

OUR DECLARATION OF INTENT

The Les Mills global family is made up of 17,500 fitness clubs, 130,000 instructors and millions of participants from 100 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

Hey instructors! When it comes to mixing up past releases, please try to teach most tracks from the past 20 releases, with the odd 'throwback' track from BODYCOMBAT 20 onwards. Use common sense and be mindful of not selecting tracks with lots of similar moves. Always teach with the current coaching model in mind.

BODYCOMBAT 71

From L to R: Regan Kang, Rachael Newsham, Lissa Bankston, Dan Cohen

Learning ring craft improves both skill training and technique, giving you a better understanding of mixed martial arts training principles.

We have incorporated some incredible new innovations in this round.

BODYCOMBAT Release 71 is truly spectacular. With an authentic striking rhythm to start our workout, followed by a specific kick mobility track, this already sets up the class for huge success.

We have several opportunities to slow down some of the striking patterns to allow for efficiency and in turn this brings increased power.

We have 3 cardio peaks and a muscular strength and endurance phase. BODYCOMBAT 71 has some really exciting work.

Musically, think fresh and street. The energy and the rhythms set an amazing tone to the workout. With huge dance tracks, Drum 'n' Bass, Techno and mainstream Pop, this release is a winner.

Keep it real and stay with the fight!

Dan & Rach

Dan Rach

BODYCOMBAT Presenters

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

Rachael Newsham (New Zealand) is co-Program Director of BODYCOMBAT and Program Director of SH'BAM™. She is based in Auckland.

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

Lissa Bankston (U.S.) is a BODYCOMBAT, BODYJAM, BODYPUMP and a SH'BAM Trainer, a CXWORX and RPM Instructor, and a LES MILLS Series Coach. She is based in Knoxville, Tennessee.

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BORN TO MOVE: NEW RESEARCH

How much exercise did you do as a child?
How much exercise do you do now?
Can you see a correlation between the two?

Research has shown that your activity levels as a child will predict how active you are as an adult.¹

Youth Physical Activity Guidelines recommend that children and adolescents should accumulate a minimum of 60 minutes of moderate-to-vigorous physical activity every day², and yet statistics show that most children fall tragically short of this. A report from the US found that only 27% of high-school students manage to achieve the minimum recommendations.³

The question is, HOW do we get our kids to move more? The answer – **we need them to WANT to exercise.**

LES MILLS BORN TO MOVE™ classes have been designed to engage and motivate children. They're fun, action packed and social. The buzz of learning new moves, fresh routines, plus the excitement of being in a group will all ensure the classes instill a love of fitness from an early age. They include easy-to-follow exercises and games, set to age-specific music. We know it works but **we needed some evidence.**

A study conducted in the UK⁴ set out to investigate whether BORN TO MOVE delivers on its promise to get kids moving and change their attitude towards being active. In a six-week study of 10 to 11 year olds, two schools acted as a control and continued with their regular two physical education classes a week. The other two received two BORN TO MOVE classes a week.

The researchers were particularly interested in how active the children were during the class, and how the classes affected their motivation to exercise when compared with standard PE

classes. The children also answered questions relating to enjoyment, the music, the teacher and how competent they felt during the class.

The results clearly demonstrated that BORN TO MOVE is a fantastic solution to getting children motivated to exercise. The children in the BORN TO MOVE group accumulated **more moderate to vigorous physical** activity over the day as a whole than the children who just did their regular PE classes. And they **spent less time being sedentary.** Enjoyment levels during BORN TO MOVE were significantly higher when compared to the control group which meant that their **intrinsic motivation** scores were higher also.

The children of today's world spend more time staring at a screen and are less physically active than previous generations. Obesity has more than doubled in children and quadrupled in adolescents over the past 30 years. The obese children of today become the obese adults of tomorrow, and it's of growing urgency that we find a solution to this global epidemic.

Getting children to fall in love with movement from a young age will ensure they build the healthy habits of a lifetime. As we battle to draw their attention away from screens and get them active, finding a solution to keep them engaged is the key. As this study shows, BORN TO MOVE is the perfect remedy to get our children moving!

1. Childhood Physical Fitness Tests: Predictor of Adult Physical Activity Levels? Dennison, B.A., Straus, J.H.E., Mellits, D. & Charney, E. (1988). *Pediatrics* 82(3):324-330.
2. 2008 Physical Activity Guidelines for Americans, Centers for Disease Control and Prevention.
3. 2009 Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention.
4. <http://bmcpublihealth.biomedcentral.com/ticles/10.1186/s12889-016-3550-7>.

IMPROVING SPEED IN BODYCOMBAT

Using more speed in our punch and kick patterns in BODYCOMBAT increases intensity. The faster you move, the more muscle fibers you activate. This means you burn more calories during the class and – if you reach maximum training zones – afterwards as well (EPOC).

THE SECRET TO SPEED: RELAX

The key to creating speed when punching and kicking is in the relaxation phase between the two contractions of the strike.

A previous study* has shown that there is a contract–relax–contract cycle during forceful and quick strikes – so-called “double peak muscle activation”:

1. An initial peak of muscle activation occurs at the start of the strike, as the muscles tense to generate force.
2. This is followed by a relaxation phase to allow the speed of the movement to increase.
3. A second contraction takes place in the final moment of the strike (at the moment of ‘contact’ with the opponent).

HOW DO WE APPLY THE SCIENCE TO BODYCOMBAT?

In the Education session in the Release Kit, the first big peak on the graph occurs when Dan contracts his muscles to prepare for the strike. This is followed by a trough – indicating that he has relaxed his muscles – so you see less activity on the chart. At the last second he tenses again as he ‘lands’ the punch.

It’s the relaxation phase that enables the body to move fast. The more force you apply to the movement, ie ‘muscling’ the punch, the slower you will actually move. This contraction–relaxation–contraction state is replicated in other areas of the body – particularly the legs and the core.

PREPARING FOR SPEED

Let’s think about the difference between power and speed.

To perform a move with immense **POWER**:

- Take a breath.
- Squeeze your fists.
- Tense the muscles of your legs.
- Imagine your body as immobile as an iron bar.
- Visualize yourself physically projecting immense power.

Example: To execute the Roundhouse power kick, you should focus on causing as much ‘damage’ as possible. Mentally navigate the movement, visualizing your shinbone striking the middle of the punchbag.

Now, let’s consider performing a strike with immense **SPEED**:

- Stay calm.
- Remain relaxed until a fraction of a second before performing the strike.
- Imagine yourself getting in and out really quickly – focus on moving through time and space as fast as your body will allow.

Example: To perform a Karate Punch – breathe, relax, stay agile. You don’t want any tension through your body.

TRAINING FOR SPEED IN BODYCOMBAT

There are three key training tools for increasing speed:

1. Strength
2. Power
3. Pure Speed Training

For **strengthening** the lower body, you can’t beat Squats and Lunges. Then, once you have established a foundation of leg strength, introduce exercises to improve **power** – eg multiple power kicks on a heavy bag. The next stage is **speed** – eg performing multiple speed kicks on the bag.

The Bench Press is really effective for building **strength** in the upper body and this type of training assists us with explosive **power**. To really improve power, the medicine ball is a great tool: try medicine ball slams and wall balls.

The final element is **speed**. For explosive fitness, we suggest you practise: ¾-range Speed Pushup; Speed Pushups with locked elbows; and Plyometric Pushups.

With Speed Training you aim for **maximum speed** in every rep – you can’t afford to burn out. Keep your sets really brief and ensure that you’re well warmed up and not fatigued from a previous workout.

Remember: Think fast, be explosive, and relax when you do these drills.

*McGill, S.M., Chaimberg, J.D., Frost, D.M., & Fenwick, C.M.J. (2010). Evidence of a double peak in muscle activation to enhance strike speed and force: An example with elite mixed martial arts fighters. *The Journal of Strength and Conditioning Research*, 24(2), 348–357.

THE HISTORY OF MARTIAL ARTS

THE HISTORY OF BOXING

Boxing is a combat sport where two participants, generally of similar weight, fight each other with only their fists. Boxing is supervised by a referee and is typically performed inside a ring with rounds lasting 1 to 3 minutes. There are three ways to win:

1. Victory is achieved if the opponent is knocked down and unable to get up before the referee counts to 10 seconds; this is called a knockout or KO.
2. If the opponent is deemed too injured to continue, this is called a technical knockout or TKO.
3. If there is no stoppage of the fight before an agreed number of rounds, a winner is determined either by the referee's decision or by judges' scorecards.

There are four basic punches in Boxing: Jab, Straight Right/Cross, Hook and Uppercut.

THE HISTORY OF KARATE

Karate is a Martial Art that is centuries old and essentially Japanese. The translation of kara is open and the translation of te is hand. So Karate means 'empty hand'.

Karate training is commonly divided into three sections:

1. Kihon (the basics or fundamentals)
2. KATA (forms)
3. Kumite (sparring)

THE HISTORY OF MUAY THAI

Muay Thai is referred to as 'The Art of Eight Limbs', as the hands, shins, elbows and knees are all used extensively in this art. A practitioner of Muay Thai (nak muay) thus has the ability to execute strikes using eight 'points of contact', as opposed to 'two points' (fists) in Western Boxing and 'four points' (fists, feet).

Muay Thai is the national sport of Thailand.

THE HISTORY OF KUNG FU

Kung Fu consists of a number of fighting styles that were developed over many centuries.

Essentially this is a Chinese Martial Art, practised by Shaolin monks. Those fighting styles are identified as 'families' or schools. Examples of these styles are physical exercises that mimic movements from animals.

There are five animal forms:

1. The Dragon
2. The Snake
3. The Tiger
4. The Crane
5. The Leopard or Panther

THE HISTORY OF TAE KWON DO

Tae Kwon Do is a Korean Martial Art. The word tae means 'to strike or break with foot'; kwon means 'to strike or break with fist'; and do means 'way', 'method', or 'art'. So, 'Tae Kwon Do' may be loosely translated as 'the way of the foot and fist' or 'the way of kicking and punching'.

Tae Kwon Do is a flamboyant Martial Art that is agile, fast and precise; it is 90% feet and only 10% hands.

THE HISTORY OF CAPOEIRA

Capoeira is essentially a Brazilian art. This form combines three elements:

1. Martial Arts
2. Game playing
3. Dance

It was created in Brazil by slaves brought from Africa, some time after the 16th century.

Participants form a roda or circle, and take turns playing musical instruments (such as the Berimbau), singing, or ritually sparring in pairs in the center of the circle. The sparring is marked by fluid acrobatic play, feints, and extensive use of Sweeps, Kicks and even head butts.

THE HISTORY OF TAI CHI

Tai Chi is an internal Chinese Martial Art, often practised for health reasons.

Tai Chi can be practised for a variety of other personal reasons — its hard and soft Martial Art techniques can help self-defense, focus and breathing.

Consequently, a multitude of training forms exist, both traditional and modern.

Some Tai Chi training forms are well known to Westerners as the slow-motion routines that groups of people practise together every morning in parks around the world, particularly in China.

THE HISTORY OF JIU-JITSU

Jiu-Jitsu originated 2,500 years ago in India. It was developed by monks as a method of self-defense against thieves on long journeys.

In 1919, Jiu-Jitsu was introduced to Brazilian Hélio Gracie, who developed the Japanese art into what is known today as Brazilian Jiu-Jitsu. Brazilian Jiu-Jitsu (BJJ) focuses on grappling and ground fighting. It promotes the principle that a smaller, weaker person can successfully defend themselves against a bigger, stronger opponent using leverage and proper technique during locks and choke-holds.

What will Brazilian Jiu-Jitsu do for you and your members?

1. Burn calories
2. Increase strength
3. Gain discipline
4. Provide self-defense
5. Build confidence