

### **Programme Design**

Basics come first

The ability to design an effective and safe training programme is one of the main skills a trainer must possess.

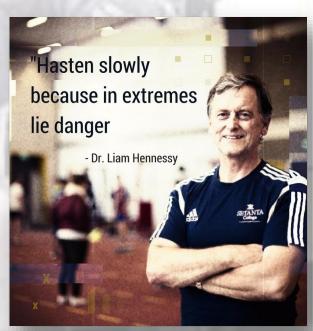
There are many (many!) pages of notes, lectures, theory and practical lessons we cover when showing our students the most effective way of programming exercise to achieve an athlete or players **goals**. One key message to remember throughout, and particularly to start with, is to remember these 5 words:

#### "How well. Not how much!"

The temptation to **overcomplicate** is always there as a trainer no matter how experienced you are. Renowned S&C Coach Mike Boyle uses an analogy comparing trainers to chefs; from when they start out to when they become more experienced.

As Boyle puts it; when you begin to design and plan exercise programmes think of yourself as a cook.

- As a young cook you *follow the recipe*, you don't start chopping and changing and adding and subtracting ingredients right off the bat.
- After lots of practice of writing programs you are a sous chef or second in command of the kitchen. You have now developed the ability to *alter the* recipe without damaging the meal but can't yet cook to your own taste
- After years of practice you are a chef. You can now contemplate bold changes to the recipe.



### Where to Begin

### Building towards a goal

Strength and Conditioning is more than lifting weights – it covers the entire development of an athlete and what is required to improve their physical performance. Strength is just one piece of the jigsaw; you must also incorporate plyometrics, speed and agility, flexibility, endurance and core stability.

Performance, training and personal **goals** will vary between sports and individuals. It is vitally important to identify, measure and track key physical traits so you can roll out specific interventions. It is only through proper planning that an S&C programme will be effective in achieving these goals.

You must first take a step back and take note of:

- 1. Consultation with the Client/Player/Team
- 2. Perform a Needs Analysis
- 3. Take Posture, Movement and Functional Screening assessments
- 4. Identify appropriate Fitness Tests to measure current and future performance





## **Programme Prescription & Warm Up Guide**

## Example of a Warm Up guide:

Warm Up Guide						
Exercise Sequence Exercise Reps						
Exercise 1	IWT (Mobility Movements)	10				
Exercise 2	Lunge Walk	10				
Exercise 3	Facepulls	10				
Exercise 4	Side Lying Leg Raises	10				
Exercise 5	Push-Ups	10				
Excerise 6	Kettlebell Squat Hold	30 secs				
Repeat the sequence 2 times						

# Programme Prescription

Turning Theory into Reality

After studying the theory, it is about putting what you have learned into practice. Once we understand the sportsscience that underpins the programme we can now take responsibility for the design, planning, implementation and management of a comprehensive programme of fitness development. As follows are two programmes submitted to us by actual students showing a block of training for a team, and an individual fitness programme.

# **Intensity / Effort Guide for Team Programme**

Intensity / Effort Guide							
Use this guide to establish what weight to lift for each set							
Rate of Percieved Exertion (RPE Scale)	Reps Left in the Tank	Description					
10	0	Maximum effort set. Could not do 1 more rep					
9	1	Nearly max effort but could do 1 more rep					
8	2 to 4	A tough set but a couple reps short of muscle failure					
7	5 to 8	Not near muscle faillure at the end of the set and weight can be moved quite quickly					
6	8-12+	Weight moves quickly when moderate force is applied					
5	12-15 +	Warm-ups weights					
4	20+	Recovery or warm-ups weights					

*Exercises to be	done in sequence			Week	1				ek 2			Wee	k 3			Weel	( 4	
Movement type	Excerise	Total Set Time	Reps (Aim)	Reps (Done)	Load	Set	Reps (Aim)	Reps (Done)	Load		Reps (Aim)	Reps (Done)	Load	Set RPE	Reps (Aim)	Reps (Done)	Load	Set RPE
			5				5	(20110)			5				5	(20110)		
			5				5	NV 3		F-77	5				5			
Hip / Knee	Box Jumps	3 min	5				5	E.J.			5				5			
			8			8				8				8		8		
			8			8				8				9				
Hip	Romanian Deadlift	2.5 min	8	1		9				9				9		6		
			8			9	8			9	6			9	)			
		8			8	8			8	8			8	8 8				
Vertical Press Military Press		8			8				9									
		8			8				9				9					
						0			3				-	, 3				
	Kneeling Band	3 min	8			8	8			8	8			8	8 8			
Vertical Pull Pulldowns		8			8	8			9	8			g	8				
			8			9	8			9	8			9	8			11
Supe	er Set																	
			8 per le				8 each				8 each I				6 each l	_		
Hip / Knee	Step-ups		8 per le				8 each				6 each I				6 each l	eg		
• •			8 per le	eg T		9	8 each	leg		9	6 each	leg T		9	)			
		4 min	8			8	8	5000		8	8	<u> </u>		8	8 8			
Hip	Barbell Hip Thurst		8			8				8					8			
TIIP			8			9				9					)			
Supe	er Set																	
			10				10				10				10			
Core Paloff Press		10				10	79			10				10				
		10				10				10				10				
		2.5 min																
	Single Arm	2.5 11111	30 sec				30 sec				40 sec				40 sec			
Core Kettlebell Walk		30 sec 30 sec				30 sec				40 sec				40 sec 40 sec				



## Par Q Form

The PAR-Q form (Physical Activity Readiness Questionnaire) is a tool for exercise professionals to determine if a person is safe to start an exercise program. It is enables a coach to get to know your athlete and conduct an initial assessment of their health status and medical history.

	Par Q F	orm Results						
Name: John Maguire	Sex: Male	Height: 187cm	Weight: 75kg					
	Exercise 8	& History Goals						
Past experience	Years training individually ar	ears training individually and with a team						
Previous training	Resistance Training - all asp	Resistance Training - all aspects						
How often you train per week	: 5 times per week	A 1/12	104					
Type of training:	Resistance Training & Anaer	obic Training	121					
Level of fatigue post training	8 out of 10	h 117 117 14	105					
Fitness goals:	Strength gain & improve spo	orts performance	ICI III					
	Previous	Injury & Illness						
Arthitis: No	Asthma: No	Heart problems: No	High cholesterol: No					
Diabetes: No	Stroke: No	Epilespy:No	Osteroporsis: No					
Chest pain: No	Dizziness: No	High/low blood pressure: No	Other: No					
	Joint Pro	blems & Pains						
Ankles/feet: No	Shoulders:No	Muscle pain: No	Knees: No					
Neck: No	Hips/pelvis: No	Elbows: No	Lower back: No					
	Nutrition	al Information						
Regular meals	Yes	Portions of veg	3					
Fast eater	No	Portions of protein:	4					
Vitamins/supplements	Creatine	Dairy produce	2					
Portions of fruit	3	Sweets/ salts/ sugar (added)	No					
Drinks	Tea: 1 Coffee: 2 Fruit Juice:	1 Water: 4 litres Soft Drinks: 0	A CHILD					
Allergies: No	Binging: No	Snoke: No	Overeating: No					
Alcohol: Yes	How much: Occasionally							

### **Functional Movement Screen & Testing**

FMS Testing Results					
FMS	Score/Weight				
Inline Lunge	2				
Overhead Squat	2				
Shoulder mobility	3				
Trunk Stability Push Up	3				
Rotary Stability	2				
Leg Raise	2				
Core Strength					
Plank Test	3 minutes				
3RM Test					
Bench	90kg				
Squat	170kg				
Deadlift	220kg				
Snatch	N/A				
Clean	100kg				
Anaerobic Power					
30m Sprint	4.2 sec				
Vertical Jump Test	55 cm				

Other Tests						
Step Up Test	N/A					
Beep Test	N/A					
Ankle Mobility	N/A					
Thomas Test	N/A					

## Functional Movement Screen

A cornerstone of our coaching philosophy here at Setanta College is to instil a knowledge and understanding of the principles underpinning human movement. You can't train somebody unless you know them! From an athlete's posture, to their movement patterns, compensations and limitations we must first consult, assess, screen and test.

FMS is commonly used, as you see here, but there are a wide variety of screening and testing protocols that form the very first module of all our S&C courses.

Body Composition Measurements						
Hip: N/A	Chest: N/A	Stomach: N/A				

Not applicable to this performance programme.

Exercise B1 & B2 is a Super Set. The two exercises must be performed together.

Exercise Program						
Phase: Competition phase Goal: Power building / Performance						
Exercise	Sets	Reps	Rest	Info		
A1 Squat Jump	3	5	120 sec	Fast down fast up		
B1 Power Clean	6	1	120 sec	Max Strength		
B2 Dynamic Hip Flexor	6	5	120 sec	Simulates knee drive		
C1 Dumbell Bench	4	8	90 sec			
D1 Pullups	3	10	90 sec			

#### Notes:

- Focused on max strength with heavy weight of 90-95%.
- Progression below is moving from a strength based session to a power based session.

Progression						
Phase: Competition phase	Goal: Power build					
Exercise	Sets	Reps	Rest	Info		
A1 Squat Jump	3	3	120 sec	Fast up fast down		
B1 Power Clean	4	4	120 sec	Move as fast as possible		
B2 Dynamic Hip Flexor	4	5	120 sec	Simulates knee drive		
C1 Dumbell Bench	3	6	90 sec			
D1 Pullups	3	8	90 sec			

Super Set -

- Session 2 has the same exercises with less weight.
- The power clean will move to about 70% of 1RM and the focus will be on moving the weight as fast as possible to increase power output.
- Volume is not very high as the focus is on strength/power and volume is sometimes counterproductive to this.
- Overall reps in the assistance exercises decreases and the aim is not to fatigue the client as

