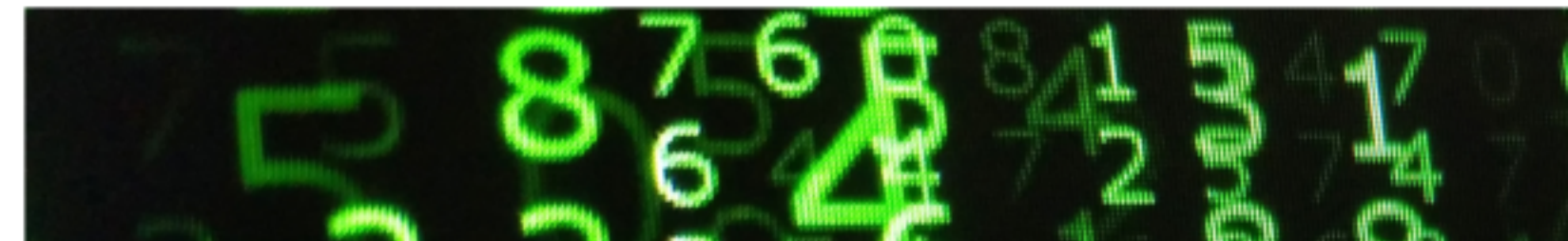
ENTER THE BASIC INFO

1



ENTER THE TRAINEE BIOMETRICS

The first step is to enter the trainee's Sex, Age, Weight, and Performance Level in the "Weights" tab. This data will effect the Loading grade values and estimated 1RMs and 6-month strength goals. If you are making a program that you will copy and use for many trainees, just leave these on default and change them in each trainee's file.

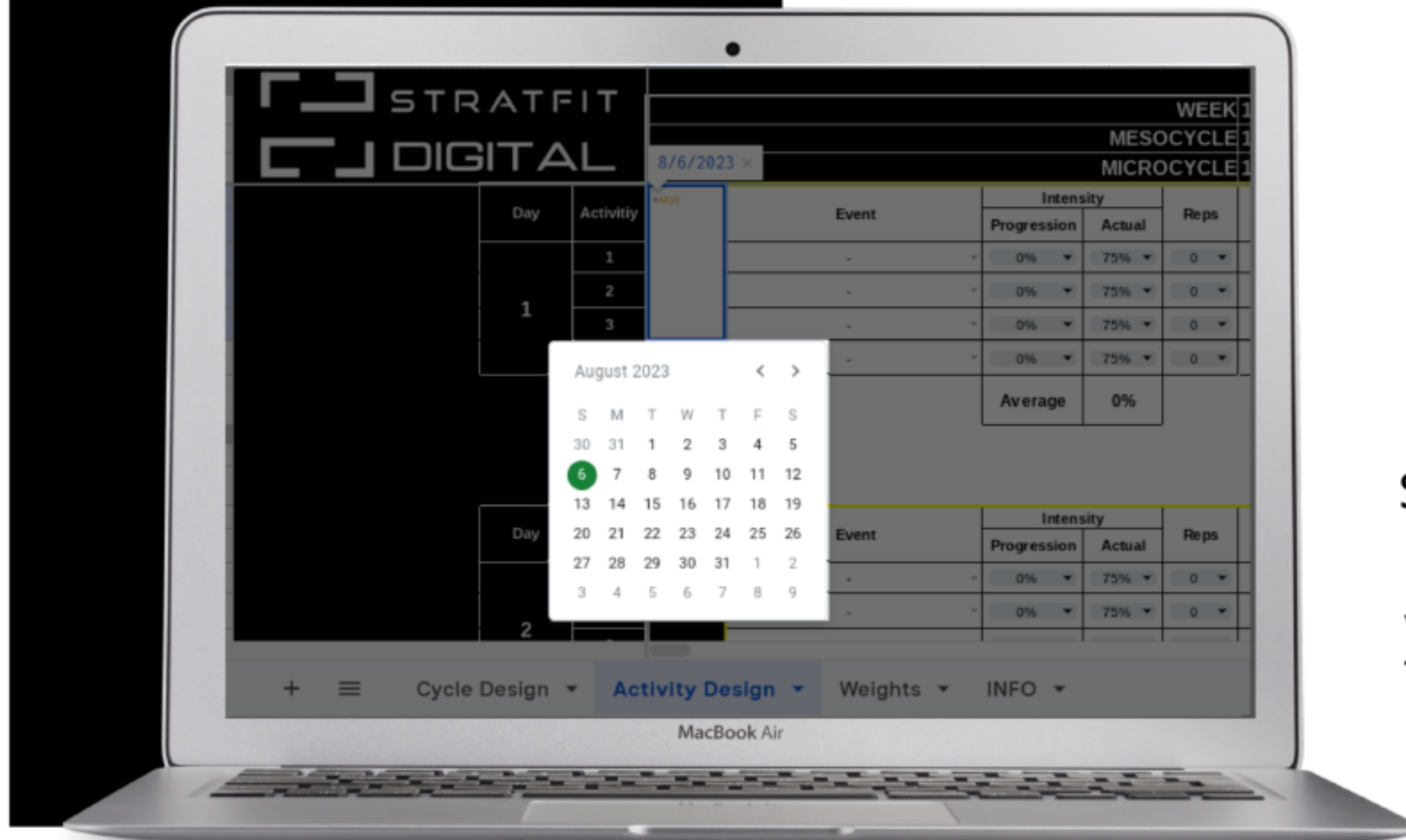


1.1

SET THE CALENDAR FOR THE PROGRAM

CHOOSE THE DATE FOR THE FIRST DAY

Choose the date for day one in the Activity Design tab, the system will then set all the dates for the 6 month period. Even if you don't want a session on day one, use that date cell to set the calendar.



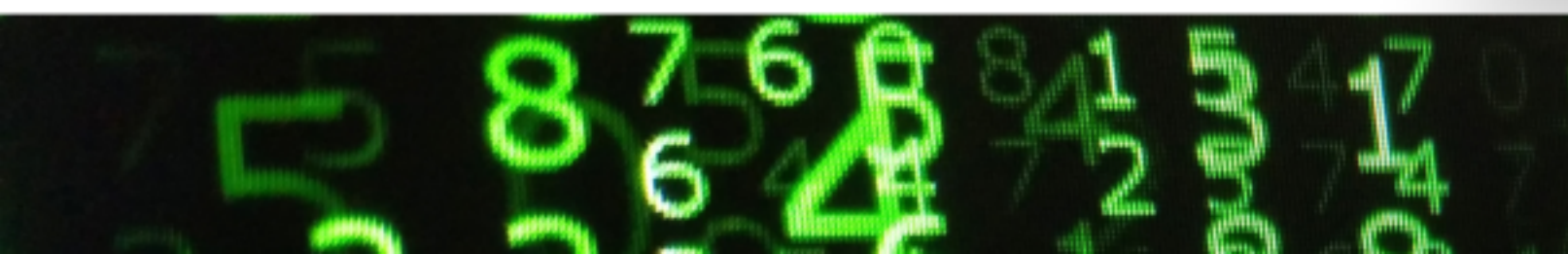
DESIGN THE ACTIVITIES OF WEEK 1

CHOOSE THE EVENT FOR THE FIRST ACTIVITY

The first step after **entering the date** (the default is the current date, choose the first date to lock it in place) for the first training day/workout is to choose the "Event" for the first activity.



2



3

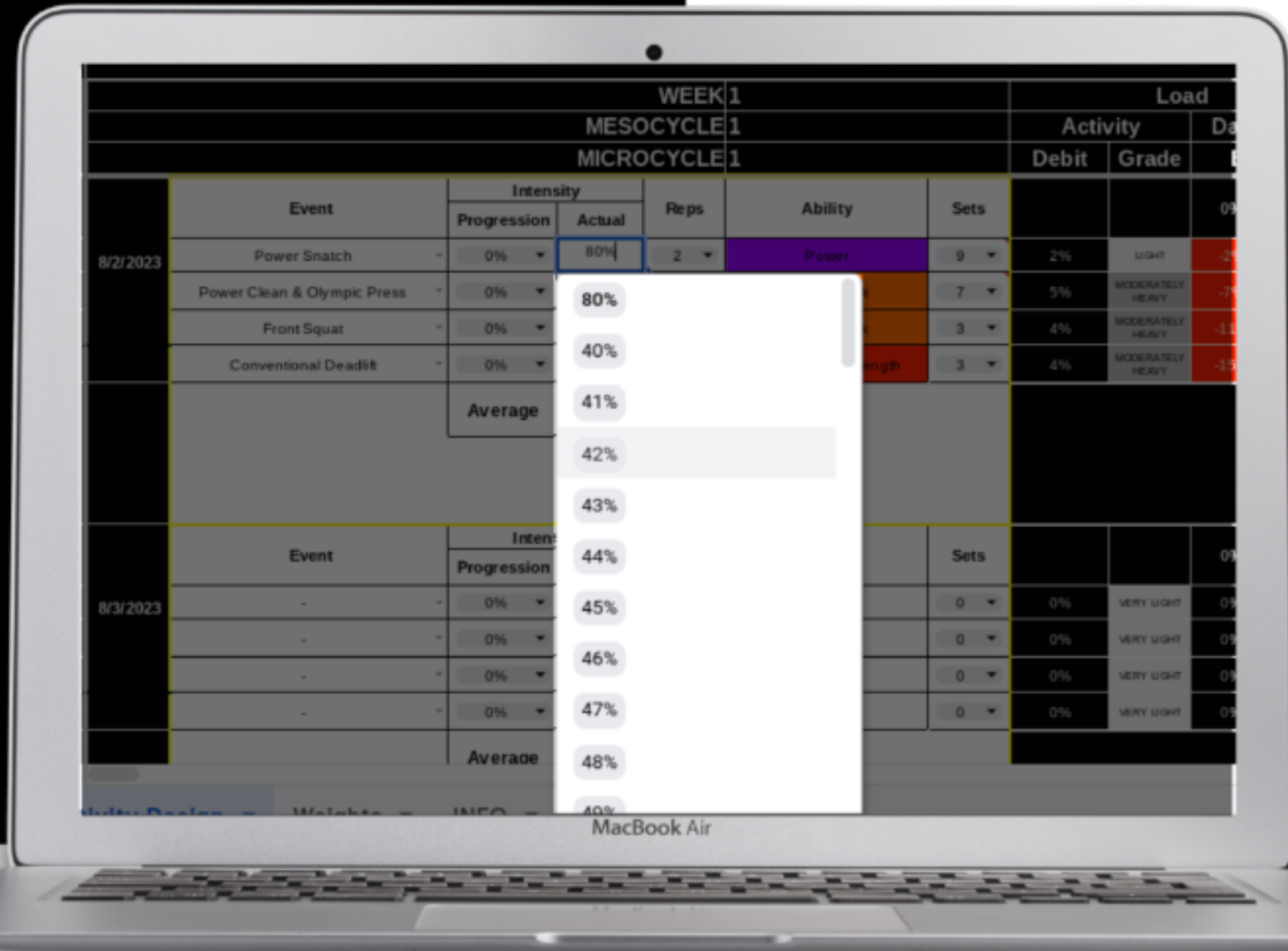
ACT. 1 INTENSITY

CHOOSE THE INTENSITY THE FIRST ACTIVITY

Choose a a training intensity (as % of 1 Rep Maximum for the first Activity.

The Intensity and number of Reps per set determines the quality of the athlete's adaptation to the training.

The quality refers to the Ability the activities develops in the athlete as an adaptation.



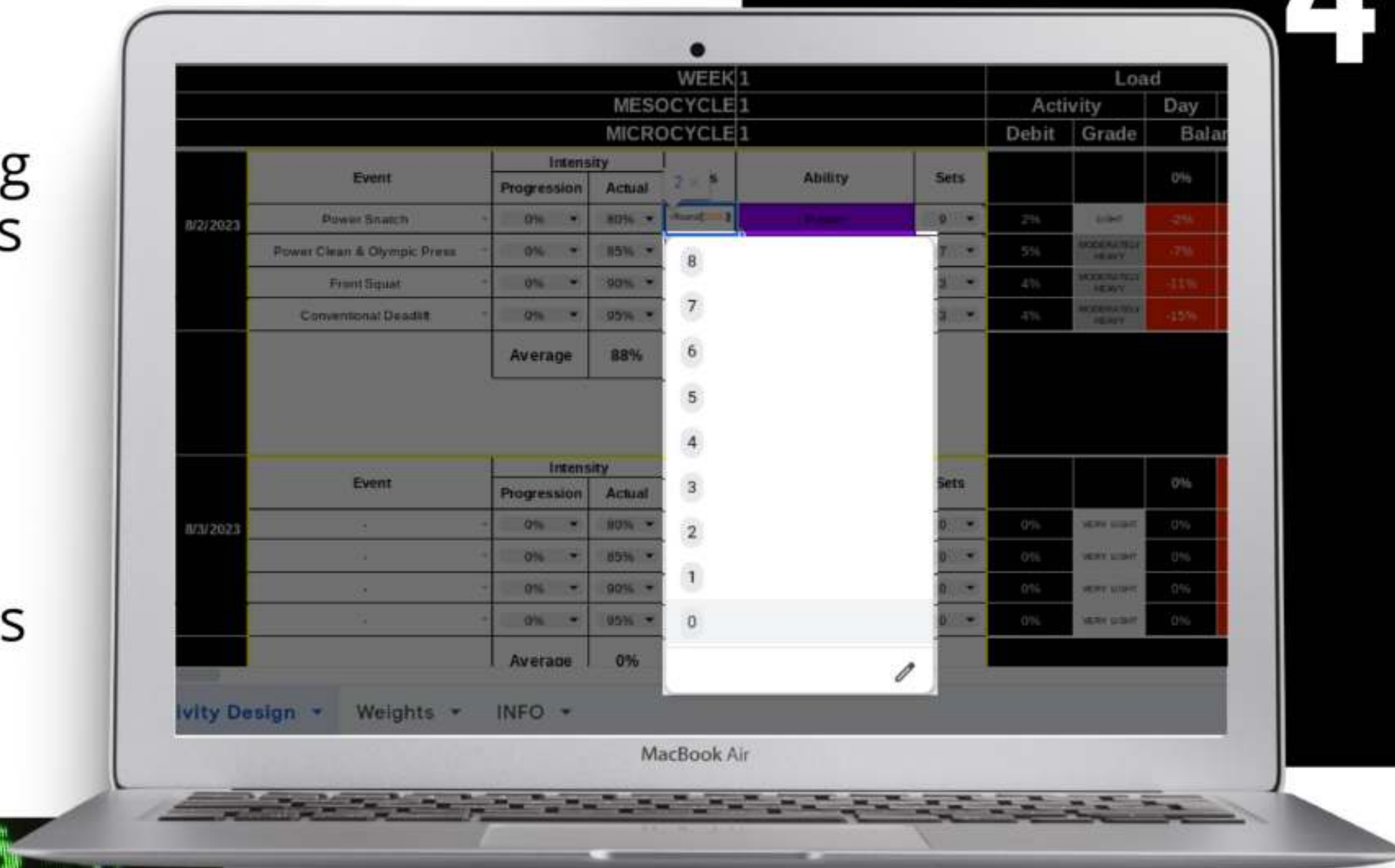
CHOOSE THE REPS PER SET

After choosing the training intensity, choose the Reps per set from the "Reps" dropdown menu.

The system provides a range from 0 to the maximum number of reps with the given intensity (AMRAP).

REPS

4



5

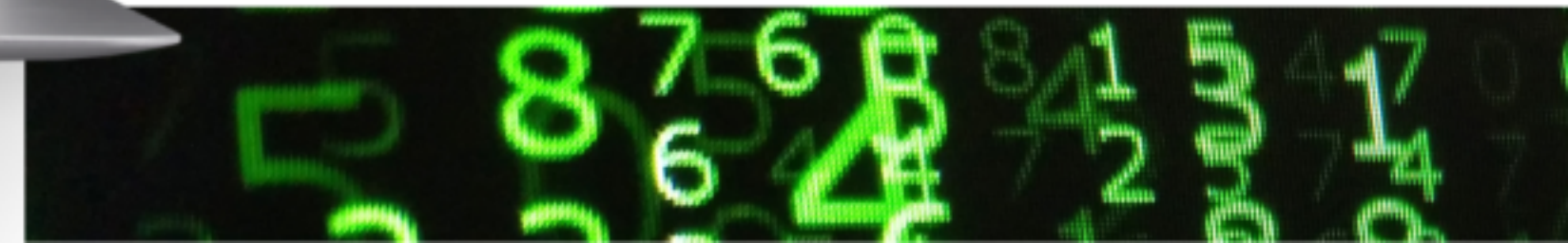
VIEW THE ABILITY

THE QUALITATIVE COMBINATION OF INTENSITY AND REPS = ABILITY

After you enter the Intensity and Reps per set the system will determine what Ability the sets will develop in the athlete as a training adaptation. The equations behind this function assume that the athlete will perform each rep with full Volitional Momentum (meaning the each rep will be performed with as much Speed as possible).

WEEK 1							Acc
MESOCYCLE 1							Debit
MICROCYCLE 1							
Event	Intensity		Reps	Ability	Sets		
	Progression	Actual					
8/2/2023	Power Snatch	0%	80%	2	Power	9	2%
	Power Clean & Olympic Press	0%	85%	2	Heavy Work	7	5%
	Front Squat	0%	90%	2	Heavy Work	3	4%
	Conventional Deadlift	0%	95%	1	Submaximal Strength	3	4%
		Average	88%				
8/3/2023	-	0%	80%	0	-	0	0%
	-	0%	85%	0	-	0	0%
	-	0%	90%	0	-	0	0%
	-	0%	95%	0	-	0	0%

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SETS

PRESCRIBE THE SETS

After entering the Intensity and Reps per set you enter the number of Sets.

The number of sets determines quantitative level of adaptation from the activity. If "Power" is the Ability/qualitative adaptation of the work then more sets the athlete performs the more "Power Endurance" the activity will develop as a training adaptation.

The system limits the number of sets so that the Loading "Debit" of the activity will not exceed the day and weeks' Loading prescription or the maximal bound for the intensity according A.S. Prilepin's lifting intensity-reps chart.



6

Activity

VERY LIGHT	LIGHT	MODERATE	MODERATELY HEAVY	HEAVY	SUBMAXIMAL	MAXIMAL	MAXIMUM
1%	2%	3%	4%	6%	7%	9%	16%

7

LOADING BALANCE SYSTEM

LOAD DEBIT AND BALANCE

When you enter an "Event" with a training "Intensity," number of "Reps" per set, and the number of "Sets," this creates a Load. This Load "Debits" form adds to the Day and Week/Microcycle Balances. You view the debiting Load for the Activity and Loading "Grade" to on the right side of the day block. The day and week balances are there as well.

When you start building the program with the week one activity, the Load adds up from the top of each day down and the top of the week/microcycle down.

After week one, you can set Loading "Budgets" for days and weeks; with this system, the Loads debit from the top down in a balanced fashion like a checkbook. More on that system later.

WEEK 1						Load				
MESOCYCLE 1						Activity		Day	Week	
MICROCYCLE 1						Debit	Grade	Balance		
Event	Intensity		Reps	Ability	Sets	Debit	Grade	Day	Week	
	Progression	Actual								
8/12/2023	Power Snatch	0%	80%	2	Power	8	2%	LIGHT	2%	2%
	Power Clean & Olympic Press	0%	85%	2	Heavy Work	6	3%	MODERATE	6%	6%
	Front Squat	0%	90%	2	Heavy Work	3	4%	MODERATELY HEAVY	10%	10%
	Conventional Deadlift	0%	95%	1	Submaximal Strength	3	4%	MODERATELY HEAVY	14%	14%
		Average	89%							
8/13/2023	-	0%	80%	0	-	0	0%	VERY LIGHT	0%	14%
	-	0%	85%	0	-	0	0%	VERY LIGHT	0%	14%
	-	0%	90%	0	-	0	0%	VERY LIGHT	0%	14%
	-	0%	95%	0	-	0	0%	VERY LIGHT	0%	14%
		Average	0%							
	Event	Progression	Actual	Reps	Ability	Sets				

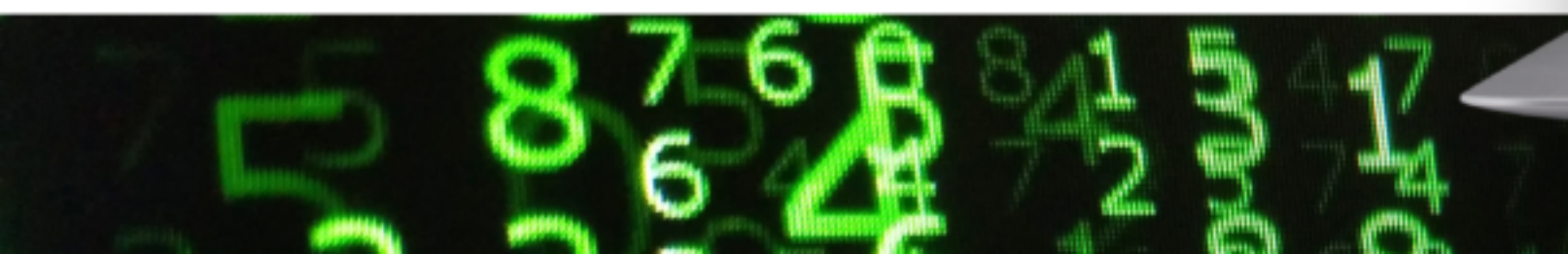
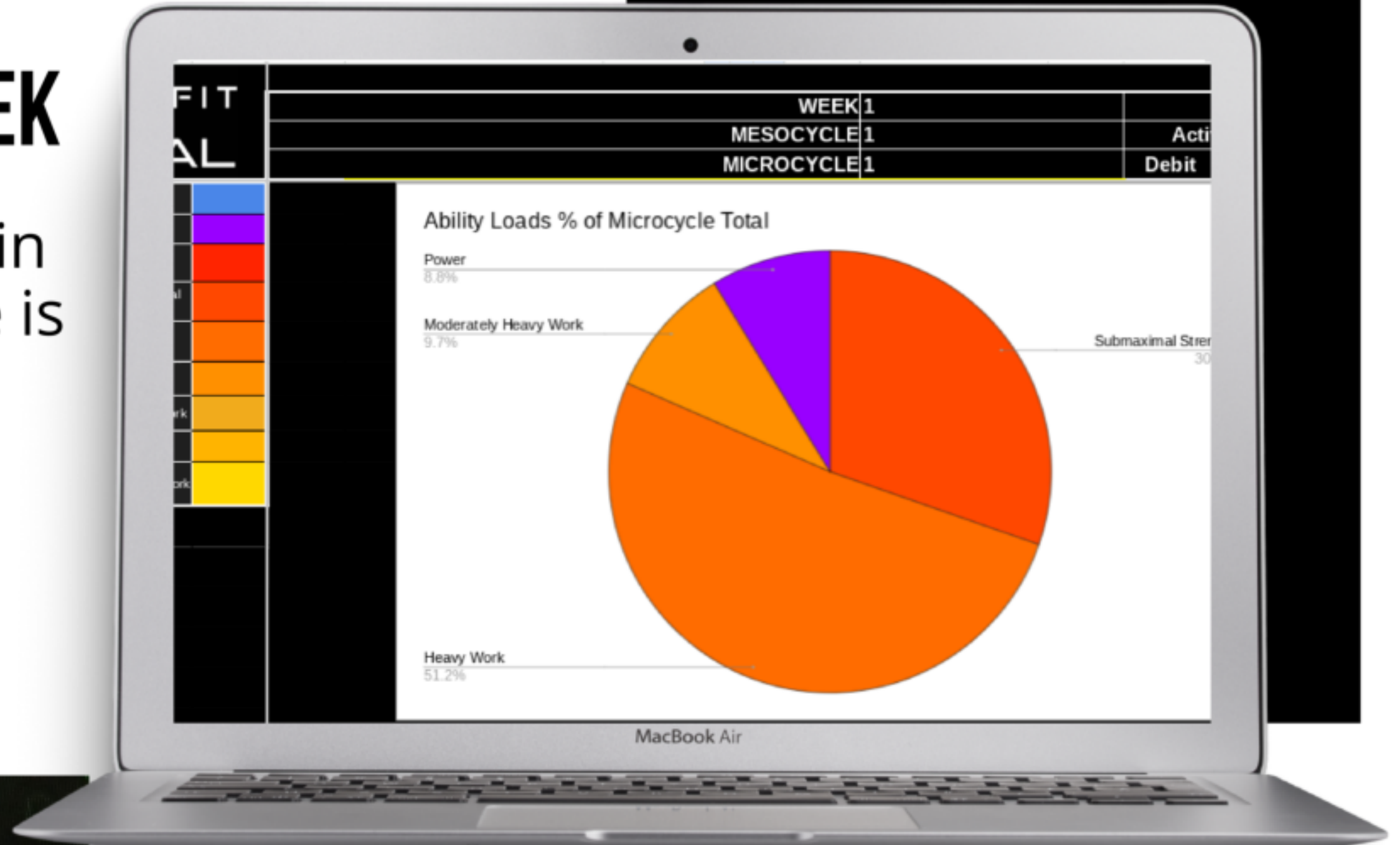


MICROCYCLE ABILITIES

8

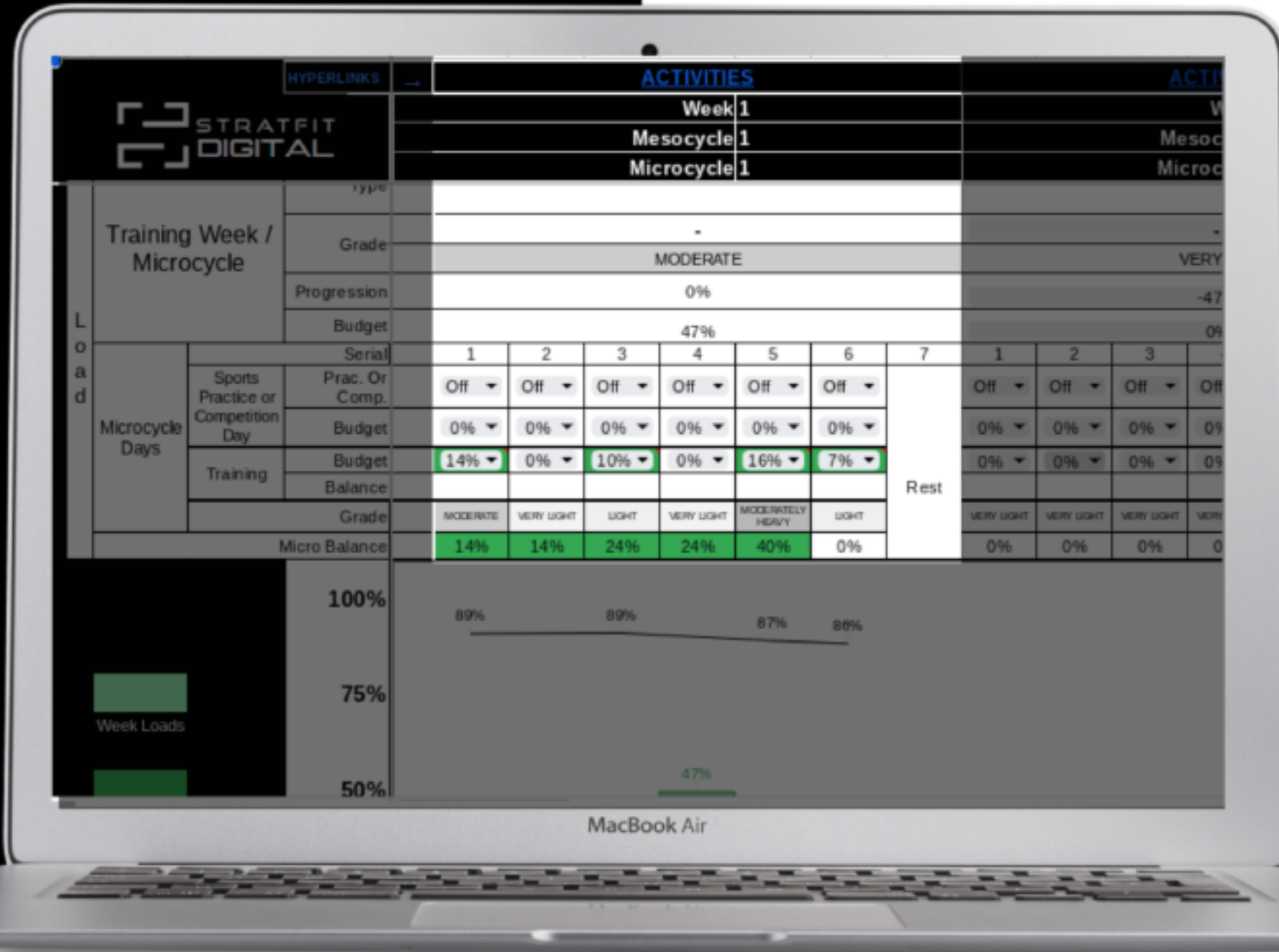
VIEW THE ABILITY DEVELOPMENTS OF THE WEEK

Below each Week/Microcycle in the Activity Design sheet there is a pie chart showing the breakdown of the Abilities developed in the cycle.



9

CYCLE DESIGN



WEEK 1 BALANCES

After designing the Activities and Days of weeks one use the Hyperlink at the top right of the week 1 column to jump to the week in the "cycle design" tab.

You will notice when you get the cycle tab that the Loads of Week One havn already filled it.



COMPETITIVE LOADS

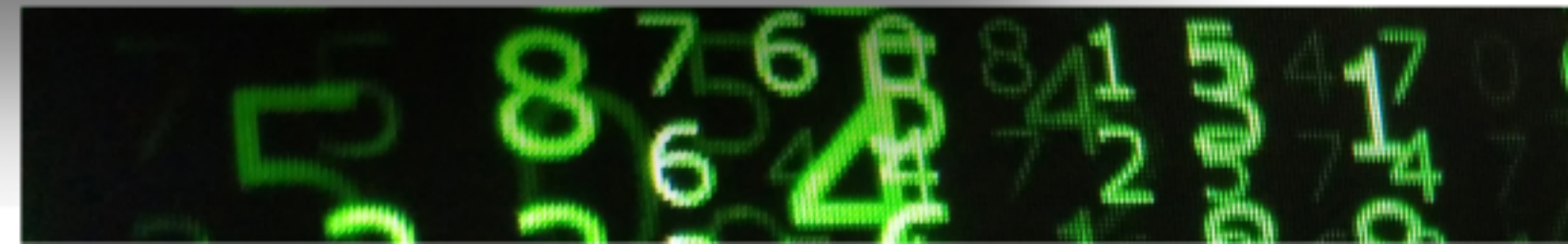
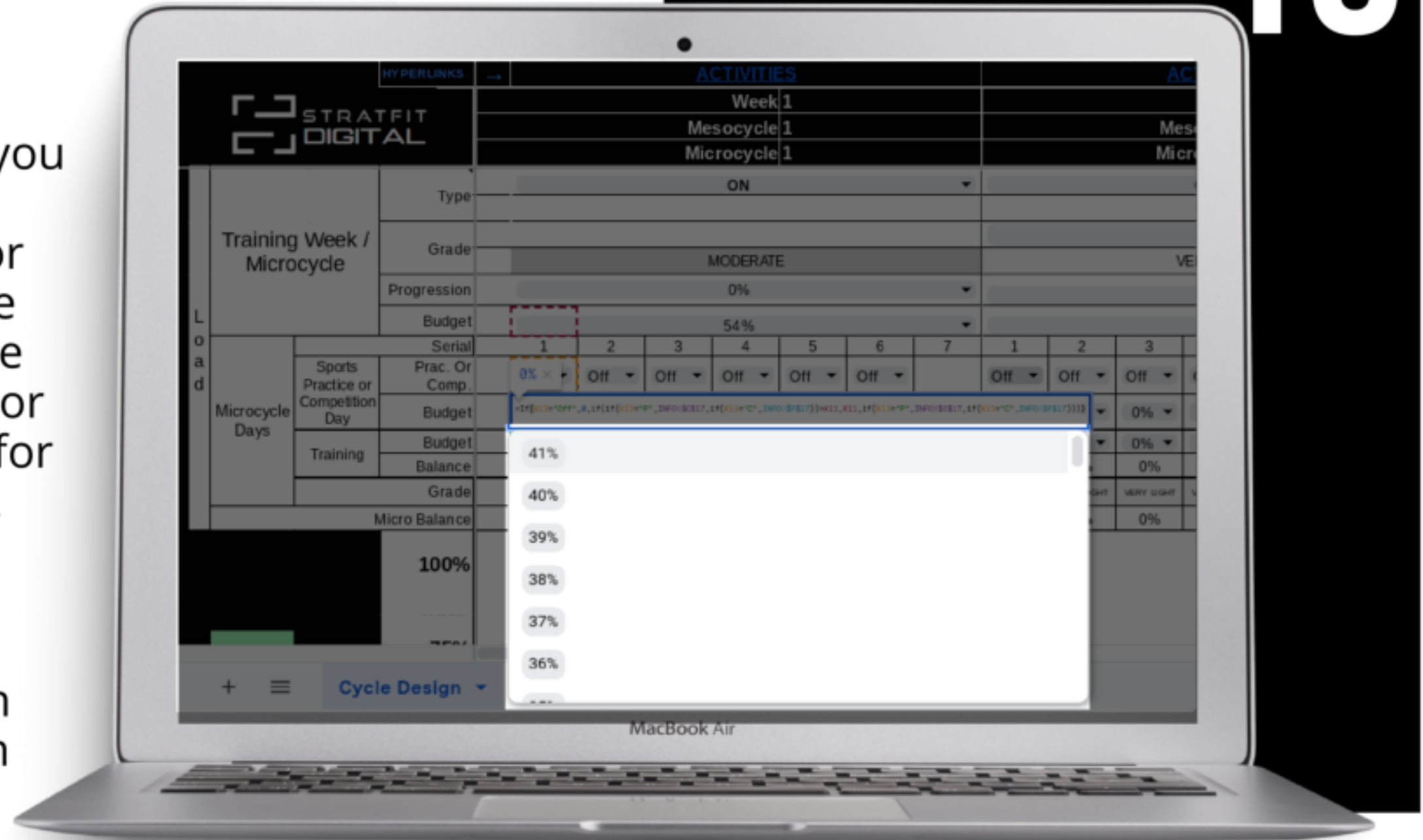
10

PRACTICE AND COMPETITION

If your strategy is for a competitive athlete you set Loads at the day level for Practices, Competition, and Training. In the "Prac. or Comp." row, choose "P," "C," or "Off." The system automatically puts an approximate Load in the sports day budget for practice or competition. You can use the "Info" sheet for references to fine tune the sports Loads.

The Cell will turn Yellow if there is a competition. You can place all the competitions for the 6 month period in advance if you want to build the program around the competitive schedule.

Adjust the week budget as needed to account for the competitive Loads.



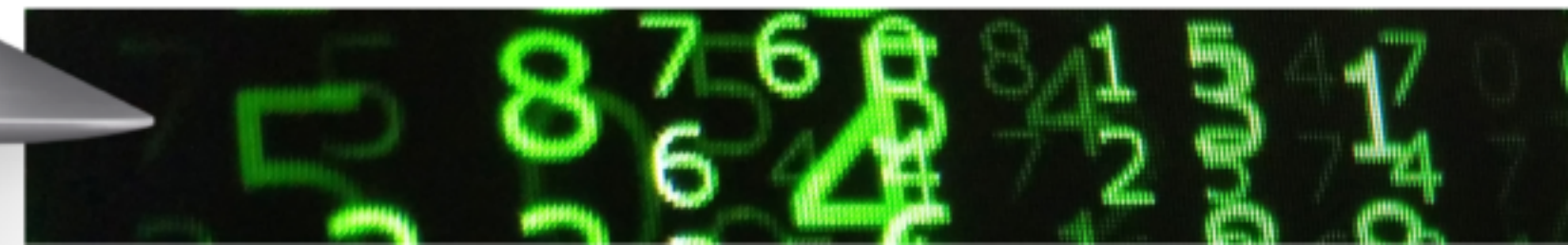
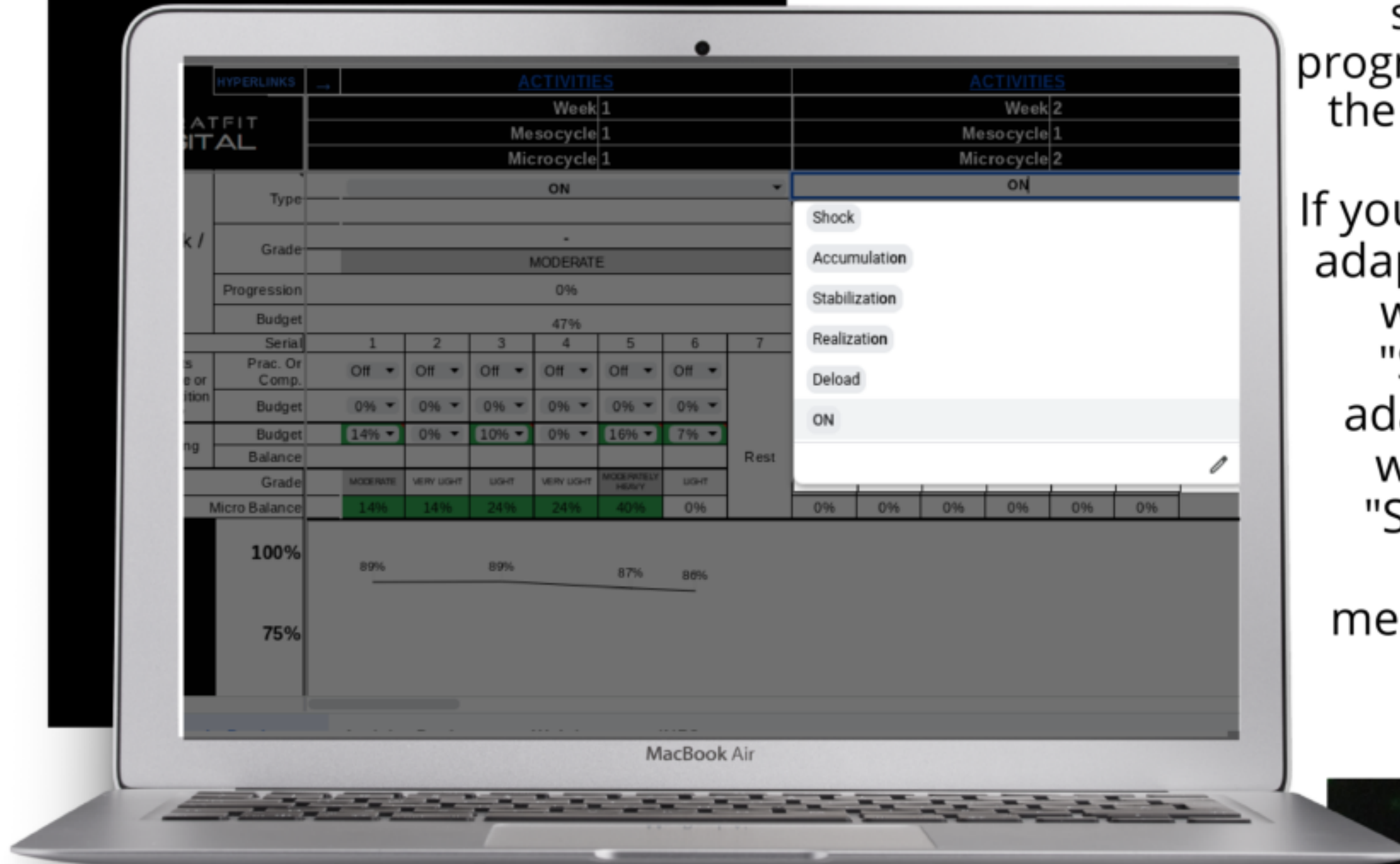
11

CYCLIC PROGRESSION

MICROCYCLE TYPE

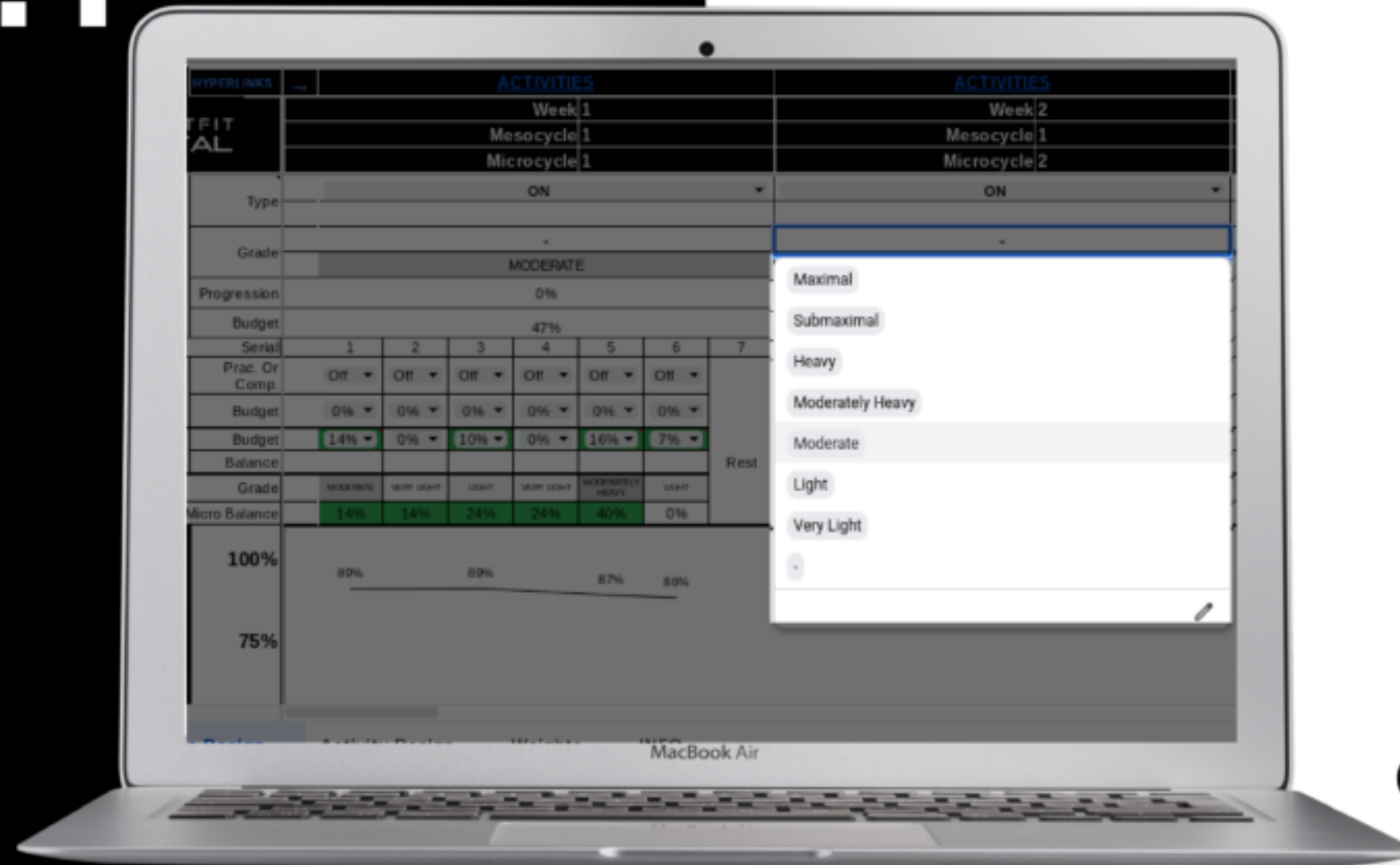
There are two parallel systems to create a progression at the Microcycle level. The first system uses microcycle "types" to create progression. After creating the first week, choose the Microcycle type for all the following weeks.

If you want to accumulate more fatigue to drive adaptation, you choose "Accumulation;" if you want to Stabilize the adaptation, choose "Stabilization;" if you want to Realize the adaptation, you choose "Realization;" If you want to Shock the organism, you choose "Shock," when you want to Deload for full recovery from fatigue to start another mesocycle you choose "Deload." Choosing a type will set a Loading Budget for the week/microcycle.



11.1

CYCLIC PROGRESSION



MICROCYCLE **GRADE**

The other system for creating a Loading progression at the microcycle level is to choose a "grade." Remember the grades from slide 2.1.

The default setting for the microcycle type is "ON." To use the grading system, leave the "ON" type and choose a grade.

Choosing a grade will set a Loading Budget for the week/microcycle.

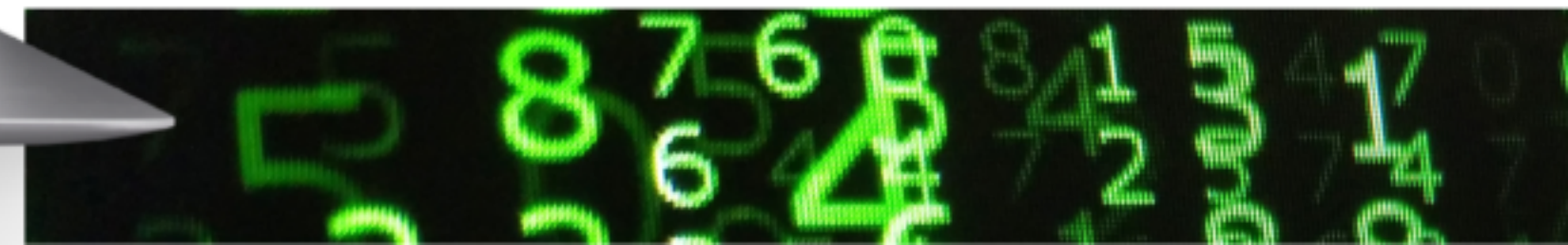
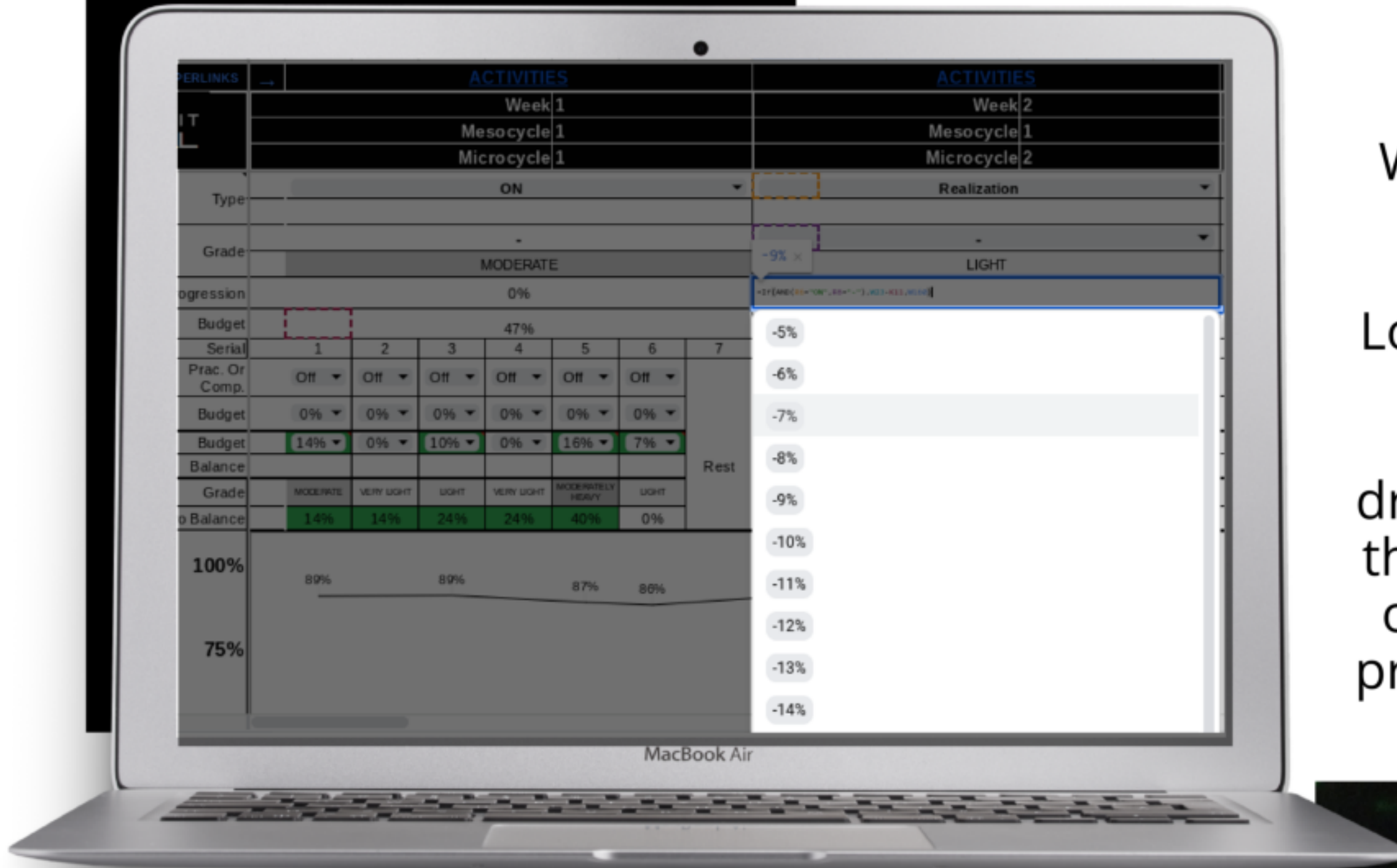
Week / Microcycle							
VERY LIGHT	LIGHT	MODERATE	MODERATELY HEAVY	HEAVY	SUBMAXIMAL	MAXIMAL	MAXIMUM
15%	31%	46%	61%	69%	76%	84%	100%

11.2

LOADING PROGRESSION

SET THE PROGRESSION %

When you choose a Type *-or-* Grade, the system automatically sets a progression % over the last week's Load. It also sets a progression range so you can choose a custom progression percentage from the dropdown. The range will ensure that the microcycle will have the character of the type or grade you chose. The progression will set the budget for the week/micro.

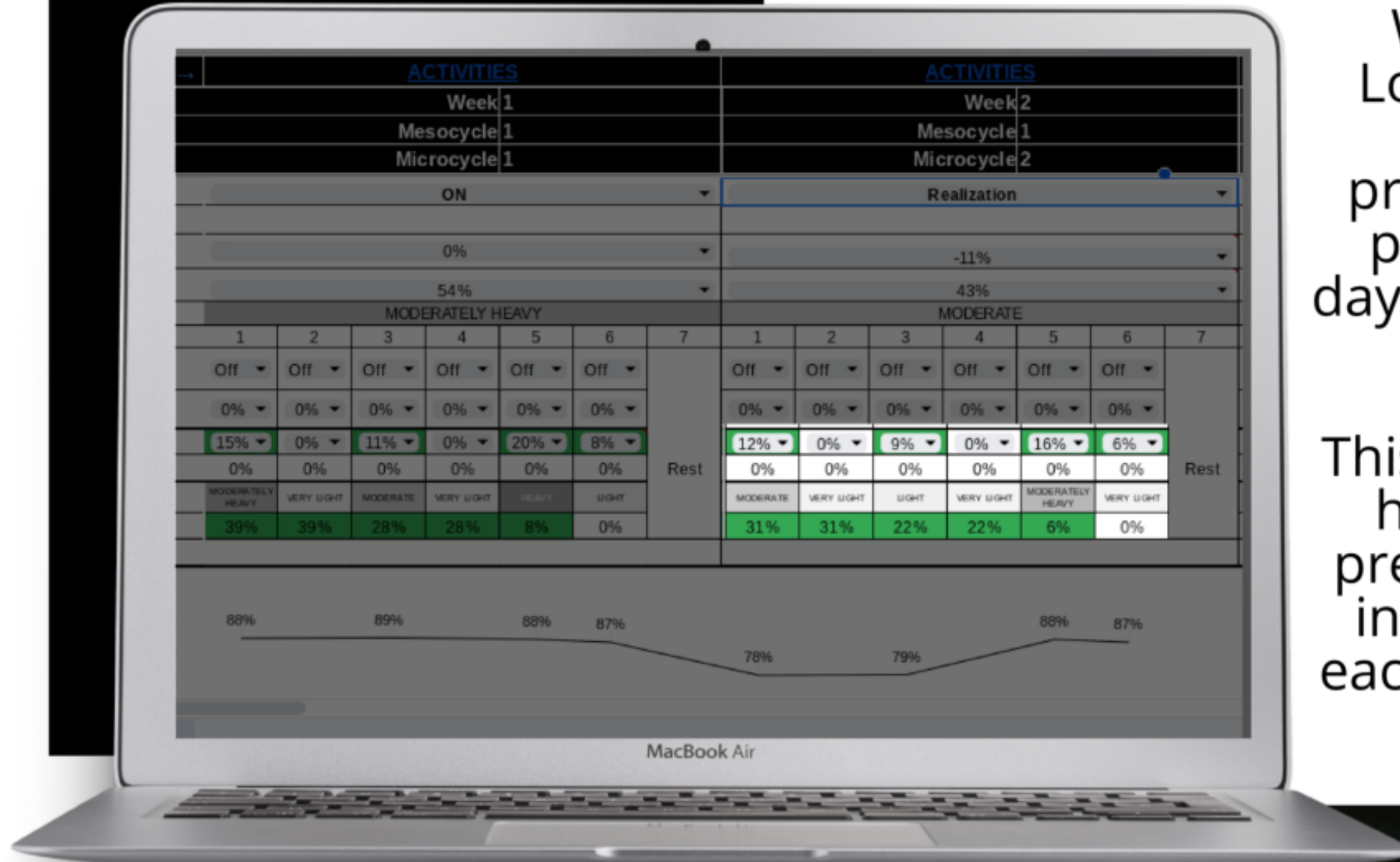


11.3 CONTINUITY

DAY LEVEL PROGRESSIONS

When you enter the Week Level Loading Progression % the system will distribute the progression/regression percentage proportionally across the training days based on each day's share of the Load of the previous week.

This will ensure the training week will have a similar character to to the previous week, only with the change in the Loading. You can customize each day to your liking. *Competitive Loads are done manually.



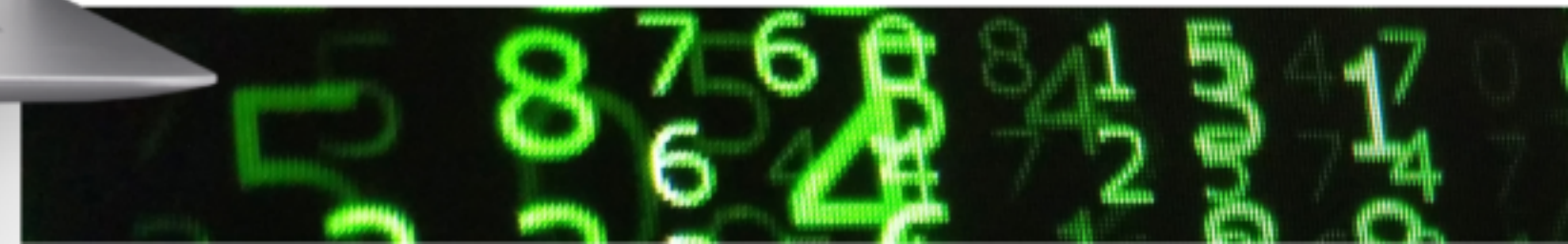
11.4 DUPLICATION

DUPLICATE A MICROCYCLE

If you want to build a training week/microcycle manually in the Activity Design sheet, leave the type default "ON" and the grade default as "-".

When you leave these defaults, you can duplicate any previous week at the top left corner each week.

If you build a week manually or use the duplication function the system will provide outputs of the type and grade of the week in the cycle design tab.



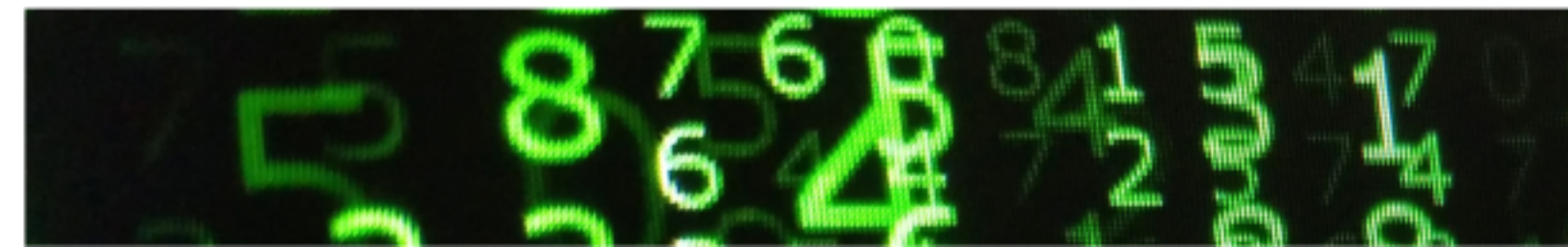
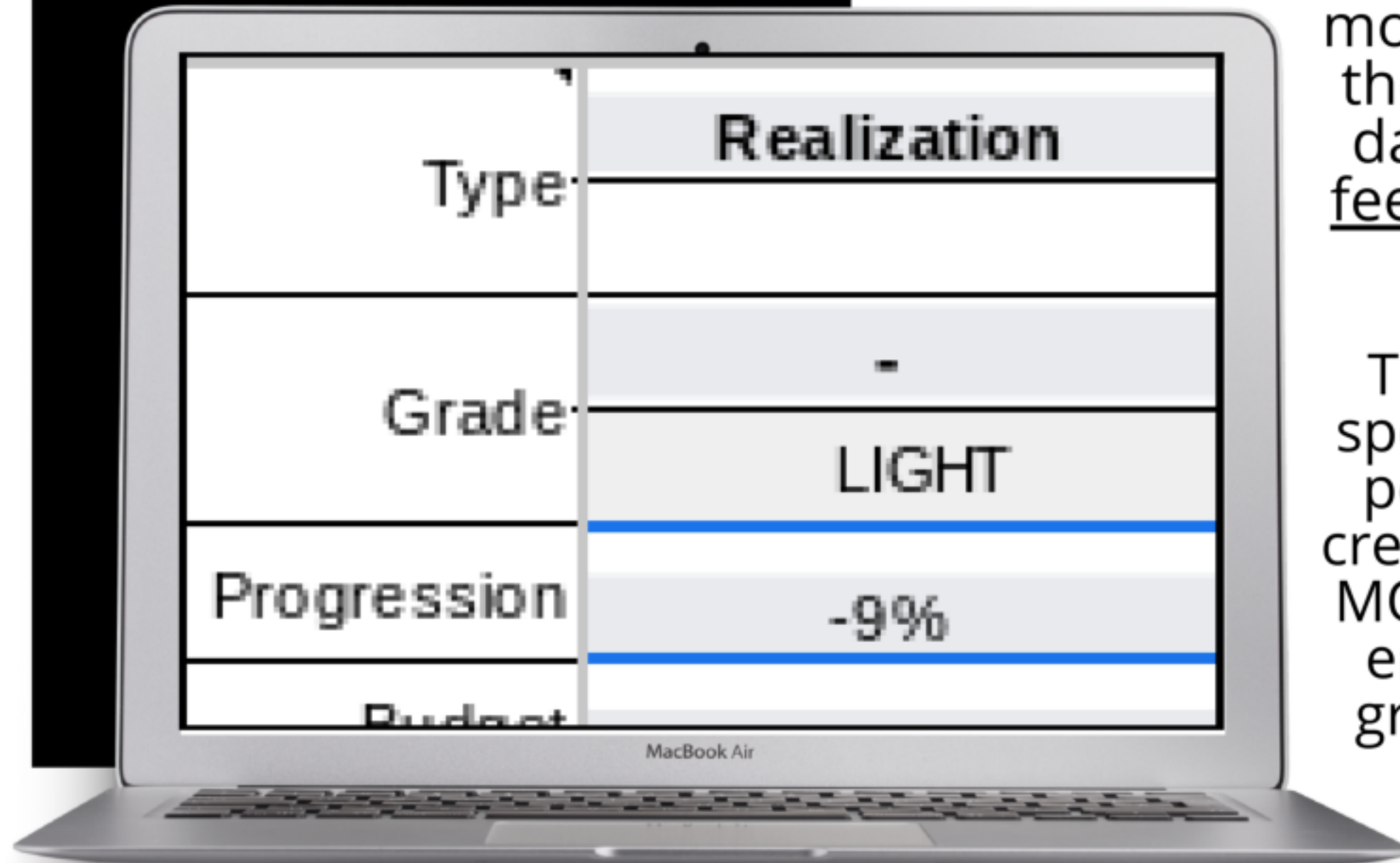
TYPES AND GRADES

11.5

TWO WAYS TO THINK

Using the microcycle "Type" might make the most sense during a long training phase when there isn't a "Peak" requirement for a certain date. The "Type" refers to how the cycle will feel to the athlete according to the Loading of the Previous cycles.

The "Grading" system is beneficial when you specifically want to create a Loading "Taper" to peak the athlete for an event. You can easily create a four-week taper: HEAVY - MOD. HEAVY-MODERATE - LIGHT to "Peak" the athlete at the end of week 4, for instance. You can use the grades at the Day level to create a short-term intra-week taper.



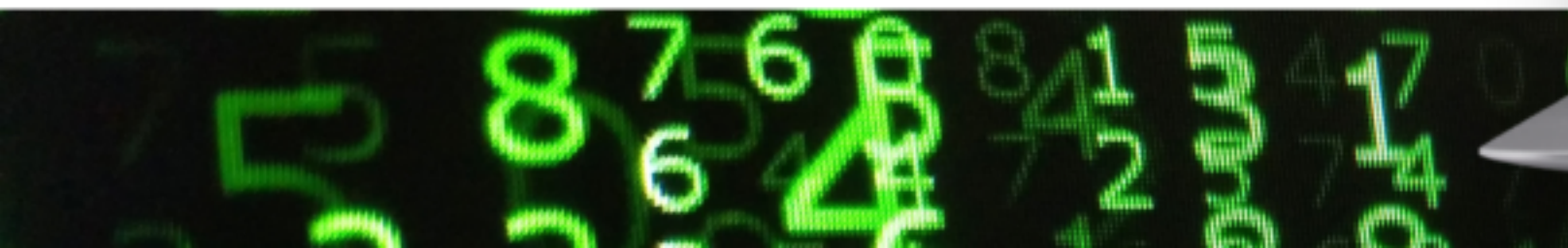
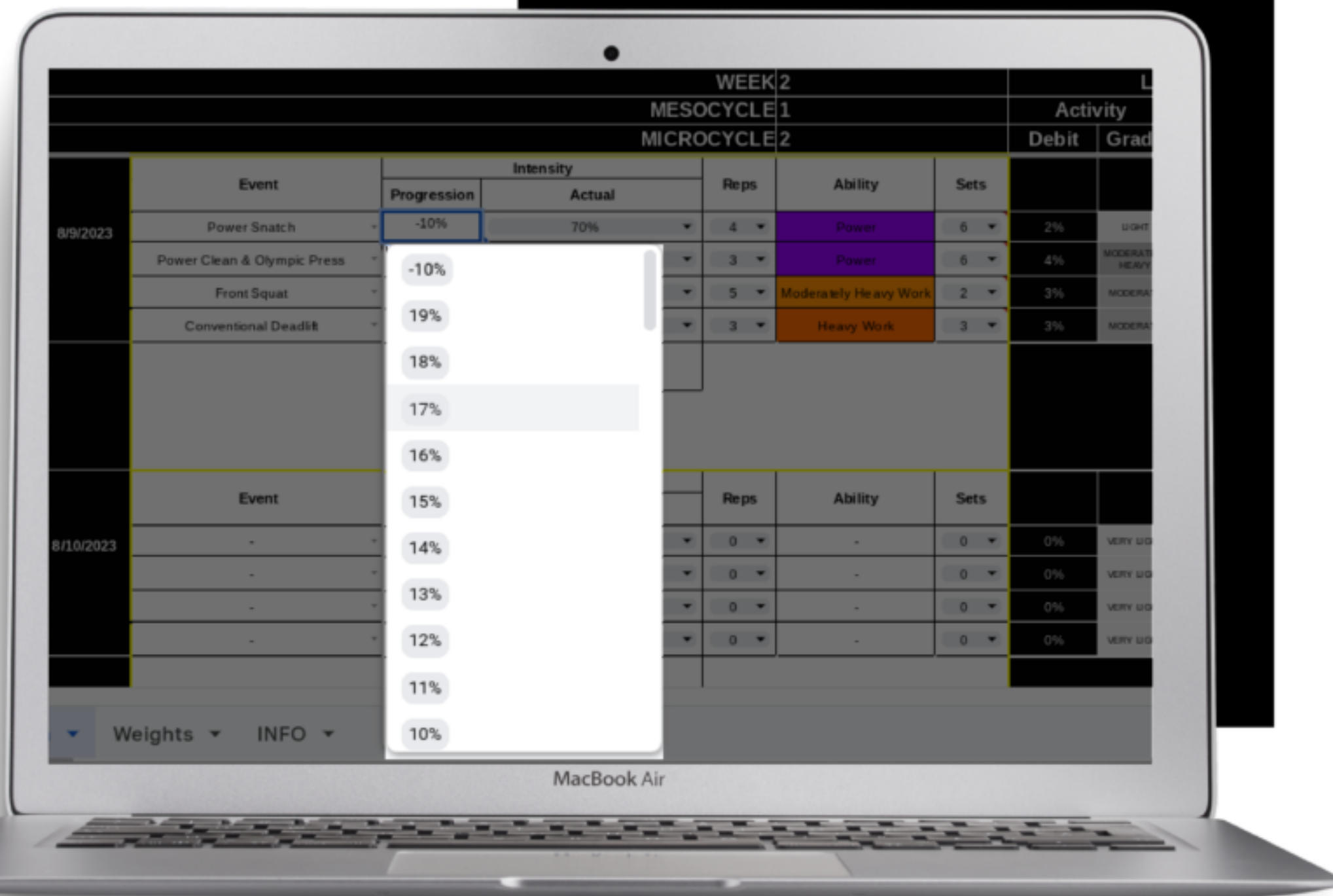
INTENSITY PROGRESSION

12

FINISH THE PROGRESSION

Use the "Activities" hyperlink above the week to jump right to the second week in the Activity Design tab. Here you set the Intensity progression for the first Activity of Day one of the Week.

The system progresses/regresses the intensity by the percentage over the previous week. The system carries that progression across all the activities of the week for convenience, but you can customize this to your liking.



13

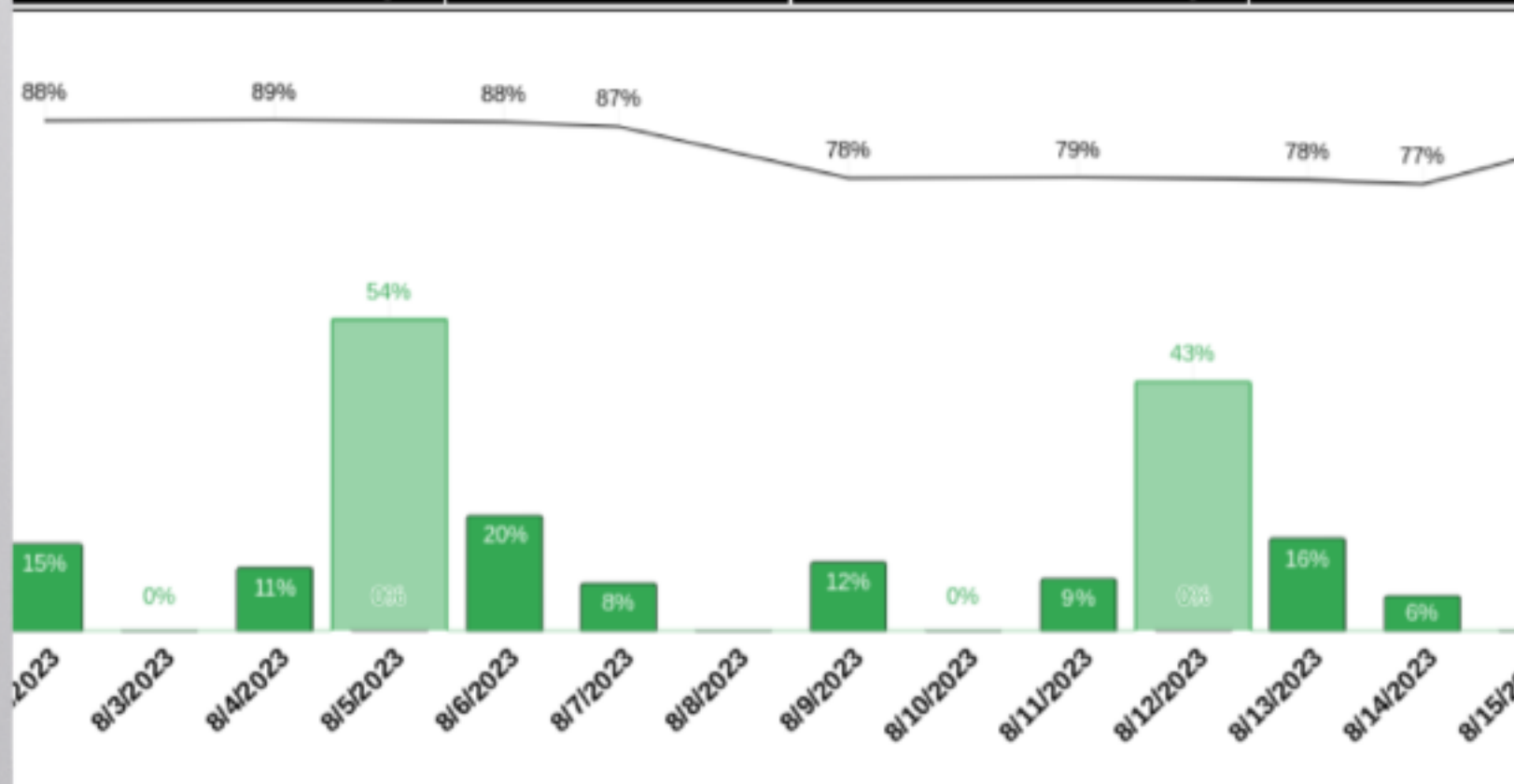
BUILD OUT THE PROGRAM

EASILY DESIGN A PRECISE SIX MONTH TRAINING PERIOD

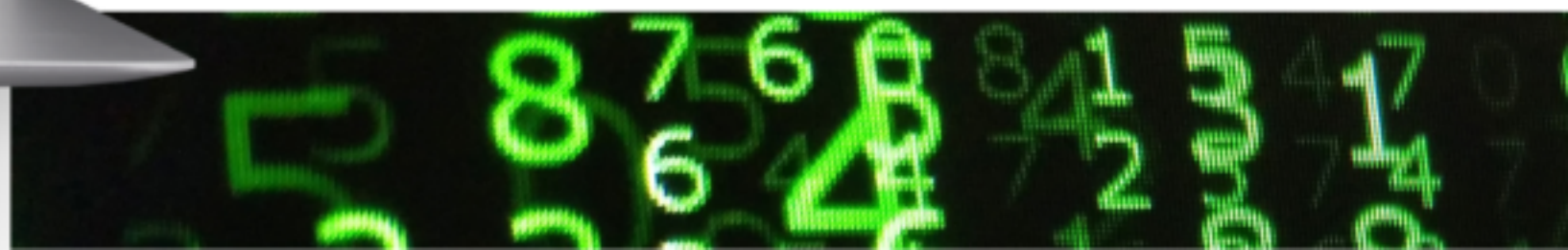
Just follow the same process from week to week in the Cycle Design sheet to build out the 6 month training program.

When you schedule a Deload the system will detect it and start another mesocycle in the following week.

ACTIVITIES		ACTIVITIES	
Week 1		Week 2	
Mesocycle 1		Mesocycle 1	
Microcycle 1		Microcycle 2	



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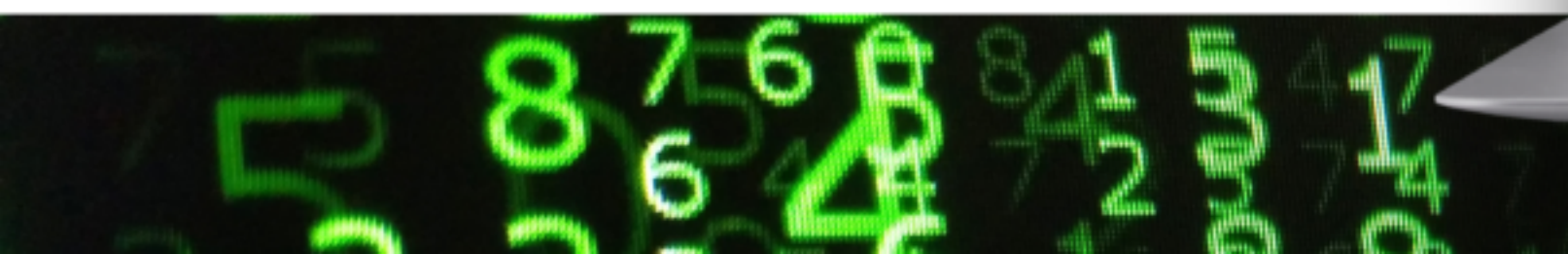
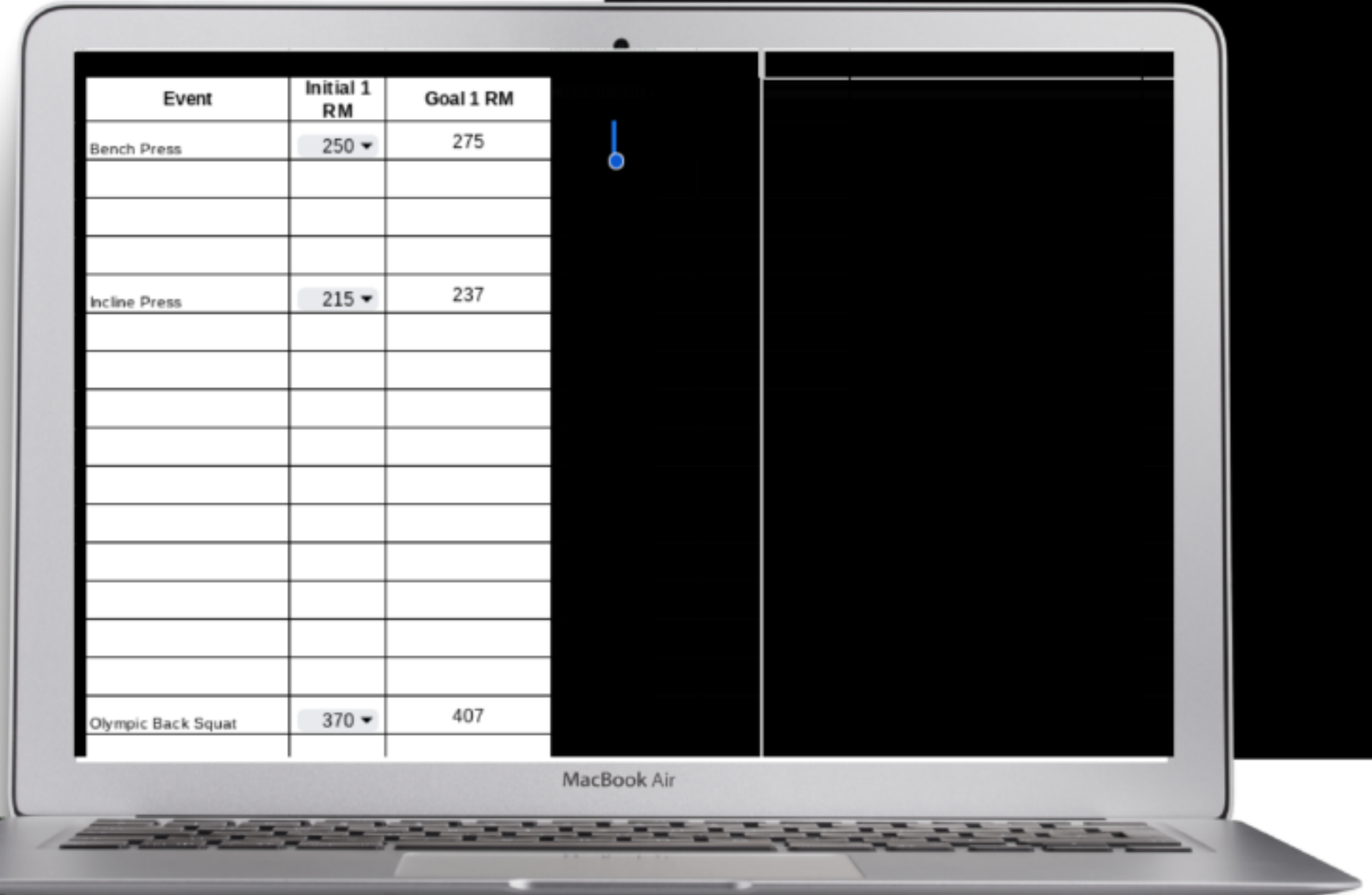
ENTER THE INITIAL 1RM FOR EACH EVENT

According to the biometric data you entered earlier, the system will estimate Initial 1 Rep Maximums for every Event. The system only displays the Event you programmed in. If you know precise 1RMs for the trainee enter them here.

The system also estimated a 6-month strength increase percentage goal. This percentage is displayed below the biometric data table you filled in. You can alter the goal percentage from a rational range. The system will increase the trainee's 1RMs following each deload to ensure they reach their goal by the end of the period.

1 REP MAXIMUMS

14



15

WEIGHTS

REGULATE THE 1RMS

The "Weights" sheet automatically calculates training weights according to the intensities from the Activity Design sheet and the trainee's current 1RMs.

You can use the first and last main set of each activity to autoregulate the 1RM for the event.

There is a Reps and "RIR" (Reps In Reserve) cell for each activity.

After completion of the first and last main set of an activity, enter the number of Reps completed and "Reps In Reserve" that the lifter had left in the tank at the end of the set.

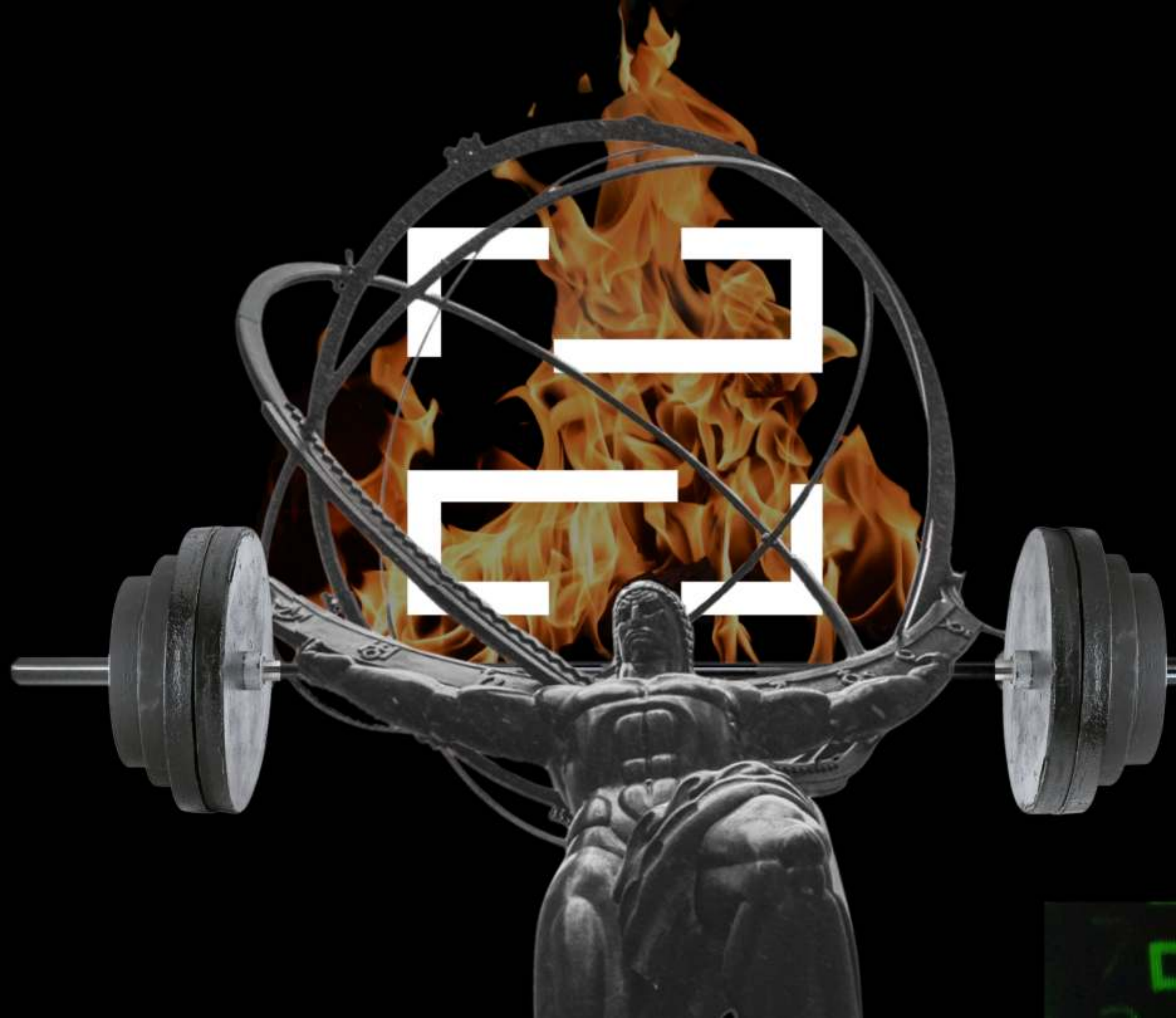
The system will use this information to autoregulate the event's 1RM and training weight.

Event	Set 1			Remaining Sets			Sets
	Weight	Reps	RIR	Weight	Last Set Reps	Last Set RIR	
Power Snatch	160	2	6	160	2	6	9
Power Clean & Olympic Press	175	2	4	175	2	4	7
Front Squat	280	2	3	280	2	3	3
Conventional Deadlift	445	1	2	445	1	2	3

Event	Set 1			Remaining Sets			Sets
	Weight	Reps	RIR	Weight	Last Set Reps	Last Set RIR	
-	0	0	0	0	0	0	0
-	0	0	0	0	0	0	0
-	0	0	0	0	0	0	0
-	0	0	0	0	0	0	0

MacBook Air





STRATFIT

THERE IS MORE...SUBSCRIBE TO STRATFIT DIGITAL

There is much more information on the loading system in the "Loading System Information" sheet inside StratFit Digital. Subscribe to SF Digital now to use the power of this new supersystem of technoscience to ignite your creativity for training strategy design and to take your craft as a strength & conditioning professional to the next level and beyond. Follow our blog for more insight into the system, and we look forward to having you involved in the growth and development of our revolutionary project to forever

ACHIEVE BEYOND.

