

Activ5 Challenge Testimonial Study & Academic Research Behind Key Claims

January 2017









# Activbody Activ5 Challenge Testimonial Study:

The Effect of the Activ5 Fitness Challenge on Total Body Appearance, Pant and Dress Size, Body Fat Mass and Weight Loss for Normal, Overweight, and Obese Men and Women. Eddie Gaut & Dr. Bob Girandola, ITG, a division of Detaug Testing Centers. Nov 19th 2016.

Electromyography Muscle Activity: A Single Activ5 Exercise vs. Treadmill Workout, Indoor Cycle, Squats, Lunges and Abdominal Crunches. Eddie Gaut, Detaug Testing Center. December 2016.

# +30% STRENGTH INCREASE OVER 6 WEEKS

# **MUSCLE GAIN & FAT LOSS**

• On average, Activ5 Challenge participants increased their strength by 30% over 6 weeks.

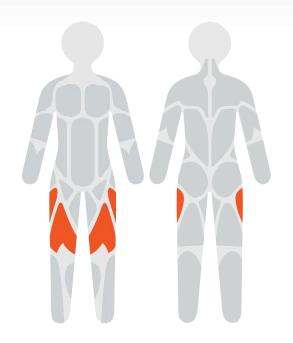
That's the equivalent of 5% increase in strength per week.

62-71% OF THE WEIGHT LOSS

IS PURE BODY FAT

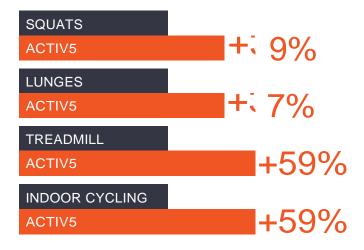
- On average, 71% of the weight lost from top performing Activ5 Challenge participants was pure body fat.
- On average, 62% of the weight lost from all Activ5 Challenge participants was pure body fat.

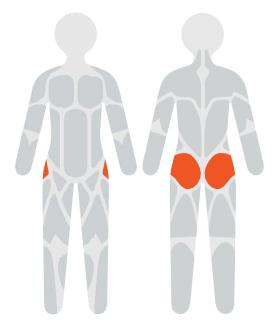




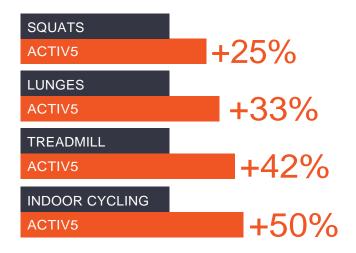
# **MUSCLE ACTIVITY VS GYM EXERCISES**

• On average, Activ5 Challenge participants generated 39% more Quad muscle activity than squats, 37% more than lunges, 59% more than a treadmill workout and 59% more than indoor cycling.





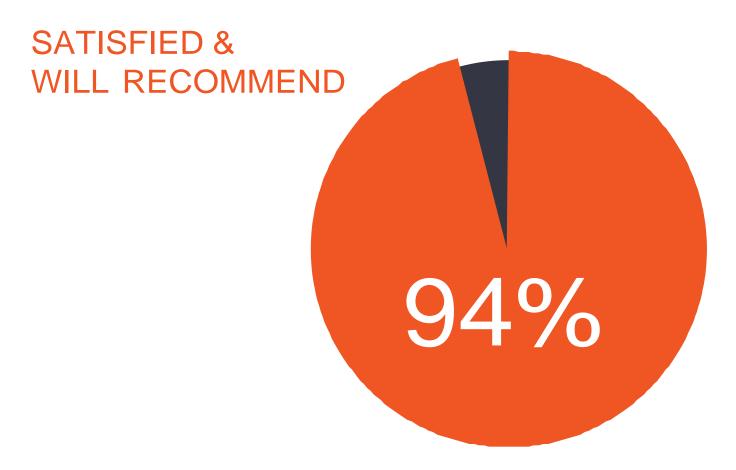
• On average, Activ5 Challenge participants generated 25% more Buttocks muscle activity than squats, 33% more than lunges, 42% more than a treadmill workout and 50% more than indoor cycling.





# **ACTIV5 RECOMMENDATION**

- 94% of Activ5 Challenge participants would recommend the program to other busy professionals
- 94% of Activ5 Challenge participants were satisfied with the program.



5 MINUTES 3 TIMES / DAY 6 WEEKS

# **INCHES / WEIGHT LOSS**

- Activ5 Challenge proved to take inches off the waist.
- On average, top performing Activ5 Challenge participants lost about a pound per week during the program.

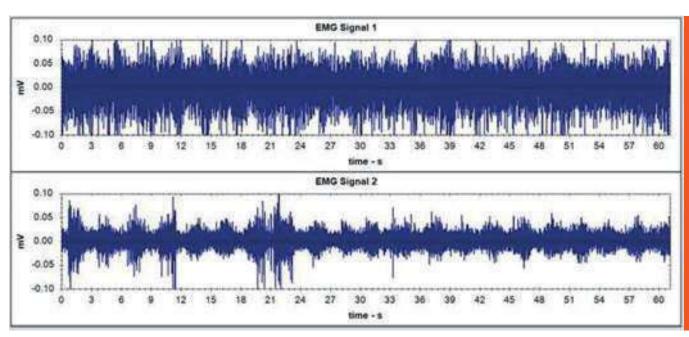


# **EXAMPLE VISUALS:**

Top 2 shows muscle activity for Activ5.

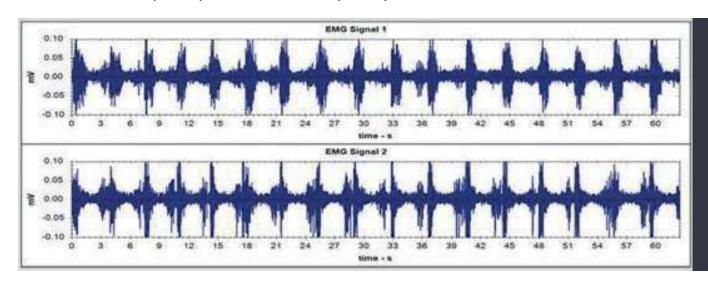
Bottom 2 shows same muscles being worked out with traditional exercises.

Subject 1: BUTTOCK (EMG 1) and INNER THIGH (EMG 2) activity of Activ5 exercise.



≯5

Subject 1: SQUATS BUTTOCK (EMG 1) and INNER THIGH (EMG 2)





# Key Academic Research on Isometrics

# **BUILD STRENGTH:**

A NUMBER OF RESEARCHERS HAVE OBSERVED THAT VERY LARGE AND RAPID INCREASES IN STRENGTH OCCUR AS A RESULT OF ISOMETRIC TRAINING.

### For example:

- 1) Lindh (1979) noted an increase of 30% in 5 weeks
- 2) Young (1985) noted an increase of 40% in 8 weeks
- 3) Thepaut- Mathieu (1988) reported an increase of 25 54% in 5 weeks
- 4) Weir (1995) found that strength increased by 27% in 6 weeks

## Scand J Rehabil Med. ;11(1):33-6, 1979vv

Increase Of Muscle Strength From Isometric Quadriceps Exercises At Different Knee Angles. Lindh M.

# Pflugers Arch.; 405(4):384-8, December 1985

The Effects Of Two Forms Of Isometric Training On The Mechanical Properties Of The Triceps Surae In Man.

Young K, McDonagh MJ, Davies CT.

# Journal of Applied Physiology Vol. 64 no. 4, 1500-1505, April 1988

Myoelectrical And Mechanical Changes Linked To Length Specificity During Isometric Training C. Thepaut-Mathieu, J. Van Hoecke, B. Maton

# Eur J Appl Physiol Occup Physiol. ;70(4):337-43, 1995

Effects Of Unilateral Isometric Strength Training On Joint Angle Specificity And Cross-Training. Weir JP, Housh TJ, Weir LL, Johnson GO.

### Int J Physiother. ;1(1): 10-16, 2014

Effect of isometric quadriceps strengthening exercise at multiple angles in knee joint among normal adults.

JibiPaul, Pradeep Balakrishnan.

### The Journal of Physiology.; 391, pp. 1-11, 1987

Human muscle strength training: the effects of three different regimes and the nature of the resultant changes

By D. A. Jones and O. M. Rutherford

## The Journal of Applied Research. Volume 7, No.1, 2007

Muscle Strength Training and Weight Loss from a Combined Isometric Exercise and Dietary Program Jerrold Petrofsky, Jennifer Batt, Ryan Jones, Vincent Kambe, Natalia Ushak, James P. Tucker, Luke Gentry, Tamara Billings, Shashi Gunda



# Europ. J. Appl. Physiol. 40: 45, 1978

Effect Of Isometric Strength Training On Mechanical, Electrical, And Metabolic Aspects Of Muscle Function

Komi, P.V., Viitasalo, J.T., Rauramaa, R. et al.

DOI:10.1007/BF00420988

# The Journal of Clinical Hypertension, 2010

Current Evidence on the Hemodynamic and Blood Pressure Effects of Isometric Exercise in Normotensive and Hypertensive Persons Steven G. Chrysant, MD, PhD

# 5X MORE EFFECTIVE THAN COMMERCIAL EXERCISE GYM

# The Journal of Applied Research Vol. 6, No. 4, 2006

Muscle Use During Isometric Cocontraction of Agonist-Antagonist Muscle Pairs in the Upper and Lower Body Compared to Abdominal Crunches and a Commercial Multi Gym Exerciser Jerrold Petrofsky, Jennifer Batt, Hye Jin Suh, Ryan Jones, Natalia Ushak, James P.Tucker, Luke Gentry, Vincent Kambe, Tamara Billings

# ACCELERATE FAT BURNING & WEIGHT LOSS

# Annals of Biological Research, 2 (1):83-87, 2011

The Effects Of Isometric Exercising Method On Under-Skin Fat Rate In Nonathlete Boy Students Of Islamic Azad University

Mohammad Dehghanpor, Amineh Sahranavard and Alireza Lotfi

### Annals of Biological Research, 2 (4):455-459, 2011

The Effect Of Three Different Exercising Methods On Under-Skin Fat Rate In Non-Athlete Males Mohammad Dehghanpor, Mir Hamid Salehian, Ali Ojaghi, Amineh Sahranavard

# The Journal of Applied Research. Volume 7, No.1, 2007

Muscle Strength Training and Weight Loss from a Combined Isometric Exercise and Dietary Program Jerrold Petrofsky, Jennifer Batt, Ryan Jones, Vincent Kambe, Natalia Ushak, James P. Tucker, Luke Gentry, Tamara Billings, Shashi Gunda

# **SAVE TIME**

### The Journal of Applied Research Vol. 6, No. 4, 2006

Muscle Use During Isometric Cocontraction of Agonist-Antagonist Muscle Pairs in the Upper and Lower Body Compared to Abdominal Crunches and a Commercial Multi Gym Exerciser Jerrold Petrofsky, Jennifer Batt, Hye Jin Suh, Ryan Jones, Natalia Ushak, James P.Tucker, Luke Gentry, Vincent Kambe, Tamara Billings



# **INCREASED ENERGY**

# Journal of Applied Physiology Vol. 89 no. 3, 977-984, September 1st 2000

Resistance Training Increases Total Energy Expenditure And Free-Living Physical Activity In Older Adults

Gary R. Hunter, Carla J. Wetzstein, David A. Fields, Amanda Brown, Marcas M. Bamman

# Europ. J. Appl. Physiol. 40: 45, 1978

Effect Of Isometric Strength Training On Mechanical, Electrical, And Metabolic Aspects Of Muscle Function

Komi, P.V., Viitasalo, J.T., Rauramaa, R. et al.

DOI:10.1007/BF00420988

# LOWERED BLOOD PRESSURE

# Journal of the American Heart Association: Volume 89, Issue 3, 327-334, March 2014

Exercise Training for Blood Pressure: A Systematic Review and Meta-analysis Veronique A. Cornelissen, PhD; Neil A. Smart, PhD

# Eur J Appl Physiol 116: 1289-1296, 2016

Isometric Exercise Training Lowers Resting Blood Pressure And Improves Local Brachial Artery Flow--Mediated Dilation Equally In Men And Women

Mark B. Badrov, Shane R. Freeman, Mary Ann Zokvic, Philip J. Millar, Cheri L. McGowan

### Mayo Clin Proc. 89(3): 327-334, March 2014

Isometric Exercise Training for Blood Pressure Management: A Systematic Review and Meta-Analysis Debra J. Carlson, BHlthSc; Gudrun Dieberg, PhD; Nicole C. Hess, BPsych(Hons); Philip J. Millar, PhD; and Neil A. Smart, PhD

## The Journal Of Clinical Hypertension: Vol. 12 No. September 2010

Current Evidence on the Hemodynamic and Blood Pressure Effects of Isometric Exercise in Normotensive and Hypertensive Persons
Steven G. Chrysant, MD, PhD

### Open Access Journal of Sports Medicine: 4 33-40, 2013

Double-Leg Isometric Exercise Training In Older Men Anthony W Baross, Jonathan D Wiles, Ian L Swaine

# Journal of the American Geriatrics Society: December 1971

Brief Maximal Isometric Exercise In Hypertension Broino Kiveloff M.D., Olive Huber Ph.D



# INCREASE BONE DENSITY

Prev Med. 33(5): 503-13, November 2001

Potential Health-Related Benefits of Resistance Training Richard A. Winett, Ph.D., and Ralph N. Carpinelli, Ed.D.

# Australian Journal of Basic and Applied Sciences, 5(12): 981-985, 2011

The Effect of Isometric Training on Prevention of Bone Density Reduction in Injured Limbs During a Period of Immobilization

Mohammad Reza Yousefi, Nassour Ahmadi, Mohammad Reza Abbaszadeh, Kaveh Kheybari, Ahmad Valizadeh and Mohammad Nasiri

# Osteoporosis International: Volume 17, Issue 8: 1225-1240, August 2006

High-Intensity Resistance Training And Postmenopausal Bone Loss: A Meta-Analysis M. Martyn-St James, S. Carroll

# LOWER CHOLESTEROL

# The Journal of Applied Research. Volume 7, No.1, 2007

Muscle Strength Training and Weight Loss from a Combined Isometric Exercise and Dietary Program Jerrold Petrofsky, Jennifer Batt, Ryan Jones, Vincent Kambe, Natalia Ushak, James P. Tucker, Luke Gentry, Tamara Billings, Shashi Gunda

# **BOOST ENDURANCE**

# Europ. J. Appl. Physiol. 40: 45, 1978

Effect Of Isometric Strength Training On Mechanical, Electrical, And Metabolic Aspects Of Muscle Function

Komi, P.V., Viitasalo, J.T., Rauramaa, R. et al.

DOI:10.1007/BF00420988

# **REDUCED PAIN**

# Journal of American Medical Association, Vol 289, No 19, May 2003

Active Neck Muscle Training in the Treatment of Chronic Neck Pain in Women- A Randomized Controlled Trial

Ylinen et al.



### Journal of Physical Activity and Health, 2014

Effects of Stabilization Exercises on Health-Related Quality of Life in Women With Chronic Low Back Pain

Maria Moussouli, Symeon P. Vlachopoulos, Nikolaos D. Kofotolis, Yannis Theodorakis, Paraskevi Malliou, and Eleftherios Kellis

### BMC Cancer, 14:67, 2014

Feasibility of Isometric Spinal Muscle Training In Patients With Bone Metastases Under Radiation Therapy - First Results Of A Randomized Pilot Trial

Harald Rief, Georg Omlor, Michael Akbar, Thomas Welzel, Thomas Bruckner, Stefan Rieken,

Matthias F Haefner, Ingmar Schlampp, Alexandros Gioules, Daniel Habermehl, Friedbert von Nettelbladt and Jürgen Debus

# Pain, 64 415-423, 1996

Modulation Of Pressure Pain Thresholds During And Following Isometric Contraction In Patients With Fibromyalgia And In Healthy Controls

Eva Kosek Jan Ekholm and Per Hansson

## Pain 118, 2005

Isometric Exercise Has Opposite Effects On Central Pain Mechanisms In Fibromyalgia Patients Compared To Normal Controls

Roland Staud, Michael E. Robinson, Donald D. Price

# Official Journal of the American College of Sports Medicine, 2013

Pain Relief after Isometric Exercise Is Not Task-Dependent in Older Men and Women Kathy J. Lemley, Breanna Drewek, Sandra K. Hunter, And Marie K. Hoeger Bement

### Isokinetics and Exercise Science 19 207-214, 2011

The Effect Of Early Isometric Exercises On Clinical And Neurophysiological Parameters In Patients With Sciatica: An Interventional Randomized Single-Blinded Study Juliusz Huber, Przemysławlisinski, Wodzimierz Samborski and Marcin Wytrazek

# American Journal of Lifestyle Medicine: Vol 4, No 5, May 2010

Mental Health Benefits of Strength Training in Adults

Patrick L O'Connor PhD Matthew P. Herring MS and Amanda

Patrick J. O'Connor, PhD, Matthew P. Herring, MS, and Amanda Caravalho

# BAD HABIT RELIEF (SUCH AS SMOKING)

# Society for the Study of Addiction, 2009

Effect Of Isometric Exercise And Body Scanning On Cigarette Cravings And Withdrawal Symptoms Michael Ussher, Mark Cropley, Sally Playle, Roshane Mohidin and Robert West

### Hum Psychopharmacol Clin Exp; 21: 39-46, 2006

Acute Effect of Isometric Exercise on Desire to Smoke and Tobacco Withdrawal Symptoms Ussher M, West R, Doshi R, Sampuran AK.



# MENTAL HEALTH (BETTER SLEEP, REDUCED ANXIETY, DEPRESSION AND FATIGUE)

American Journal of Lifestyle Medicine: Vol 4, No 5
Mental Health Benefits of Strength Training in Adults
Patrick J. O'Connor, PhD, Matthew P. Herring, MS, and Amanda Caravalho

# IMPROVE RANGE OF MOTION

### International Journal of Physical Medicine & Rehabilitation 1:5, 2013

Physical Therapy and Rehabilitation after Rotator Cuff Repai: A Review of Current Concepts Austin Vo, Hanbing Zhou, Guillaume Dumont, Simon Fogerty, Claudio Rosso and Xinning Li

### Journal of Applied Philosophy, 1988

Myoelectrical and Mechanical Changes Linked to Length Specificity During Isometric Training Thépaut-Mathieu C, Van Hoecke J, Maton B.

# Journal of Strength & Conditioning Research, February 2002

Effects of Resistance Training on the Sit-and-Reach Test in Elderly Women. Barbosa, Aline Rodrigues; Santarém, José Maria; Filho, Wilson Jacob; De Fátima Nunes Marucci, Maria

# Science of Flexibility, p.162-164, 1996

Michael J. Alter ISBN 10: 0736048987

### Journal of Strength and Conditioning Research, 17(2), 374-378, 2003

Adding Weights to Stretching Exercise Increases Passive Range of Motion for Healthy Elderly Ann Marie Swank, Daniel C. Funk, Michael P. Durham, And Sherri Roberts

# **IMPROVE STAMINA**

# Journal of the American Geriatrics Society: July 1983

Isometrics Can Counteract the Effects of Disuse

Broino Kiveloff M.D. Associate Chief Department of Rehabilitation Medicine The New York Infirmary

### Prevention magazine, February 1983

http://www.flaxoflife.net/i/ui/143225/f/A 60-Second\_Shortcut\_to\_Vitality.pdf

# Eur J Appl Physiol 112:4151-4161, 2012

Isometric Strength Training Lowers the O2 Cost of Cycling During Moderate-Intensity Exercise Zoladz JA, Szkutnik Z, Majerczak J, Grandys M, Duda K, Grassi B.



# REHABILITATION

Current Orthopaedic Practice: Vol. 24 - Issue 1: p 79–83, January/February 2013 Shoulder Rehabilitation in Glenohumeral Instability Lervick, Gregory N.

# IMPROVES ARTERIAL STIFFNESS AND BLOOD FLOW

# Experimental Gerontology 53, 2014

Arterial Stiffness and Blood Flow Adaptations Following Eight Weeks of Resistance Exercise Training in Young and Older Women

Rossow LM, Fahs CA, Thiebaud RS, Loenneke JP, Kim D, Mouser JG, Shore EA, Beck TW, Bemben DA, Bemben MG

# INJURY PREVENTION

Journal of Electromyography and Kinesiology: Official Journal of the International Society of Electrophysiological Kinesiology 24(1), 2013

The Effects of Isometric and Isotonic Training On Hamstring Stiffness and Anterior Cruciate Ligament Loading Mechanisms

J. Troy Blackburn, Marc F. Norcross

# Australian Journal of Basic and Applied Sciences, 5(12): 981-985, 2011

The Effect of Isometric Training on Prevention of Bone Density Reduction in Injured Limbs During a Period of Immobilization

Mohammad Reza Yousefi, Nasoor Ahmad, Mohammad Reza Abbaszadeh, Sina Rokhsati

# **REDUCES BODY FAT**

## Annals of Biological Research, 3 (1):349-352, 2012

Effect of Localized Isotonic Exercises On Under Fat Skin

Mohammad Dehganpoori, Habib Mohammad poor, Ali Ojaghi, Tofig Mahdavi and Amine Sahranavard

### Annals of Biological Research, Vol. 2 Issue 1, 2011

The Effects of Isometric Exercising Method On Under-Skin Fat Rate in Non- Athlete Boy Students of Islamic Azad University

Mohammad Dehghanpor, Amineh Sahranavard, Alireza Lotfi



# SITTING IS THE NEW SMOKING

# Siting is the New Smoking- 7 Ways a Sedentary Lifestyle is Killing You

Dr. James Levine, Director of the Mayo Clinic-Arizona State University Obesity Solutions Initiative http://www.theactivetimes.com/sitting-new-smoking-7-ways-sedentary-lifestyle-killing-you

# YOUTH ATHLETE IMPROVEMENT

# Journal of Sports Sciences 31(1), September 2012

Explosive Force Production During Isometric Squats Correlates with Athletic Performance in Rugby Union Players
Tillin NA, Pain MT, Folland J.

The Journal of Sports Medicine and Physical Fitness 53(5):573-81, October 2013

Relationships of Isometric Mid-Thigh Pull Variables To Weightlifting Performance Beckham G, Mizuguchi S, Carter C, Sato K, Ramsey M, Lamont H, Hornsby G, Haff G, Stone M.

# MORE EFFECTIVE THAN AEROBICS

### Journal American Medical Association (JAMA) 289(19): 2509-16, May 2003

Active Neck Muscle Training in the Treatment of Chronic Neck Pain in Women- A Randomized Controlled Trial

Ylinen J, Takala EP, Nykänen M, Häkkinen A, Mälkiä E, Pohjolainen T, Karppi SL, Kautiainen H, Airaksinen O.



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