

# OUR DECLARATION OF INTENT

The Les Mills global family is made up of 16,000 fitness clubs, 100,000 instructors and millions of participants from 112 countries around the globe.

**SEPARATED BY GEOGRAPHY, RELIGION, RACE, COLOR AND CREED, WE ARE UNITED IN OUR LOVE OF MOVEMENT, MUSIC AND THE PURSUIT OF HEALTHY LIVING, BOTH FOR OURSELVES AND OUR PLANET.**

**AT LES MILLS WE BELIEVE IN THE DIGNITY OF EACH INDIVIDUAL WITHIN OUR COMMUNITY AND STRIVE TO RESPECT THE RIGHTS AND FREEDOMS OF ALL.**

In our choice of role models, music and movements we understand that different people and societies have different standards of dress, popular culture and dance.

**WE ALSO KNOW THAT WHAT IS CONSIDERED APPROPRIATE IN SOME CONTEXTS CAN BE SEEN AS INAPPROPRIATE IN OTHERS.**

As a company that leads group fitness experiences for millions of people every day, we walk a fine line between delivering cutting-edge, innovative products and ensuring that accepted norms are upheld and respected.

Choosing, licensing and matching choreography to the right music is a huge challenge! We screen the music we use and try to avoid language and references that may cause offense. If we can, sometimes there will be an alternative track (at the bottom of the track list) for you to use instead.

**WE EMBRACE OPEN COMMUNICATION WITH OUR GLOBAL FAMILY SO DIFFERENCES OF OPINION CAN BE EXPRESSED, AND COMPROMISES REACHED.**

**ABOVE ALL, WE ARE PASSIONATE ABOUT DELIVERING LIFE-CHANGING FITNESS EXPERIENCES, EVERY TIME, EVERYWHERE.**

**BLAH BE LOUD AND HEARD**

Tell us what you think of this release. Visit [lesmills.com/BLAH](http://lesmills.com/BLAH)

**Hey instructors!** When it comes to mixing up past releases, please consider track length, music genre and choreography; for example, you should avoid overloading on plate work or Hover/Plank work.

## CXWORX 23



From L-R: Dan Cohen, Rachael Wilkins, Reagan Kang

Core endurance has sometimes been given the title of the underdog! In Release 23 each track features a test of core control, core strength, or core endurance. Holding on to that extra 2 reps can sometimes create a very sweat-drenched challenge. Being smart with the levels of intensity has really reignited the programming around CXWORX.

Creating new variations on existing movements changes the dynamics of the workout — adding excitement, freshness and extra challenge.

Being smart in CXWORX is how the program is designed. The members in your class will enjoy the fantastic music that brings a new level of motivation. Combining Plate

Arcs and Lateral Lunges will chisel the obliques; Overhead Squats will burn fat and bring incredible strength to the core; Triple Mountain Climbers, Back Extensions, and Resisted Bow & Arrows all add to the endurance, bringing the underdog to the forefront of core conditioning.

The whole look and feel of CXWORX 23 has an incredible uplifting freshness that will leave your participants wanting to book into the very next class.

Dan and Susan X

Dan Susan X

## CXWORX Presenters

Dan Cohen (New Zealand) is co-Program Director for both CXWORX and BODYCOMBAT, an International Master Trainer for BODYPUMP, and a passionate mixed martial artist based in Auckland.

Reagan Kang (Malaysia) is a CXWORX and BODYPUMP Instructor and Trainer, a LES MILLS GRIT Series Coach and Trainer, and a BODYCOMBAT and an RPM Instructor. He is also a personal trainer and CrossFit coach and is based in Singapore.

Rachael Wilkins (New Zealand) is a CXWORX, BODYATTACK, BODYBALANCE/BODYFLOW and BODYPUMP Instructor, and a LES MILLS GRIT Series Coach. She is also a Nutritionist and is based in Auckland.

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# INTERNAL & EXTERNAL COACHING

Great coaches have the ability to drive people to succeed in ways they never would have dreamed of. **Don't you want to be that coach?**

Internal and External cueing can make a huge difference to athletic performance in our participants. They'll help you to improve execution and manipulate intensity – two key objectives of Layer 2 coaching.

- **Internal** cues encourage people to focus on their **body parts and the mechanics of the movement**.
- **External** cues inspire people to focus on the **outcome of the movement**; their energy is directed **outside the body**.

For example, in the Tricep Kickback Row in BODYPUMP, we could say, "squeeze the triceps". This is an Internal cue that focuses the attention inward. OR we could say, "drive the plate up and back". This is an External cue – you're asking participants to focus on the outcome of the movement.

To get someone to run faster, you could say "extend your hip" – this would be Internal – or "push the floor behind you" – which would be External.

When we train the core, we often say, "squeeze your abs" – this is Internal. An External, outcome-focused cue would be to say, "imagine you're about to get punched in the stomach".

## So why should we care?

Different cues can produce different outcomes, and many coaches believe that External cues deliver better results. This is because External cues work with the body's natural movement; they are in sync with it.

Internal cues, on the other hand, can interrupt automatic movement. When you concentrate on how things move, you can interrupt the body's natural response. Think about how you teach a child to walk. Most parents don't say, "lift your foot off the floor by flexing at the knee and engaging your hip flexor"! Instead we say: "come to me, over here..." By focusing on the movement outcome (External focus) we achieve the goal in the most natural way.

Many athletes improve performance when they have an external focus. People doing a forward jump went further when encouraged to get as close to the target as possible, compared to a group who were asked to extend their knees as quickly as possible when they jumped.<sup>1</sup>

## Are Internal cues still relevant then?

Yes! People don't always know how to perform an exercise instinctively. For example, getting the glutes to engage optimally doesn't come naturally to many people. Some participants – particularly beginners – need to be coached with an internal focus to establish good technique.

Example: The Squats track in BODYPUMP.

- In Set 1 you'll use Layer 1 cues to set up the move correctly.
- In Set 2 the majority of your coaching will focus on Layer 2, eg in a Wide Squat you could cue, "driving your knees out" to engage the side glutes. This is an Internal Layer 2 cue.

In Set 3 you could follow up with an External, outcome-focused cue to enhance that element of the Squat, eg "let's focus on driving those knees out even more; try and rip the floor beneath you apart". Focusing on trying to rip

the floor apart is External and builds on your coaching from Set 2.

Example: The Deadlift in BODYPUMP.

- You could cue: "Lift your chest as you tip forward from the hips". This is an Internal cue to improve execution.
- This can be followed up with "show me what's written on your tee-shirt". This is a great External cue that enhances the move by providing an outward focus.

**Using a mix of Internal and External cues in Layer 2 is the best way to coach people to achieve more than they could do on their own.** It will help give clarity and flow to your Layer 2 coaching, and prevent you from cluttering this phase with too many ideas.

Action Plan: Watch the Masterclass and identify as many Internal and External cues as you can. Listen carefully. Are the cues encouraging participants to focus on their body parts and mechanics? Or are the cues directing the energy outside the body, inspiring people to focus on the outcome of the movement? Become a master at identifying the difference between Internal and External cues.

<sup>1</sup>Effect of Attentional Focus Strategies on Peak Force and Performance in the Standing Long Jump. Wu et al. May 2012.



# NEW RESEARCH: RPM BENEFITS

**New research has shown that RPM delivers the combined benefits of cardiovascular training coupled with short bursts of intensity known as cardio peak training.**

A study conducted at Loughborough University in the UK measured the effects of doing RPM for 8 weeks on individuals who were not regularly active.

Participating in classes 3 times per week with no changes in diet generated the following benefits:

- 11% increase in VO2
- 7% reduction in systolic blood pressure
- 13.6% reduction in body fat
- Total cholesterol decreased by 13% including a 23.3% reduction in LDL's – (considered the 'bad' cholesterol)
- Participants also lost – on average – 1 inch (3cm) in their waist circumference.

The subjects in this trial also had a compliance rate of 95% during the study, which was very high for this type of group.

Many of the participants achieved a heart rate of 95% of their maximum during the workouts. This indicates the effectiveness of the program to hit short peaks of intensity off a cardiovascular training base.

We can therefore say that RPM delivers the combined benefits of cardiovascular conditioning with multiple peaks of intensity AND the advantage of great instruction and awesome music – which serve to increase the attendance beyond what we normally see with this type of training.

For more on this study go to <http://fitnessresearch.edu.au/journal-view/group-studio-cycling-an-effective-intervention-to-116>



# THE SCIENCE OF RESISTANCE TUBING

Tubing is versatile, easy to use and inexpensive. It has a wide appeal across a range of age groups and it provides us with the ability to take a simple exercise and make it challenging.

## THE MAIN CONSIDERATIONS WHEN TRAINING WITH TUBING ARE:

- The point of **MAXIMUM RESISTANCE** is different when you use tubing compared to using free weights
- Tubing allows you to provide **RESISTANCE** to movements in other directions other than straight down as we see in body weight or free-weight exercises
- There is **NO MOMENTUM** when you use tubing so it is often safer to use during quicker and large-range exercises such as Woodchops
- There are some common rules that make using tubing safe and effective.



## POINT OF MAXIMUM RESISTANCE

With the Dumbbell Curl we have a small arc of maximum resistance in the middle of the curl.

With tubing, the load is quite different as it occurs at a different point, depending on the line of pull, and continues to **increase** as you move through the range.

## DIRECTION OF RESISTANCE

Tubing always pulls toward the point to which it is anchored, eg by fixing the band under one foot we now have a line of pull directly against the action of the Woodchop.

The tubing allows us to stand and bear weight while providing different angles of pull to challenge the core, which allows us to produce a training stimulus in the position we need it most.

Gluteal exercises are a really important part of core conditioning. Normally we lie down on our side to work the side hip stabilizers but we can use the tubing by wrapping it in the direction needed to resist the movement and perform the same exercise whilst standing.

To adjust the amount of resistance, we can alter the tension of the band in the start position by using a shorter length across the same distance or we can use more starting length to make the exercise easier.

## MOMENTUM

In exercises such as Woodchops which are performed through a large range with quite a quick tempo, momentum is a key safety issue when choosing different types of resistance.

When using free weights our muscles accelerate at the start of the movement and decelerate at the end. This deceleration phase can be very stressful on muscles and joints as the muscles need to contract eccentrically in a lengthened position.

With tubing, there is no momentum effect because the resistance keeps increasing as it moves further through the range without needing a deceleration phase. This makes tubing safer to use during wide-range faster movements such as Woodchops.

## TUBING RULES

Try to keep the load on the band at all times – in most exercises we can adjust the start length to keep load on the band throughout the movement.

Always anchor the tubing firmly on its fixation point. This will help you avoid a slingshot effect and make the exercise safer for you and the people around you.

Tubing is graded from light to heavy so always try a new exercise with a lighter grade of resistance until you are comfortable with the technique. Go heavier when you can role-model perfect execution from the start.

Always keep the wrist in a strong functional position with a firm grip around the handle and the wrist slightly extended.